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Arabic/English Bilingual Proficiency in Language Minority Students

by

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ABSTRACT

This thesis presents a case study of three individuals who were born in Lebanon and immigrated to Canada at a young age. To varying degrees, all have experienced difficulty in the Canadian school system. The study seeks to answer the question of whether these difficulties were related to a language deficit, and if so, was it a deficit in language knowledge, or language skills?" Test results indicate that in both Lebanese Arabic and English, all subjects' grammatical competence compares well with native speakers in phonology, syntax and morphology. Deficits were noted in vocabulary.

This research supports two claims:

- Children can achieve conversational fluency in a second language within two years, but require five to eight years to achieve proficiency with the academic uses of language, and

- School success in a second language is related both to L1 literacy levels and age of arrival in the L2 school environment.

ACKNOWLEDGEMENTS

For my mother

Alice Mary Vincent
1918-1981

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CHAPTER 1

INTRODUCTION

1. Background

In many places throughout the world, children are part of ethnic minorities whose language is different from the dominant or standard language of the society in which they live. A number of studies have found that these language minority children are less likely to succeed in school than are majority, monolingual children. Baker (1996) cites the England Department of Education and Science (1985), Figueroa (1984) and Tomlinson (1986) as examples of research into differences between ethnic groups. Watt and Roessingh (1994) cite Grey (1991), Minicucci (1992), Sinclair (1992), and Spener (1988) as examples of studies which indicate that, compared with majority children, minority students suffer from frustration and marginalization in school. This level of frustration results in dropout rates for language minority students that are significantly higher than the dropout rates for majority students. The Canadian Education Statistics Council (1996:40) reports that "persons whose mother tongue is other than English or French (including Amerindian languages) show lower levels of educational attainment overall than those whose mother tongue is one of the two official languages. In 1981, 54.6% of them had completed fewer than nine years of schooling. While this figure fell to 43.2% in 1991, it is still higher than the percentage for those whose mother tongue is English or French. This scenario holds true for all provinces except those in the Atlantic region,

where the low level of educational attainment is even more pronounced." Alberta

statistics confirm the disparity between the two groups. In 1992, the Alberta dropout rate

for English as a Second Language students[1] was over 61%, approximately double the

overall provincial high school dropout rate of 34% (Alberta Education (1992a)). Watt and

Roessingh (1994) tracked 232 ESL students in an Alberta high school from 1988 to 1993,

and found a dropout rate of 74% for this group.

Why do so many of these students fail in school? Researchers have suggested a

number of contributing factors. Some of these are language and cognitive deficits due to

lack of first language (L1) development, insufficient L1 literacy skills, insufficient

support in school to allow students time to "catch up" academically, cultural differences

that place the language minority student at a disadvantage, lack of support for literacy

activities in the home, and sociopolitical factors related to the adjustment of minority

groups to majority culture. A language minority student's opportunity for academic

success is no doubt influenced by a number of factors. This case study has been

undertaken to investigate, with a few individuals, the *linguistic* factors that may be

relevant to their school experiences.

2. Terminology

In the research literature on bilingualism and bilingual education, a number of

terms are used to discuss the nature of language and how we use it. These include such

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[1] Alberta statistics include as ESL students only those students who received ESL support and whose schools received the provincial ESL grant. Canadian-born students whose first language is other than English do not qualify for this grant, because they are not recent arrivals to Canada. (Alberta Education (1998)).

terms as *language ability, academic language ability, language knowledge, language achievement, language competence, language performance, language proficiency, language skills, and literacy skills.* Different authors and researchers sometimes adopt their own specific meanings and distinctions, and there is no standardized use of these terms (Baker, (1996)). In the interest of clarity, I offer the following definitions of the terms that will be used in this thesis:

- **English as a Second Language (ESL) Students:** Roessingh (1996) defines ESL students as those who are still in the process of actively learning English. Generally, they are recent arrivals to their new country. For the purposes of this study, ESL students are those who are enrolled in ESL classes for some portion of their school program.

- **ESL Programs:** It is important to distinguish ESL programs from Minority-Language Preservation programs. ESL programs are designed to help non-native speakers learn English.

- **Minority Language Preservation programs** are designed to help second language learners to maintain their L1 and acquire their L2.

- **L1:** The first, or native, language of a speaker.

- **L2:** The second or additional language of a speaker, especially in discussion of language teaching, where L2 is the 'target language' or language to be learned

- **Language Minority Students (LMS):** Following Cummins (1981), LMSs are those students whose first language or home language is different from the language of the

wider community and its schools. The term Language Minority Student(s) may
include ESL students.

- **Grammatical competence:** a speaker-hearer's _knowledge_ of his language, as
  represented by a generative grammar, or set of rules which indicate precisely what
  can be and cannot be a sentence in a language. (Chomsky (1988)). The ability of a
  speaker of a language to produce and understand an unlimited number of utterances,
  including many that are novel and unfamiliar. Grammatical competence includes a
  speaker's knowledge of phonology, morphology, syntax and vocabulary. In this
  thesis, the terms _grammatical competence_ and _linguistic competence_ are used
  synonymously.

- **Language performance:** Language in use. The outward evidence of grammatical
  competence; grammatical competence may be presumed by observing general
  language comprehension and production. Systematic errors – those consistently
  produced by the learner – reflect the nature of the speaker's grammar. Unsystematic
  errors are attributable to performance factors (Archibald and Libben (1995)).

- **Communicative competence:** A term originally coined by Hymes (1971) to provide
  a broader notion of proficiency than _grammatical competence_. It refers to a speaker's
  knowledge of the total set of rules and conventions governing the skilled used of
  language in a society. These include such things as knowing when and how it is
  appropriate to open a conversation, what topics are appropriate to particular speech
  events, and which forms of address to use. This research is placed within the
  framework of Bachman's (1990) Model of Communicative Competence. For

Bachman, one of the components of communicative competence is *language competence.*

- **Language competence:** the knowledge and abilities that underlie language proficiency. Within Bachman's model, *language competence* encompasses both *Organizational Competence* and *Pragmatic Competence.* Organizational competence is concerned with knowledge and ability related to the structural aspects of language: the well-formedness of structures at and below the sentence level (*grammatical competence*), and the knowledge of how to join utterances together to form a text (*textual competence*). Texts can be either spoken or written; therefore, textual competence may or may not involve literacy skills.

- **Language ability:** Baker (1996:6) identifies four basic language abilities: the oracy abilities of listening and speaking, and the literacy abilities of reading and writing. Each language ability can be more or less developed, and the range of sub-skills that can be measured is large and debated. In this thesis, the term *language proficiency* may be used synonymously with *language ability.*

- **Bilingual:** having ability in two languages. Because the abilities may be at different levels of development, it is impossible to provide a definition that encompasses the many forms that bilingualism takes. They include *balanced bilingualism* (having equal proficiency in both languages), and *subordinate bilingualism* (having unequal proficiency).

- **Balanced bilingual:** In the sense used by many researchers in bilingualism (Baker (1996:8)), *balanced bilingualism* refers to the possession of 'reasonable' or

'good' ability in both languages. A child who can understand and operate in

classroom activity in either language would be an example of a balanced bilingual.

This is the sense in which the term *balanced bilingual* is used in this thesis.

- **Fluency of speech:** Fluent speech is produced automatically and without hesitation.

3. Language Minority Students in Calgary

Recent research by Roessingh (1996) with ESL students in high school focused

on the inclusive classroom, where ESL students were together with native English

speaking students. In the course of this research, she identified a group of language

minority students who were having difficulty in school. Their first language (L1) was

Lebanese Arabic, but they were different from the later-arriving Lebanese ESL students

in a number of respects. Roessingh describes these students as follows:

> "These students come from a second language background, but are
> currently not receiving any ESL support. Some of these students are
> Canadian born and never were eligible for ESL support; others are
> Canadian born – then left – and have returned to find themselves
> behind at school; others are students who have been in Calgary beyond
> the three-year funding limit and are fully integrated now with no further
> ESL support. They are often perceived to be slower learners or
> developmentally delayed, although teaching staff, administrators and
> guidance counsellors are at a loss to make sense of the students'
> apparent cognitive deficits. "They sound so good", or "he's been here
> so long his academic troubles can't be because of language", are the
> oft-repeated phrases used to describe these students. A number of these
> students had had differentiated programs of various kinds throughout
> elementary and junior high school: often, resource room help or, in one

case, placement in a class for the educable mentally handicapped. The key to their educational success (and English language development) may depend most critically on their first language abilities. Among this group, there is a great range in this regard." (1996:39)

Table 1.1 summarizes the differences between the two groups with respect to both oral and written abilities in both L1 and L2:

TABLE 1.1

Comparison of Early-Arriving and Later-Arriving Students

Canadian-born or early arrivals	Later arrivals (ESL)
Lebanese spoken at home	Lebanese spoken at home
Do not read/write Arabic	Academically proficient in Arabic
Spoken L1 informally assessed as undeveloped	Proficient at spoken L1
Fluent spoken L2 Not receiving ESL support	Range of abilities in spoken L2 Receiving ESL support
"Fossilized" L2 reading skills: Grade equivalent (GE) 5.5 No change in five months	Made gains in L2 reading: Improved one Grade equivalent in five months

(Source: Roessingh (1996))

The Canadian-born group do not read or write Arabic; most of the later-arriving students do. The spoken Lebanese of the Canadian-born students was informally assessed by the later arrivals as "undeveloped". The Canadian-born students speak fluent English (L2); the ESL students' spoken English covered a range of abilities. The most striking difference between the two groups is seen in the scores on English reading tests: both before and after the 5-month period of research, the average score for the Canadian-born

group was a grade equivalent of 5.5. Their reading scores did not improve. In contrast,

the ESL students made an average gain of one grade equivalent in English reading over

the five-month research period. Some of them surpassed the Canadian-born students in

that short time.

It would seem that this group of language minority students could be called

linguistically disadvantaged in some way. Their L1 was informally assessed as "missing

something", and their L2 reading skills were tested at well below grade level. Both

reading scores and school performance indicated that they did not possess sufficient

English language ability to succeed at school tasks that require the academic use of

language. At one time, such speakers might have been termed *semilingual,* a term

originally coined by Nils Hansegård in 1968 (see Skutnabb-Kangas (1981)), to describe

the "less than complete linguistic skills" of Finnish-Swedish bilingual Finns in the Torneå

Valley, Sweden. The term *semilingual* has since been applied to linguistic minorities by a

number of writers. Skutnabb-Kangas (1981) cites Paulston (1974), Hymes (1974),

Loman (1974), Pinomaa (1974), Heyman (1973), Toukomaa (1972), Cummins (1980)

and others who have used the term to describe a phenomenon of individuals having

imperfect command of a linguistic system, or partial command of two languages. Little

attempt has been made to properly define the term, except by Hansegård. He defined a

semilingual as a speaker who exhibits the following profile in both of their languages:

"displays a small vocabulary and incorrect grammar, consciously thinks about language

production, is stilted and uncreative with each language, and finds it difficult to think and

express emotions in either language." (Summarized by Baker (1996:9)). A semilingual is

seen as someone with quantitative and qualitative deficiencies in both their languages when compared with monolingual speakers of those languages.

Although there are language abilities on which people differ, there is a lack of sound objective evidence of the occurrence of semilingualism, and serious doubts about the value of the term. Based on Hansegård's definition, it would be inaccurate and inappropriate to label Roessingh's students as semilingual. By the evaluation of school staff, all of them speak fluent and appropriate English. However, their reading scores and lack of school success indicate a problem. I have undertaken this study of a few individuals in order to determine whether or not the problem is a linguistic one.

4.   The research question

This thesis presents a case study of three individuals, one of whom is one of the early-arriving students in Roessingh's study. To varying degrees, all have experienced difficulty in the Canadian school system. Furthermore, the spoken Lebanese of one of these speakers was informally assessed by other Lebanese speakers as "undeveloped", giving rise to the question of whether she possesses linguistic competence in her first language. The specific questions I sought to answer in this research are the following: "Were their difficulties in school related to a language deficit in either their L1 or L2 or both, and if so, is it a deficit in language *knowledge*, or in language *skills*? What is the locus of the deficit? Is it in the representation of their grammars, and if so, in what areas – syntax, morphology, phonology or vocabulary?" Or does it lie not in their representational structure, but in another component of a broader model of

communicative competence? The answers to these questions may contribute to the

diagnosis of the school problems of language minority students. More specifically, it may

help to identify one or more of the sources of frustration that lead to the high dropout

rates for these students.

4.1   The context: Bachman's Model of Communicative Competence.

The research is placed within the context of Bachman's Model of Communicative

Competence, illustrated in Figure 1.1. Bachman's model provides a metaphor that helps

us to visualize the various components of linguistic competence.

FIGURE 1.1

Bachman's Model of Communicative Competence
(Archibald & Libben 95)
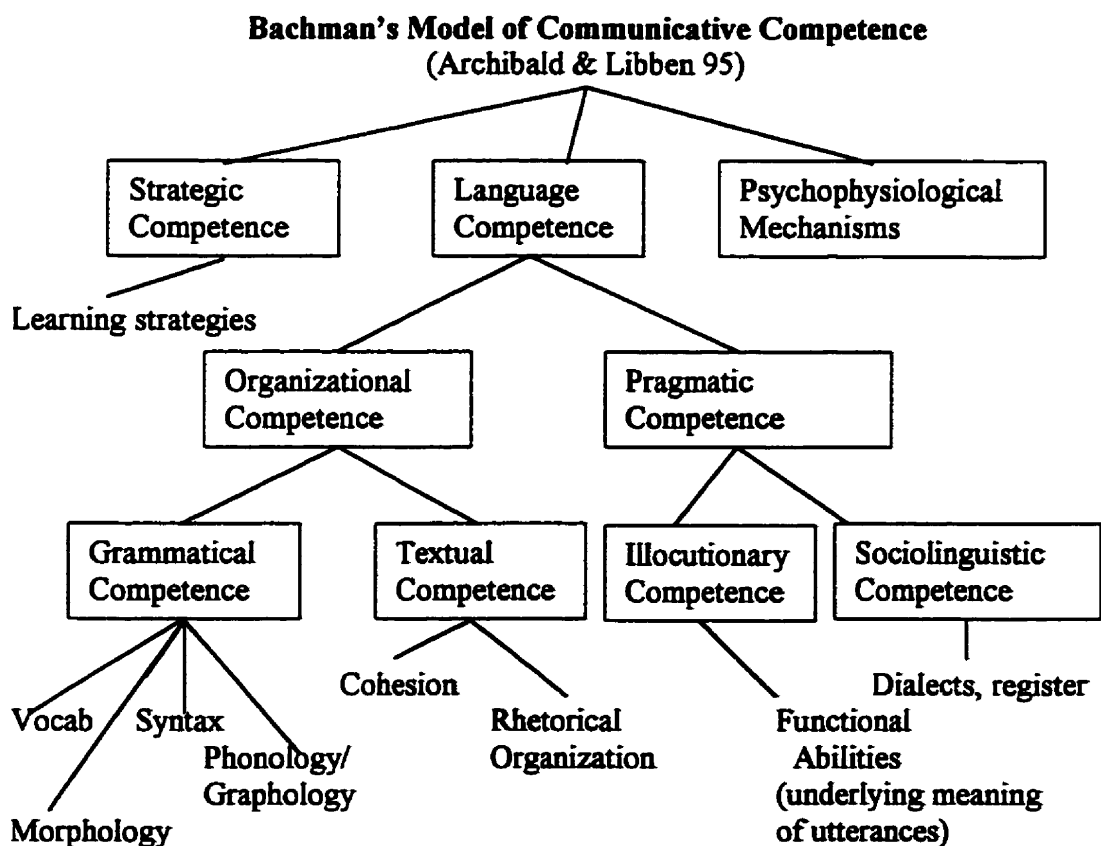
Bachman divides communicative competence into three components:

- *Strategic Competence*, the communication strategies and learning strategies that

  language learners employ to deal with gaps in their language knowledge and to

  increase their competence.

- *Psychophysiological Mechanisms*, the auditory, neurological and articulatory abilities

  required to use language.

- *Language Competence*, which includes *organizational competence* and *pragmatic*

  competence:

  Pragmatic Competence relates to the factors that make an utterance acceptable in

  some situations and not in others. *Illocutionary competence* relates to the ability to

  interpret the intended meaning of an utterance in context. *Sociolinguistic competence*

  relates to dialects, register, and cultural references.

  Organizational Competence is concerned with knowledge and ability related to the

  structural aspects of language: *grammatical* and *textual* competence. Grammatical

  competence refers to the well-formedness of structures at and below the sentence

  level, and includes four competencies: the knowledge of vocabulary, morphology,

  syntax, and phonology/graphology. According to Bachman (1990:87), these

  competencies "govern the choice of words to express specific significations, their

  forms, their arrangement in utterances to express propositions, and their physical

  realizations, either as sounds or as written symbols"[2]. Textual competence relates to

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[2] Since, for Bachman, these physical realizations may be either spoken or written, I have chosen to focus on the phonology of my subjects' languages. All three subjects do know how to form Arabic script.

the construction of units larger than the sentence. It includes the knowledge of how to join utterances together to form a text, either spoken or written, structured according to rules of cohesion and rhetorical organization.

Bachman's (1990) discussion of his model does not contain an extensive treatment of vocabulary as a component of grammatical competence. It is unclear whether vocabulary competence consists of a certain vocabulary size, or whether it is more related to the appropriate choice and use of the words a speaker does possess. I will assume that both appropriate use of words and the size of the lexicon are components of lexical or vocabulary competence. Vocabulary differs from the other components of grammatical competence in that it does not fossilize in the way that syntax, morphology and phonology have been observed to do. The lexicon may expand over the course of a speaker's lifetime.

Regarding the role of literacy in communicative competence, I am assuming in this thesis that the literacy abilities of reading and writing are not essential or basic components of communicative competence. Referring to Bachman's Model, it is evident that in all components, the ability to read and write provides a means of expression of communicative competence. However, it is also evident that individuals in oral cultures, who speak one of the many languages that do not have a written form, may also fully express the components of communicative competence. One obvious difference between being a speaker of a language and being able to read and write a language is the degree of success attained by the learners of these tasks. With the exception of those with specific disabilities, all people naturally acquire the ability to understand and speak a language. In

contrast, not everyone becomes literate, nor do people usually learn to read and write naturally, without instruction. Therefore, literacy abilities are more accurately defined as language _skills_, not as core language competencies. They are abilities that _access_ knowledge, but are not _knowledge_ or _competence_ themselves.

Literacy is more than just a cognitive activity, but also has a social and political dimension. In modern literate societies, those who do not acquire proficiency with the academic uses of language suffer social, economic and political consequences that result from an inability to fully participate in the life of the community. While not wishing to underestimate the importance of literacy, I found it necessary to restrict the scope of my research. The school performance and personal testimonies of my subjects are clear indications of problems in the areas of reading and writing English. The question I wished to answer is whether or not those reading and writing difficulties could be linked to deficits in their underlying grammars, either of English or Lebanese. I have therefore chosen to focus on the _grammatical competence_ of my subjects, as demonstrated in their spoken languages, in the areas of syntax, morphology, phonology and vocabulary.

5. The speakers: an introduction

The three subjects for this research are the children of parents who immigrated to Canada from Lebanon. All were born in Lebanon and received some early schooling there, but none reads or writes Arabic, having left their home country before acquiring literacy skills. Based on numerous conversations, I would assess their spoken English as fluent. Although all will testify to having had some difficulties in school, their level of

education in English covers a broad range: one has not completed high school, one is a

high school graduate (nonacademic stream), and the third has an undergraduate degree in

Economics.

Speaker 1, Muna[3], is the student from Roessingh's study. She attended her first

year of school in Lebanon, but that year of schooling was interrupted by the civil war.

She left Lebanon in 1987 and began school in Canada at 8 years old; she was 20 years old

at the time of testing. She speaks Lebanese at home and English with friends and at work.

She was not read to much by her parents; she does remember some storybooks

from her preschool years, but most storytelling in her family was oral. Her father is a poet

and musician, who tells stories in that medium. She is comfortable speaking both

Lebanese and English, but she considers English her dominant language; by her own

estimate, she uses English 65% of the time.

She describes her linguistic experience as "being caught between two languages".

With respect to reading and writing, her experience has been that whenever she has made

progress in one language, she has lost ground in the other. She received ESL support in

her first three years in elementary school, and she was motivated and enthusiastic about

learning English in her early school years. Her account of using English for school

purposes is that it was easier in elementary school than in the upper grades.

When she was 13, she and her sisters went to Lebanon for 15 months to be with

her father, and there she attended school with Arabic-speaking children. The instruction

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[3] The three subjects have been given Arabic pseudonyms that reflect their character. *Muna* means "desire" or "wish". Muna clearly desires to achieve more, academically and professionally, than she has at present.

she received in English was at a very basic level, for beginning students of English, and was "too easy" for her. The subjects taught in Arabic were "very hard", because although she understood the spoken Arabic, she was not able to read or write. When she returned to Canada she was put in Grade 8, a class placement based on her age, not her proficiency. Regarding her Junior High School years (Grades 7-9), she recalls being aware of her need for additional help with English reading and writing, but not knowing what was available, or how to access that help.

Muna's high school years were challenging for her, academically and personally. Her Grade 11 year was interrupted for five months, when she returned to Lebanon to visit her father who was ill. She attributes her difficulty in school to the two extended visits to Lebanon during her middle and upper school years, and to personal factors such as lack of motivation for school tasks and the stress related to her father's illness. At the time of her interview, she did not mention her English reading and writing skills as a factor. In order to complete high school, she would require another two years of study. She is currently successfully employed as a telephone salesperson, but wishes to find employment that would provide more potential for growth and advancement.

Speaker 2, Sami[4], left Lebanon in 1976 at the age of 10, spent a year in France before coming to Canada, and at the time of testing, had been here for 22 years. His early schooling in Lebanon was in Arabic and French and he was fluent in French as a child. He does not remember his parents reading stories to him as a preschooler. He is

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[4] Arabic pseudonym meaning "lofty".

able to decode Arabic letters, but has never read Arabic text with ease. When he first began school in Canada, he attended a special school for ESL students for approximately six months before moving into regular classes.

He lives alone and, by his own estimate, uses English about 80% of the time. He successfully studied Engineering for two years before completing his Bachelor of Arts in Economics, and now works as an investment advisor. The subject describes himself as "good at business math", but says that using written English is difficult for him. When he does presentations that involve written English, he requires help.

The following dialogue illustrates how Sami would describe his experience of living in two cultures:

> *L:* So now, do you feel more at home in English or in Arabic?
>
> *S:* English. I mean, I'm 33, I've been here 22 years, so obviously I'm a lot more comfortable with the English language than I am the Arabic language, that's for sure. I'm more comfortable with Arabic culture, but more comfortable with English speech.
>
> *L:* You feel like you live in two worlds?
>
> *S:* I feel like I think one thing and I live something else....like, my mentality is one way, and you wouldn't think that for somebody who's been here that long. My mentality is one way, but life here is a completely different way than my mentality. And I guess they say that you never forget who you are, you never forget where you're from."

Speaker 3, Nabil[5], left Lebanon in 1992 at the age of 11. When tested, he had been in Canada for six and one half years. He received some schooling in Arabic and English (as a second language) in Lebanon, but is not able to read or write Arabic now.

He has been back to visit Lebanon four times, one of these visits lasting five months. He uses Lebanese at home with his family and feels equally at home speaking English and Lebanese. He estimates that he speaks English 70% of the time, and Lebanese 30%. He does not recall his parents reading stories to him as a preschooler, but was "told" stories in Lebanese. Learning to speak English was "easy", but reading and writing he "still can't do very well". He remembers his ESL instruction at school lasting "about four months" and consisting of conversational English instruction. He did not receive extra help with reading and writing until his last year of high school, when he approached a resource teacher for assistance. With her recommendation, he received government financial assistance to attend a private institute for help with reading and writing in English. He believes he made progress there, but funding terminated after two months, about halfway through his program, and he withdrew.

He is a high school graduate (nonacademic diploma), and recognizes that his reading difficulties present an obstacle to his further educational progress. He plans to attend a technical school and eventually, to study engineering at university.

6. Outline of the thesis

In this chapter I have defined the research question and the framework within which it is placed. In Chapter 2, I will discuss issues in bilingual education, particularly

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[5] Arabic pseudonym meaning "noble".

with respect to language minority students. In Chapter 3, I will give an overview of the Arabic language and dialects, with comments on how the linguistic situation in the Arab world affects some issues in education there. In Chapter 4, I will discuss the research design and test results. Included in this chapter is a discussion of the development of a grammaticality judgment task to test competence in Lebanese Arabic. The test results for vocabulary, morphology/syntax, and phonology in English and Lebanese Arabic will be presented for the three subjects. In Chapter 5, I will present my conclusions based on these test results and suggest further research questions that arise from this study.

CHAPTER 2

ISSUES IN BILINGUAL EDUCATION

It is not clear what effect the specific linguistic and sociocultural background of language minority children has on school success or failure in comparison with monolingual, majority children. Neither is it clear why some language minority groups are more successful in school than others, nor why some language minority students finish high school and go on to successful higher education, while others from the same language background, and sometimes from the same families, drop out before completing high school.

Researchers have examined the disparity of school performance between groups from two broad perspectives. One approach focuses on factors that are *internal* to the language minority student such as cognitive development, L1/L2 proficiency (including oral and academic language development), and more specifically, the relationship between L1 and L2 literacy development. Another examines *external* factors such as socioeconomic status, culture, politics, and educational policies regarding bilingual education. The two approaches are briefly summarized in the following sections.

I.   School performance of language minorities: internal factors

1.1   Bilingualism and cognitive development

Does being bilingual impair one's cognitive development and lead to failure in

school? During the 19th century and the first half of the 20th century, the dominant belief

among academics was that bilingualism had a detrimental effect on thinking. Up until the

1960s, typical research confirmed this viewpoint by looking at the differences between

groups of bilinguals and monolinguals in terms of their performance on intelligence tests,

particularly verbal IQ. Baker (1996) cites Saer (1923), Saer, Smith and Hughes (1924),

and Darcy (1953) as examples. Baker notes that the early research was characterized by a

number of methodological deficiencies such as testing in English only, use of simple

averages rather than more complex statistical analyses, and failure to control for such

factors as socioeconomic status, gender, age, and type of school attended. Later research

that addressed these methodological deficiencies provided evidence that balanced

bilingualism may lead to cognitive *advantages* over monolingualism, such as higher IQ

scores (Peal & Lambert (1962)). Subsequent research has confirmed these findings,

indicating that balanced bilinguals perform better on tests of verbal fluency and

flexibility, both of which are measures of creative thinking (Cummins (1975,1977)). The

research of Ben-Zeev (1977) indicates that bilinguals are more flexible and analytical in

language skills, due to increased metalinguistic awareness. For a review, see Baker

(1996).

1.2   The relationship between L1 and L2 development

1.2.1   The Dual Thresholds Theory

Several studies have suggested that the further a child moves towards balanced bilingualism, the greater the likelihood of cognitive advantages. Baker (1996) cites Cummins & Mulcahy (1978), Duncan & de Avila (1979), and Clarkson (1992). The Thresholds Theory (Toukomaa & Skutnabb-Kangas (1977) and Cummins (1976)) postulates two thresholds of academic language proficiency. Below the first threshold, children have low levels of proficiency (compared with their age group) in both languages, with likely negative cognitive effects. These children are those most likely to be termed "semilingual". Above the first threshold, children have age-appropriate proficiency in one but not both languages; there are unlikely to be positive or negative cognitive consequences. Above the second threshold, children have age-appropriate proficiency in both languages and there are cognitive advantages. Support for the Thresholds Theory comes from studies by Dawe (1983) and Bialystok (1988).

1.2.2   The Developmental Interdependence Hypothesis/CUP Model

Following on the Dual Thresholds Theory, Cummins (1978), cited in Baker (1996), outlined the Developmental Interdependence Hypothesis, suggesting that a child's second language competence is partly dependent on the level of competence, or academic language proficiency, already achieved in the first language. Cummins represents this developmental interdependence formally as follows:

"To the extent that instruction in Lx is effective in promoting proficiency
in Lx, transfer of this proficiency to Ly will occur provided there is
adequate exposure to Ly (either in school or environment) and adequate
motivation to learn Ly." (Cummins (1984:143)).

In Cummins' view, there is an underlying cognitive/academic proficiency which is

common across languages, and which makes possible the transfer of literacy-related skills

from one language to another. This interdependence or common underlying proficiency

implies that experience with *either* language can promote development of the academic

language proficiency underlying both languages, given adequate motivation and exposure

to both. Examples of the skills involved are subject matter knowledge, reading strategies,

and writing composition skills.

The beneficial effect of L1 instruction on L2 development, and support for the

Interdependence Hypothesis, is demonstrated in the following studies in the U.S.

(Archibald & Libben, (1995), Cummins and Swain (1986)):

- The Rock Point Navajo Study

    In 1971, A bilingual education program was started on the Rock Point Navajo

    Reserve in the United States. Prior to the inception of this program, children on the

    reserve, even though they received intensive instruction in English, were two years

    behind the U.S. norms for reading by the end of Grade 6. The bilingual program used

    Navajo as the major medium of instruction from kindergarten through Grade 2, and

    for between 25 and 50 percent of instruction after that. English was gradually

    introduced. The students who went through the bilingual program were assessed

again in Grade 6, and were performing slightly *above* the U.S. norms in English reading.

- San Diego Spanish-English Immersion Project

This demonstration project in San Diego city schools involved approximately 60% Spanish L1 and 40% English L1 students. From pre-school to grade 3, instruction was predominantly in Spanish, with 20 minutes per day of English instruction in preschool, 30 minutes in kindergarten and grade 1, and 60 minutes in grades 2 and 3. From grade 4 through 6, instruction was half in Spanish and half in English. Although students lagged somewhat behind grade norms in both Spanish and English reading skills until near the end of elementary school, by grade 6 they were performing above grade norms in both languages and in mathematics achievement.

In summary, though the results of individual studies must be treated with caution, the research on bilingual programs shows that language minority children's L1 can be promoted at no cost to their acquisition of proficiency in L2. To my knowledge, there are no studies that have found bilingual education to be detrimental to students' progress in *either* their L1 or L2.

1.3   The BICS/CALP distinction

Skutnabb-Kangas & Toukomaa (1976) first drew a distinction between "surface fluency" in a language, and the more evolved language skills that are needed to benefit from the education process. They noted that Finnish immigrant children who were born in Sweden or immigrated at a preschool age were able to converse comfortably in

Swedish in everyday situations despite literacy skills that were well below age-

appropriate levels in both of their languages. Cummins (1979, 1980b)[LBI] formalized this

distinction between surface fluency and what he calls "conceptual-linguistic knowledge"

in terms of Basic Interpersonal Communicative Skills (BICS), and Cognitive Academic

Language Proficiency (CALP). He defined BICS as "the manifestation of language

proficiency in everyday communicative contexts", and CALP as "the manipulation of

language in decontextualized academic situations" (Cummins (1984:137)). The

BICS/CALP distinction conceptualized language proficiency along two continua, as

illustrated in Figure 2.1:

FIGURE 2.1

THE BICS/CALP DISTINCTION
(Cummins (1984))
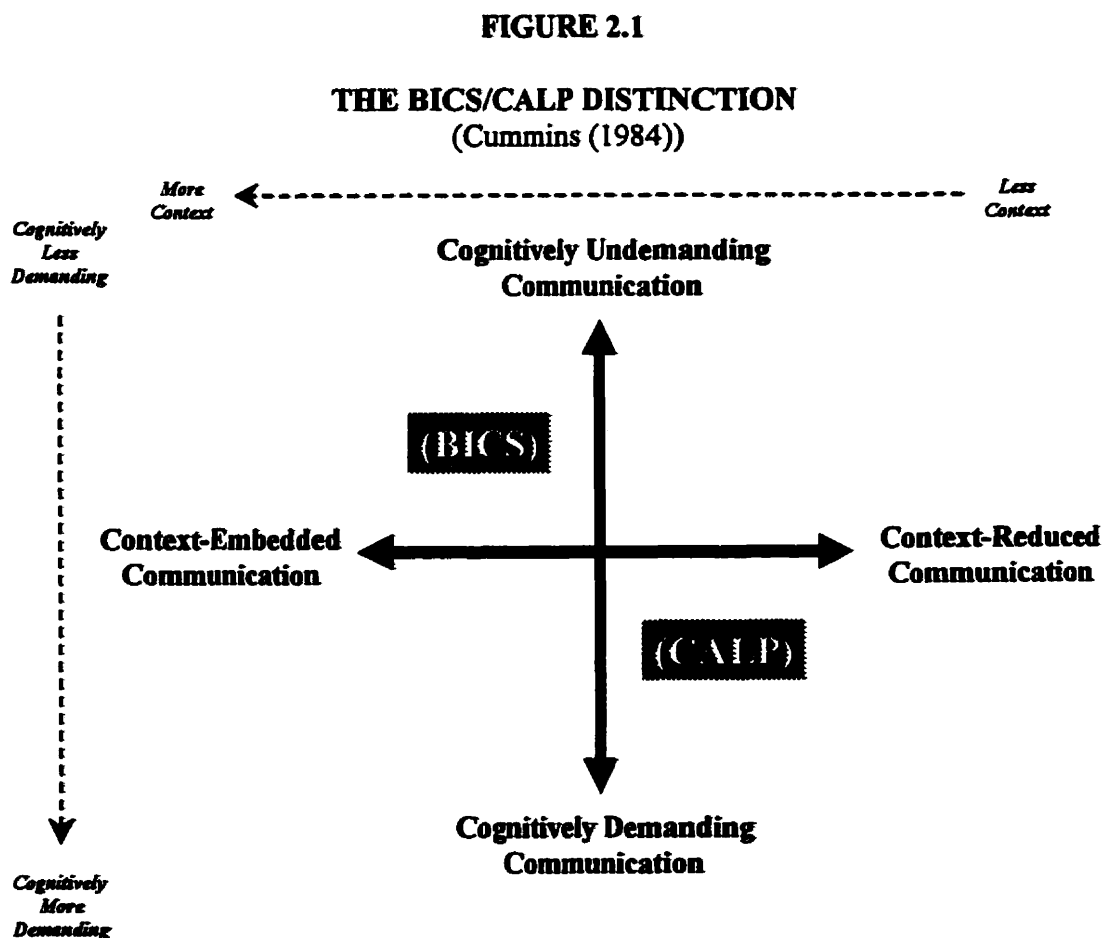
The horizontal axis represents a continuum relating to the range of contextual support available for expressing or receiving meaning. In context-embedded communication, paralinguistic and situational cues support verbal language. Examples of these cues are actions with eyes and hands and instant feedback. In general, context-embedded communication is more typical of the everyday conversational world outside the classroom. Toward the context-reduced end of the continuum, language is not embedded in a meaningful context. Therefore, cues to meaning are primarily linguistic. Language used in many classroom activities, where higher order thinking skills such as analysis, synthesis, and evaluation are required, is representative of communication at the context-reduced end of the continuum.

The vertical axis represents the level of cognitive demand required in communication. Cognitively undemanding communication occurs where a person has the mastery of language skills sufficient for easy communication. An example would be having a conversation in the street or a shop, where processing of information is relatively straightforward. Cognitively demanding communication may occur in a classroom where much information must be quickly processed.

Cummins does not propose that BICS and CALP are completely separate: all children acquire their conceptual foundation (knowledge of the world) through conversations in the home, and cognitive skills are involved in most forms of social interaction. But he argues that BICS and CALP are conceptually distinct insofar as they follow different developmental patterns. An example of this difference is the fact that for both native speakers and second language learners, phonological skills and basic fluency

(BICS) reach a plateau in the first 6 years or so; subsequent development is very much reduced in comparison to previous development. This is not the case for literacy and vocabulary development (CALP), which continue to develop, both for monolingual and multilingual speakers, throughout our schooling and our lifetimes (Cummins (1999:2)).

In Cummins' view, immigrant children may acquire BICS within two years, but it can take between 5 and 10 years to "catch up" in CALP (Cummins and Swain (1986:184)). This view is supported by a study of 1210 immigrant students through the Toronto Board of Education. These students achieved spoken English fluency within two years, but required five to seven years to achieve grade level norms in academic language proficiency as measured on Verbal IQ scores and reading tests.

Collier's (1987) study also lends support to Cummins theory. Her study analyzed the length of time required for 1548 ESL students to become proficient in English for academic purposes. Variables included were age on arrival, English proficiency, literacy and mathematics skills in L1, and number of years of schooling in English. The Science Research Associates tests were used to assess reading, language arts, mathematics, science and social studies. Her results indicated that students who were 8-11 years old on arrival required two to five years to reach national norms on all subject areas tested. Students who arrived at 5-7 years old were projected to require at least three to eight years to reach grade level. Students who arrived at age 12-15 were the lowest achievers, and were projected to need at least six to eight years to catch up to grade level in all subject areas. Collier (1987:617) projects that at least 4-8 years may be required for all

ages of ESL students to reach grade-level norms, as measured on standardized tests, in all subject areas.

The only known variable that separated the 5-7 year old arrivals from the older arriving students was their level of schooling in L1. Their relatively poor performance compared to the 8-11 year old arrivals implies that younger students might acquire English for academic purposes more rapidly if they were provided with a minimum of two years continued schooling in their L1. The poor performance of the 12-15 year old arrivals may be attributed to a loss of one to two years of cognitive and academic development in all subject areas while they are mastering English. Collier (1987:635) suggests that these later-arriving students are *most* in need of content-area classes in L1 in order to stay at grade level.

Collier's research findings support those of the Rockpoint Navajo and San Diego studies, mentioned in Section 1.2.2. The 5-7 year old students, who had not had time to develop literacy skills in their L1, were expected to require a longer time to achieve L2 grade level norms than the 8-11 year old students, who had established a foundation of L1 literacy skills before beginning L2 instruction.

Cummins clarifies his view of the BICS/CALP distinction in the following way: "....The distinction was not proposed as an overall theory of language, but as a very specific conceptual distinction which had important implications for policy and practice. ...What are the policy implications for instruction of the fact that immigrant students usually require at least five years to catch up to grade norms in L2 CALP?...The distinction and related research *does* suggest that if English language learning students

are transitioned into a "mainstream" class in which the teacher knows very little about how to promote academic skills in a second language, then they are unlikely to receive the instructional support they need to catch up academically. The distinction also suggests some clear reasons related to inappropriate assessment why bilingual students are seriously over-represented in classes for the learning disabled or mildly handicapped and under-represented in classes for gifted and talented students." (Cummins (1999:2-3)).

The issue of assessment will be addressed further in Section 2, External Factors.

2. School performance of language minorities: External factors

2.1 Sociocultural approaches

The language minority students who are most likely to experience frustration in school are those of lower socioeconomic class (Edelsky et al (1983)). Authors within the sociocultural framework argue that the reasons for poor school performance of low SES language minority children are less related to language deficits than to cultural differences between the language minorities and the middle class majority children. Edelsky et al suggest that middle and lower class children are at a disadvantage in the school system in a number of ways: having less exposure to literacy activities in the home environment, having different norms for interaction with teachers, and not having the same degree of "test-wiseness" (ability and desire to do well in testing situations) as middle class majority language children. Given these differences, they question the validity of using standardized tests to assess language minority students.

Although Cummins supports the use of standardized tests as a means of assessing language proficiency, he argues that there is little educational merit in trying to assess, by

means of IQ tests, the *intelligence* of minority students. Any IQ test standardized on a

"representative" sample will necessarily assess only those skills and knowledge that are

regarded as intelligent within the dominant group and will exclude any culturally-specific

ways in which minority children have learned to be intelligent (Cummins (1984:77). He

cites the Kamehameha Early Education Program (KEEP) as an example of how measures

of students' academic performance can be improved with the introduction of culturally

sensitive instruction. One example of such cultural sensivity was a change in classroom

management that allowed the children to work cooperatively and to learn by observing

the activities of older children, behaviours that were typical of the children's home

environment. This change resulted in an improvement in verbal IQ scores from

"subnormal" to "normal" range.

2.2   Sociopolitical approaches

Skutnabb-Kangas (1981) and Ogbu (1995) are two authors who represent a

political perspective on the issue of the school failure of language minorities. In

Skutnabb-Kangas' view, the phenomenon of semilingualism cannot be "explained away"

as a product of middle class bias on the part of researchers. It is not a "theory using white

middle class norms in an ethnocentric fashion to force those norms on bilingual

immigrant working-class children, and then label them as inferior, deficient or at least

different." (Skutnabb-Kangas (1981:249)). Neither, in her view, can semilingualism be

regarded as a deficiency inherent in the individual; it should be treated as one result of the

powerless social and linguistic circumstances in which he/she has lived. In other words,

the linguistic deficiencies described as _semilingualism_ are real, but these linguistic

inequalities are a result of political inequalities. "As soon as the minority itself gets

control over the way the school system is organized, semilingualism can be eradicated."

(Skutnabb-Kangas (1981:250)). This perspective asks us to look at the social and political

conditions that produce semilingualism. If this is not done, one of the consequences is

that the blame is laid on the individuals who suffer the consequences of the shortcomings

of a school system and a society that perpetuate a system of inequality (Skutnabb-Kangas

(1981:249)).

Ogbu (1995) notes that some minority groups encounter cultural and language

problems in school, but cultural differences do not affect the education of all minorities in

the same way. Some language minority students, e.g. the Cantonese-speaking Chinese

students in Oakland, California, and the Punjabi Indians in Valleyside, California, are

able to overcome cultural and language barriers, adjust well in school, and succeed

academically. Others, such as Hispanic/Mexican Americans, and Native Americans, do

not. He draws a distinction between _voluntary minorities_, and _involuntary minorities._

Voluntary minorities are groups that have chosen to move to a new country because they

believe that this move will lead to greater economic, political, or social well being. Their

positive expectations influence their perceptions of the public schools, and their children

do not usually experience persistent problems in academic achievement. Examples in

California are Chinese and Punjabi immigrants. Involuntary minorities are part of their

new society because of slavery, conquest, or colonization. These are the minorities that

have the most difficulties with school adjustment and achievement. He includes African

Americans, Mexican Americans and Native Americans as U.S. examples of involuntary

minorities. Ogbu argues that school success or failure among minorities can be explained

by examining the various groups' adaptation to majority culture.

Ogbu draws a broad distinction between voluntary minorities who come to a new

country with positive expectations, and those minorities that become part of another

culture through force. His analysis does not account for the cultural adaptation of

refugees or people such as Lebanese Canadians, who leave their home countries

voluntarily to escape war or political upheaval; therefore, I will not pursue his analysis

here.

2.3   Literacy in the home

Another external factor related to school performance is children's exposure to

literacy during preschool years. Wells' (1986) conducted a longitudinal study of 32

children of various socioeconomic classes, from ages one through their elementary school

years. Data was collected on the children's language development throughout their

preschool years, family practices regarding childrearing, and progress in school. His

results indicated that the children of lower socioeconomic classes were significantly less

successful in school than the more privileged children. Analysis of the results led to the

conclusion that school success was directly related to the value placed on literacy by

parents, as evidenced by the presence of books in the home, reading to their children, and

thereby imparting to the children an understanding of the purposes of literacy and how to

set about obtaining meaning from print. The children who were not exposed to literacy

activities in their homes "experienced considerably more difficulty in learning to read and write, and rarely achieved a level of independence by the age of 10 sufficient to make reading and writing enjoyable and rewarding. As a result, they tended to be less successful in other areas of the curriculum as well." (Wells (1986:145)

2.4   Education policies

2.4.1   Assessment and placement

Cummins' BICS/CALP distinction provides a useful framework for understanding the high dropout rate for ESL students from mainstream academic programs. In his view, the failure to take account of the differences in acquisition of conversational and academic uses of language has led to inappropriate psychological testing of bilingual students and premature exit from bilingual or ESL support programs. The students' conversational fluency in L2, achieved within two years of arrival, can lead teachers and other professionals to assume a level of linguistic proficiency that students do not possess with respect to academic, context-reduced language use. Upon exit from the ESL support program, students are placed into mainstream classes where they receive minimal support for continued academic language development in L2.

Cummins argues that the identification of surface structure control with 'English proficiency' leads teachers and psychologists to eliminate 'lack of English proficiency' as an explanatory variable, and low academic performance or test scores are attributed to deficiencies in the student or his/her background. Conversely, teachers and psychologists may attribute a language minority child's difficulty in school to his or her bilingualism.

An analysis of the psychological assessments of 428 ESL students in a Western Canadian city indicated that "even when a child's ESL background is taken into account, there is a tendency to assume that the IQ test score is a valid indicator of academic ability or _competence_ (as opposed to performance) and to attribute deficiencies in this competence to the child's bilingual background."(Cummins and Swain (1986:191)).

The assumption that IQ tests are valid indicators of minority students' academic abilities leads to the conclusion that their school failure is an inevitable consequence of mental inferiority due to one or more of the following factors: genetic inferiority, bilingualism, linguistic deficiency, or cultural deprivation. Standardized achievement and IQ tests 'locate' the cause of minority students' educational difficulties within the students themselves. (Samuda et al (1989)). This has led to the massive overrepresentation of minority children in special education classes. Ortiz and Yates (1983) report a 300% overrepresentation of Hispanic students in classes for the learning disabled in Texas. In Canada, ethnocultural community groups have been expressing concerns about discriminatory assessment and streaming of minority students into vocational programs since the early 1970s. For a review, see Cummins in Samuda et al (1989:102).

2.4.2 Funding

There is considerable research that strongly suggests that it requires an average of six years for an immigrant student to reach grade-level norms in L2 academic language proficiency (Collier (1987), Ramirez et al (1991), Cummins and Swain (1986)). If

educational funding for L2 assistance is provided for less time than that, students will be "mainstreamed" into monolingual classes, with no extra L2 support, before they are ready for the language demands of the classroom. For younger students, this may set them up for failure, as they gradually fall behind their monolingual peers (Ramirez et al 1991).

According to Watt and Roessingh (1994:291), some ESL students drop out of high school due to the removal of support services. Premature transition to mainstream classes, a fixed length of educational support regardless of individual need, and a high school attendance age cap that has been established according to the educational norms of English speaking students are examples of policies that can "push" students out of school prematurely.

3.   Varieties of bilingual education

The term _bilingual education_ is an imprecise umbrella term that applies both to classrooms where formal instruction aims to foster bilingualism and biliteracy, and to classrooms where bilingual children are present, but bilingualism is not fostered in the curriculum. One approach to categorizing types of bilingual education is to examine the aims of the various types. They may be divided into two general categories, _transitional_ and _maintenance_ bilingual education (Baker (1996)). Transitional bilingual education aims to shift the child from the language of home to the dominant majority language. Maintenance bilingual education aims to foster the minority language in the child. _Developmental maintenance_ seeks to develop a student's L1 to full proficiency and full literacy. Developmental maintenance is sometimes referred to as _Enrichment Bilingual_

Education, a term that is also used for programs for language majority children who are

adding a second language at school.

The various types of bilingual education may be conceptualized with the

following model:

FIGURE 2.2

BILINGUAL EDUCATION MODELS
Adapted from Verhoeven (1994)

	A transitional •————————→L1 •——————————→L2
Developmental maintenance, Enrichment bilingual education,	**B** simultaneous •——————————————→L1 •——————————————→L2
	C successive L1-L2 •——————————————→L1 •————————————→L2
Enrichment	**D** successive L2-L1 (immersion) •——————————————→L2 •————————————→L1
	E submersion •——————————————→L2

(Arrows indicate school progress)
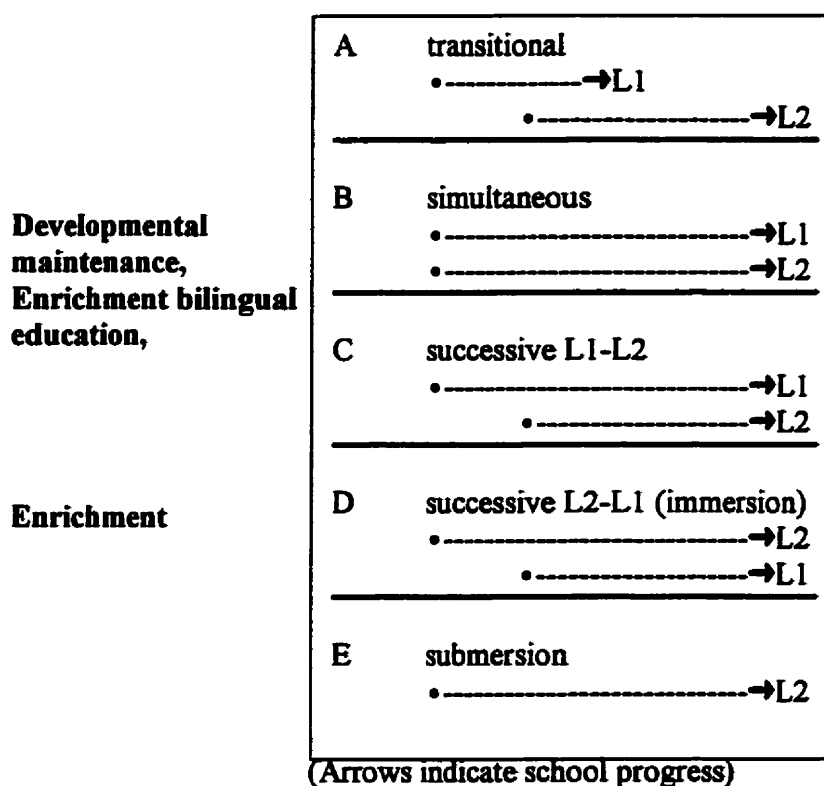
Model A, the *transitional* approach, starts with instruction in the minority language and

introduces L2 instruction after a short period. At a later point, L1 is interrupted. The goal

of the transitional approach is to reach an optimum language proficiency level in L2.

Models B, C, and D aim at functional bilingualism and biliteracy. Model B has

simultaneous L1/L2 instruction. Model C begins with L1, and later includes L2; Model

D, the _immersion_ approach, has the reverse order. Model E, the _submersion_ approach,

uses the L2, the target language, as the only language of instruction.

Verhoeven (1994) surveys the research on bilingual education within the various

models. With respect to L2 _submersion_ and _immersion_ programs (Models D and E),

research in different settings yields different results. In bilingual immersion programs in

Canada, majority English-speaking children reached a high level of L2 French literacy

skills without their L1 skills lagging behind. He cites Lambert and Tucker (1972) and

Genesee (1984) as examples. However, in studies where the minority L1 has a low level

of prestige, and the learning of L2 (L2 submersion) reflects the loss of L1, the opposite

effects are noted, i.e. there are "poor results in both languages" (Verhoeven (1994:205)).

He does not cite sources for the research on submersion, nor does he define the criteria

those studies used to determine that the results are poor in both languages.

Depressed literacy skills in L1, poor reading and writing skills in L2, and high

dropout rates are all indications of problems for language minority students in

submersion schooling. However, if we are to effectively address the problems of

language minority students in the schools, it is necessary to clearly define the nature of

the problems, whether linguistic, social, or political. The intent of this study is to discover

what, if any, are the specific _linguistic_ problems of a few individuals, and to define those

problems as precisely as possible.

The effectiveness of _transitional_ bilingual education in producing L2 academic

language proficiency has been examined in a number of surveys. As mentioned in

Section 1.2.2, there are no studies that have found transitional bilingual education to be

detrimental to students' progress in either their L1 or L2. However, the degree of *benefit*

to the language minority student in terms of enhancing school success is not yet

established. Chu-Chang (1980), Zappert and Cruz (1977) and Troike (1978) concluded

that the effects of transitional bilingual education starting from L1 were mainly positive.

Baker and Dekanter (1983) concluded on the basis of 28 studies that the effectiveness of

transitional education is weak. Willig (1985) came to the opposite conclusion that

transitional bilingual education led to a *positive* effect for reading skills in both L1 and

L2, and that bilingual education programs tend to produce higher performance in tests of

achievement throughout the curriculum.

Recent U.S. research by Ramirez, Yuen and Ramey (1991) compared English

submersion, Early Exit and Late Exit transitional bilingual education programs, all of

which have the acquisition of English language skills as their goal. Over an eight-year

period, more than 2300 Spanish-speaking students in these three types of bilingual

education were compared on measures of mathematics, language and English reading

skills. The study found that minority language students could be provided with

substantial amounts of L1 instruction without delaying their acquisition of English

language and reading skills. In contrast, the students who received instruction exclusively

in English (L2) may fall behind their English-speaking peers by grade 6. This is further

evidence to support the use of the native language as the language of instruction.

Willig's analysis also showed evidence that the acceptance by the school system

of the native language and culture of bilingual children, reflected in the availability of L1

instruction, was a positive influence on students' self-concept. It is not unreasonable to assume that motivation to learn in L2 will increase as the school pays more attention to the language and cultural background of the learner.

This positive effect is demonstrated in a five-month pilot project conducted by Boyer Short and Sutherland (1989) in a Calgary school. The study compared two groups of 12 non-English speaking five-year-old children. Their first languages were Spanish, Polish and Vietnamese. One group attended an English-only kindergarten class in the mornings and an ESL program four afternoons per week. The control group attended only the kindergarten class. The groups had similar English language skill levels. The ESL program was supportive of the students' L1s: support staff who spoke the children's native languages were available, and parents were encouraged to help out, having been assured that their first language was welcome in the classroom. Staff members used their first languages freely, and were able to explain concepts and information that were not understood; the children could respond and express themselves fluently in their first language. "The children were given the message that their language is very important and should not be disregarded while learning English." (Boyer Short & Sutherland, (1989:14)). The children's language skills in L1 and L2 were assessed with a test derived by the researchers from speech and language norms for kindergarten children. Based on the pre-and post test results in language scores, communication and confidence, reading readiness, and math skills, the difference in English language acquisition between the experimental and control groups was striking. While both groups improved, the experimental group's progress was significantly greater. This group advanced from a

mean total language score of 48 out of a possible score of 106, to a post-program score of

72/106. The control group advanced from a score of 53 to a score of 57 in the same time.

Boyer Short and Sutherland (1989: 30) concluded that "if ESL preschool children are free

to use their native language and are provided with a non-threatening classroom, one in

which parents and staff work together, the children will have a greater opportunity to

reach their maximum potential. Because the language, culture, interests and learning

styles of the children in the experimental group were respected and encouraged, their

English language level improved considerably as compared with the English language

levels of the children in the control group."

4.   The linguistic perspective

The research on bilingualism and the education of language minority children

receives input from a number of perspectives. Educators, sociologists and political

anthropologists all contribute to the debate. What is it that the linguist can bring to the

discussion? Does the field of linguistics offer insights into the nature of language that are

unique, that would clarify an aspect of the debate that has not to this point been

considered in depth?

Those in the field of second language acquisition and bilingual education are

typically interested in the development of language _skills_. These skills are observed

through the acts of speaking, listening, reading, and writing. These are all aspects of

language _performance_, or what people _do_ with language. Of greater interest to the

linguist is language _competence_, or the state of the speaker's internalized grammar.

Chomsky (1986,1988) proposes that to be a speaker of a language entails having a grammar of that language, an unconscious rule system that characterizes the speaker's language knowledge. It is this unconscious rule system that allows a speaker of a language to understand and generate original sentences, and to judge whether particular strings of words are grammatical or ungrammatical. These judgments are based on the speaker's internal structural representation of the language.

If a language minority student is struggling in school, and this struggle is attributed to a "language deficit" in either or both languages, what exactly does the term "language deficit" mean? Does it mean that the student has an impoverished internal grammar of one or both languages, or does it mean that the student has not mastered age-appropriate literacy skills? In order to locate the source of difficulty, a precise definition of terms is necessary and appropriate. In the view of Chomskyan linguistic theory, having an impoverished grammar would be a problem related to linguistic *competence*. The ability to read does also involve linguistic competence, but much more as well: recognition of letters, memory processes, and the extraction of meaning from a text, to name a few. These other factors are not in the domain of linguistics.

The specific contribution that the linguist can make is to focus on linguistic competence. Grammaticality judgment tasks, along with other evaluations, can give us a "window" into the state of a speaker's internal grammatical structure. This study asks the question "Is there a deficit in the internal representations of the grammars of these speakers?" If so, we have made a specific discovery. If not, the source of school

adjustment problems is not located in linguistic factors that are related to the *knowledge*

of the speakers; we must look for solutions elsewhere.

CHAPTER 3

THE ARABIC LANGUAGE AND DIALECTS

1.   Varieties of Arabic

The Arabic language is spoken throughout an area that lies partly in Asia and

partly in Africa. This region is bounded on the east by the Zagros Mountains, dividing

Iraq and Iran, and on the west by the Atlantic Ocean off the coast of Morocco. The

northern boundary is the Taurus range, dividing Turkey from Syria and Iraq; the southern

boundary is the Indian Ocean, the eastern and central regions of Africa, and the Sahara

Desert.

FIGURE 3.1

THE MIDDLE EAST
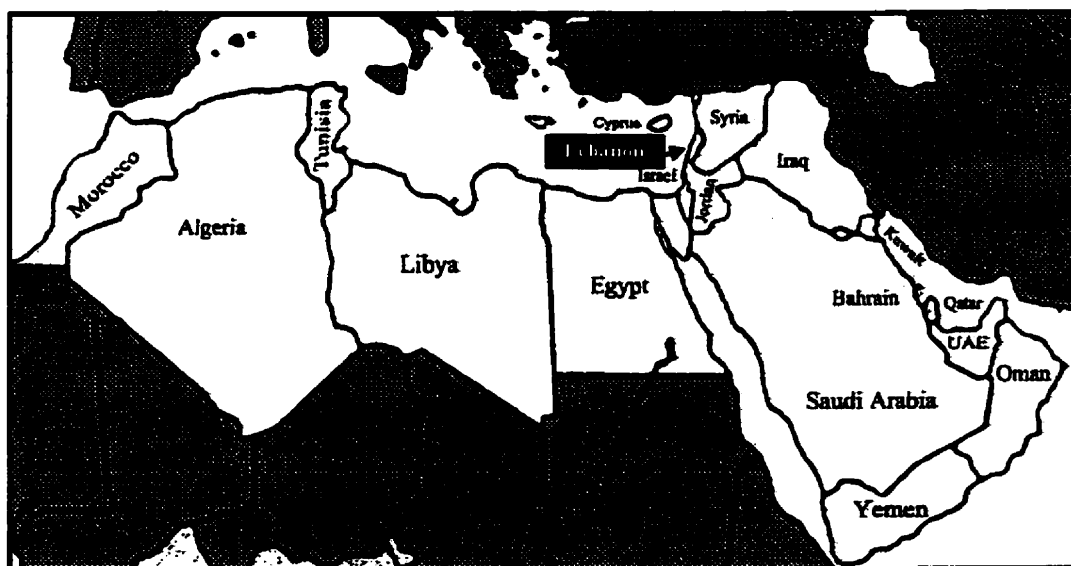
Source: Middle East Today, 1997.
Arabic-speaking countries are non-shaded

The country of Lebanon, with a population of 3,900,000, occupies a 4,015 square mile area bordered on the west by the Mediterranean Sea, and by neighboring countries Syria and Jordan on the east and south respectively. The Population Reference Bureau (Middle East Today (1997)) estimates the total population of the Middle East at 250,100,000. The Lebanese population comprises 1.6% of that total. Asher (1994:191) states that Arabic is the sole or joint official language of some 21 independent Middle Eastern and African states, and is the native language of approximately 183 million people. As the language in which the holy book of Islam, the Qur'an, was revealed, Arabic is the liturgical language of Muslims worldwide: 20 percent of the world's population, living in more than 60 countries.

Arabic communities are *diglossic*, using at least two distinct forms of the same language. One, Modern Standard Arabic, is acquired through education and is appropriate to one range of contexts; the other, the Neo-Arabic vernacular, is acquired before formal education and is appropriate to other contexts. Ferguson (1959:336) defines *diglossia* in this way: "a relatively stable language situation in which, in addition to the primary dialects of the language ....there is a very divergent, highly codified (often grammatically more complex) superposed variety, the vehicle of a large and respected body of written literature......which is learned largely by formal education and is used for most written and formal spoken purposes but is not used by any sector of the community for ordinary conversation." In describing the Arabic-speaking community, the term *diglossia* is rather simplified, since it does not account for the different levels that exist between the formal and colloquial varieties of the language. Most researchers agree that there are at least

three coexisting varieties of Arabic, each having a specialized function. These are

Classical Arabic/Modern Standard Arabic (MSA), the Neo-Arabic dialects, and Educated

Spoken Arabic (ESA). ESA lies between MSA and the dialects, in the sense that it is a

mixture of written and vernacular styles. Therefore it would be more accurate to describe

the situation in Arabic as *triglossic* or *multiglossic*, with more than two varieties and a

continuum along which native speakers shift according to a number of different variables.

1.1   Classical/Modern Standard Arabic

Classical Arabic (CA), the language of poetry, literature, and the Qur'an, was

described and standardized by Arab grammarians during the 8th and 9th centuries, and has

survived to the present. In the 19th and 20th centuries it went through a process of revival

and developed into Modern Standard Arabic (MSA), the official language of all Arab

countries. MSA differs from CA only in vocabulary and stylistic features; the

morphology and the basic syntactic norms have remained unchanged. MSA is the

language of Islamic worship, contemporary literature, journalism, television and

scientific writing. It is learned through formal education and is not acquired as a native

language by any Arabs. Its use is reserved for formal occasions calling for 'spoken

prose'. As the language of the Qur'an, Classical Arabic is widely believed by Muslims to

constitute the actual words of God and even to be outside the limits of space and time, i.e.

to have existed before time began with the creation of the world (Ferguson (1959:330)).

Hence, even though no segment of the community regularly uses MSA as a medium of

ordinary conversation, many Arabs hold the view that Arabic is 'really' Classical Arabic

or Modern Standard Arabic, the language which is prestigious and sacred.

1.2 Neo-Arabic Dialects

Neo-Arabic, or the vernacular, splits into numerous colloquial dialects. Arabs will

first acquire a Neo-Arabic dialect, then learn MSA as a second language, according to the

level of their education. All speakers, whatever their level of education, use vernacular

dialects for all speech purposes apart from religious ritual and other forms of formulaic

public speaking. However, the dialects are disdained by many Arabs and are popularly

regarded as mere 'corruptions' of Standard Arabic, incapable of expressing abstract and

complex concepts, and associated with ignorance and illiteracy (Ayari (1996:244)). None

of the regional dialects can be effectively written down.

The main groupings of the Arabic colloquial dialects are Iraqi, Arabian, Syro-

Palestinian (also called Eastern or Syrian), Egyptian-Sudanese, North African, and North-

West African. They have co-existed with the formal language for at least 1400 years,

borrowing from it and influencing it in return, at least locally. Though related to each

other, they are not mutually comprehensible with any ease, especially where they are

widely separated geographically, e.g. North-West African and Iraqi (Wickens (1980);

Bright (1992)). Within different geographical areas, there are also dialect differences that

correspond to the degree of urbanization. The patterns of migration and settlement, and

the maintenance of separate sets of social and speech networks in the cities on one hand

and the rural areas on the other, have led to a situation in which the dialects of the

countryside differ quite remarkably from those of the cities. In fact, the dialects of the

descendants of nomads in Jordan, Syria, Iraq and Saudi Arabia have more in common

with each other than they have with the dialects of the established cities such as

Damascus, Jerusalem and Amman. Similarly, the dialects of these cities have much in

common. However, as the leveling influence of MSA becomes stronger, through the

influence of the media in remote areas and the increase in public education since the

1960s, the rural-urban differences are beginning to break down (Asher (1994)).

All languages make some distinction between written, formal expression and verbal,

informal utterance. However, the difference between MSA and the colloquial dialects is

so great as to question the basic unity of the language concerned. Wickens (1980:9)

offers two examples that illustrate this difference:

- An Arabic newspaper, book or play written in Syria (in MSA) is understood by all

  educated Arabs throughout the Arab world, but if the same newspaper or book were

  read aloud in MSA, it would not be properly intelligible to poorly educated Arabs, in

  Syria or elsewhere. If the Syrian author used the Arabic alphabet to represent his own

  colloquial dialect, his book or play would be intelligible to his fellow Syrians only if

  they knew enough MSA to read the letters. Non-Syrian Arabs would suffer varying

  degrees of incomprehension.

- An Arab political leader, making an important speech, has often to choose whether he

  wishes to be wholly intelligible to all educated Arabs everywhere, in which case he

  will speak MSA, or to all of his own countrymen, in which case he will speak his

colloquial dialect. If he wishes to be understood in varying degrees by both groups, he will use an amalgam of the two.

1.3   Educated Spoken Arabic

Between MSA and the regional dialects is a continuum of spoken and written Arabic, along which speakers shift according to their communicative needs. The number of levels between MSA and the colloquial dialects, and the distinctive features of each, is a subject of controversy. However, researchers agree that there is at least one level between MSA and the dialects, which some call Educated Spoken Arabic (ESA). ESA is the medium of communication of educated Arabs, and is a mixture of written and vernacular styles. Both MSA and ESA are in use across national boundaries, with speakers modifying their speech in the interests of mutual intelligibility.

Mitchell (1986) describes ESA as the "unstigmatized" language occupying the middle ground between the "high-flown" prose of MSA and the "stigmatized" vernacular dialects. He further divides ESA into formal and informal styles. The use of ESA serves to identify the speaker as an educated person who wishes to converse on topics beyond the scope of a regional vernacular, and to communicate with other Arabs of similar background, of their own or other nationalities.

In contrast to MSA, ESA is characterized by the lack of morphological case, lack of mood endings and indefinite markers, lack of the internal passive, use of vernacular negative markers, and the lack of dual number marking on verbs and adjectives.

2.   Arab education – the challenge of diglossia

Among Arabs aged 15 years and over, the literacy rate in Arabic-speaking countries is approximately 67%, ranging from a low of 38.0% in Yemen to a high of 92.4% in Lebanon. (The Middle East Today (1997)). Even among Arabs who manage to read and write in literary Arabic well enough to satisfy academic requirements, there is a lack of confidence, skill, and interest in these activities (Ayari (1996:245)). Evidence of Arab students' poor writing skills is seen in the pervasiveness of the oral mode of discourse in their academic writings. Ayari and Elaine (1993) claim that the failure of many Arab students to comply with English rhetorical conventions in their writings correlates with their failure to exhibit writing skills in Arabic. Students who exhibit good writing skills in Arabic also tend to do so in English.

Some Arab intellectuals and educators have recommended the use of local dialects as the medium of instruction, at least in early school years, in order to overcome the mismatch between the spoken and written languages. They argue that the challenge posed by the learning of MSA, in fact a second language for the Arab child, is a heavy burden that delays the learning of academic skills until the language of literacy (MSA) is mastered. Support for this view comes from a 1968 UNESCO report, which advocates the use of the mother tongue in the initial stages of education, and studies conducted in the United States on the relationship between language of instruction and the academic achievement of students (Ayari (1996:246)). These studies attribute massive failure in the teaching of language-based skills to minority students to the difference between Standard English and the vernaculars of these students (Ogbu (1983)). This has led to the

implementation of programs in which minority children are taught in their native vernaculars such as Spanish or African-American English in order to facilitate the acquisition of literacy skills. For examples, see Baker (1996:215), Archibald and Libben (1995:435), Ramirez, Yuen and Ramey (1991).

It is not likely that the local dialects will replace MSA as the language of school instruction. Opponents of the vernacular argue that replacing literary Arabic with the vernacular would cut off future generations from the vast body of Arabic literature and undermine efforts to strengthen Arab unity. MSA continues to be the only variety of Arabic used in academic settings, and is regarded by Arabs as the language of education that will be most likely to secure better jobs or improve social status. In some countries, such as Morocco, Tunisia, and Algeria, the mismatch between the local vernacular and MSA is compounded by bilingualism. Because of the colonial legacy, French and/or English are used as languages of instruction for non-literary subjects. Some Arab educators argue that the use of French as a medium of instruction is responsible for the poor academic achievement of the school population (Ayari (1996:247)). In all three of the ex-French colonies, steps have been undertaken to replace French with MSA, at least in the elementary grades (Fitouri (1989)).

Before their school years, most Arab children are not exposed to reading material. Ayari (1996) quotes a study that estimates the number of Arab families who buy books and read from them to their children at 1.8%. This low figure is due to factors such as parents' inability to master Standard Arabic, lack of awareness of the role of reading and modelling in their children's acquisition of literacy, and a prevailing view that literary

Arabic is too difficult for children to be exposed to at a young age. Parents who do read to their children will often translate the standard form used in books to the colloquial form, assuming that the former is too complex. The view that MSA is too difficult for children is common also among teachers (Iraqi (1990)).

Some researchers speculate that the acquisition of reading and writing skills is impeded by the complexity of the Arabic writing system, which is characterized by the absence of short vowels and the plurality of letter shapes to represent the graphemes of the Arabic alphabet. Driessen (1992:30) states that the mastery of written Arabic requires several years of instruction, and that it is possible that progress in learning this language takes place at a much slower rate than in some other languages. In Morocco it takes pupils, on average, three school years to learn to decode these symbols and the diacritics used to represent short vowels; only then can they start to develop reading comprehension skills. Moroccan children need four to five years of full-time education before they are able to write a simple text in Arabic. Wickens (1980:12) mentions a number of challenges to the student of Arabic who wishes to master the script: "...it is a cursive script, i.e. there is no special print or inscription form in which the individual letters stand detached; ...most of the letters necessarily undergo various distortions of shape according to their position in a word and the shape of the letters to which they are connected; ...several of the letters, representing quite different sounds, are identical in shape, being distinguished only by one, two or three dots placed above or below them; and....there are in use several different styles of script: while they vary only in minor

details, they often appear disconcertingly different to the learner when he first meets

them."

TABLE 3.1

The Arabic Script

Phonemic Value	Final	Middle	Initial	Alone	Name
ʔ	١			١	ʔalif
b	ـب	ـبـ	بـ	ب	bāʔ
t	ـت	ـتـ	تـ	ت	tāʔ
θ	ـث	ـثـ	ثـ	ث	θāʔ
j	ـج	ـجـ	جـ	ج	jīm
ħ	ـح	ـحـ	حـ	ح	ħāʔ
x	ـخ	ـخـ	خـ	خ	xāʔ
d	ـد			د	dāl
ð	ـذ			ذ	ðāl
r	ـر			ر	rāʔ
z	ـز			ز	zāy
s	ـس	ـسـ	سـ	س	sīn
š	ـش	ـشـ	شـ	ش	šīn
ṣ	ـص	ـصـ	صـ	ص	ṣād
ḍ	ـض	ـضـ	ضـ	ض	ḍād
ṭ	ـط	ـطـ	طـ	ط	ṭāʔ
ẓ	ـظ	ـظـ	ظـ	ظ	ẓāʔ
ʕ	ـع	ـعـ	عـ	ع	ʕayn
ɣ	ـغ	ـغـ	غـ	غ	ɣayn
f	ـف	ـفـ	فـ	ف	fāʔ
q	ـق	ـقـ	قـ	ق	qāf
k	ـك	ـكـ	كـ	ك	kāf
l	ـل	ـلـ	لـ	ل	lām
m	ـم	ـمـ	مـ	م	mīm
n	ـن	ـنـ	نـ	ن	nūn
h	ـه	ـهـ	هـ	ه	hāʔ
w	ـو			و	wāw
y	ـي	ـيـ	يـ	ي	yāʔ

Adapted from Bright (1992)

Arabic has 28 consonantal phonemes. They are represented by 28 graphemes, some of which are identical in shape, and differentiated only by diacritical dots above or below the letters. Each of the three vowels in Standard Arabic occurs in a long and short form. Although the dialects retain the long vowels, they have lost many of the short-vowel contrasts. Three of the 28 graphemes, *?alif*, *wa:w*, and *ya:?* are ambiguous, indicating both their consonantal values /?/, /w/ and /j/, and the three long vowels of Arabic: /a:/, /u:/ and /i:/, respectively (Bright (1992:93)). They are listed in Table 3:2.

TABLE 3.2

Arabic Symbols With Consonant/Vowel Meanings

Name	Symbol	Phonemic Value	Vowel
?alif	ا	/?/	/a:/
wa:w	و	/w/	/u:/
ya:?	ي	/j/	/i:/

Although most children's beginning readers include the diacritics that represent short vowels, the Arabic writing system does not use these diacritics systematically at more advanced levels. The reader must scan the whole sentence, being alert to the thematic roles of words that have the same graphemic representation, in order to resolve the great number of alternative interpretations of words. For example, the word

K-T-B-T can be read *KaTaBTu* "I wrote' or *KaTaBTa* 'you (m,s) wrote' or *KaTaBTi*

'you (f,s) wrote', or *KaTaBaT* 'she wrote', or *KuTiBaT* 'it was written'. The reader

must determine from surrounding text what semantic interpretation to give to this word.

Researchers and educators have proposed a number of measures to address the

problem of illiteracy in the Arab world. These include the promotion of story reading in

literary Arabic in preschool education, simplification of the Arabic script, including the

introduction of vowels into the writing system, and the use of Arabic for all school

subjects, not just literary subjects (Ayari, (1996)). Doake (1989:9) suggests a broadly

based campaign to inform the public about the inherent capability of children to learn to

read and write and to demonstrate the role of home, school and community in

facilitating this learning.

3.   Structure of the Arabic Language

In this section I will describe the basics of the structure of Arabic, with particular

attention to those morphological and syntactic structures that differ from English. These

differences provide areas for testing possible L2 (English) interference in the speech of

Lebanese Arabic/English bilingual speakers.

3.1   Arabic Morphology

Both CA/MSA and dialectical Arabic have stem morphemes that consist solely of

consonants. Of these, over 90% have three consonants; the others have two, four or five.

Base morphemes, highly productive fixed consonant-vowel patterns or templates, combine with the stems to establish nominal and verbal patterns, which are often related to a certain semantic class. For example, the stem ʕ-l-m has the basic idea of 'cognition'. From it, one can derive the following verb forms:

TABLE 3.3

Arabic Verbal Inflection

Stem	ʕ-l-m	Related to cognition
Stem + CaCiC (past tense)	ʕalim	Verb root : 'know', (past)
Stem+ CaCCaC (causative)	ʕallam	Verb root 'teach'(cause to know)
Stem + ta + CaCCaC (reflexive)	taʕallam	Verb root 'learn' (cause oneself to know)
Stem + ista + CCaC (desiderative)	istaʕlam	Verb root 'enquire' (to want or ask for knowledge)

Source: Asher (1994:193)

To these verb forms are added inflections to indicate person, number, and gender: thus ʕalim-tu 'I knew', ʕalim-ta 'you(m,s) knew', ʕalim-tuma 'you(dual) knew', ʕalim-na 'they (fem,p) knew'.

Nouns are generated on similar principles: Ca:CiC- is the 'agent noun' pattern applied to all verbs which have a CaCvC- past stem, so ʕa:lim- means 'one who knows' or 'scientist'; muCaCCiC is the agent noun for causative verbs of the CaCCaC- stem, so muʕallim is 'teacher', and so on.

Nouns are morphologically marked for gender, number, case and definiteness:

TABLE 3.4

Arabic Noun Paradigms

	Indefinite	Definite
Masculine		
Singular		
Nom	muʕallimun 'a teacher'	ʔal-muʕallimu 'the teacher'
Gen	muʕallimin	ʔal-muʕallimi
Acc	muʕalliman	ʔal-muʕallima
Dual		
Nom.	muʕallima:ni	ʔal-muʕallilma:ni
Gen-Acc	muʕallimayni	ʔal-muʕallimayni
Plural		
Nom.	muʕallimu:na	ʔal-muʕallimu:na
Gen-Acc	muʕallimi:na	ʔal-muʕallimi:na
Feminine		
Singular		
Nom.	muʕallimatun 'a female teacher'	ʔal-muʕallimatu 'the female teacher'
Gen.	muʕallimatin	ʔal-muʕallimati
Acc.	muʕallimatan	ʔal-muʕallimata
Dual		
Nom.	muʕallimata:ni	ʔal-muʕallimata:ni
Gen-Acc.	muʕallimatayni	ʔal-muʕallimatayni
Plural		
Nom.	muʕallima:tun	ʔal-muʕallima:tu
Gen.-	muʕallima:tin	ʔal-muʕallima:ti

Source: Bright (1992)

Arabic has two basic tenses: past (perfect) and nonpast (imperfect). Each verb yields

two inflectional bases: one for conjugation with suffixed person markers (the perfect),

and one conjugated with prefixed person markers (the imperfect, subjunctive, and

imperative). Most of the verbs can be classified into ten patterns or stems. Besides these

stems, an internal passive is marked by the perfect morpheme CuCiC- and the imperfect

morpheme C(a)CaC, in combination with u as vowel of the person-markers:

- _qatala_ 'he killed', _qutila_ 'he was killed'

- _yaqtulu_ 'he kills', _yuqtalu_ 'he is killed'

3.1.1   MSA/Dialect Differences

Neo-Arabic dialects have developed new markers for the genitive relationship, e.g.

Lebanese Arabic _be:t tabaʕ-i:_ 'house of mine', with _tabaʕ_ as an independent genitive

morpheme. In MSA, this is expressed as _be:t-i_, literally, 'house-me'. In the verbal

morphology, new markers of the indicative imperfect have developed, like Egyptian

Arabic _bi-yiktib_ 'he is writing' vs. _yiktib_ (subjunctive) (Bright (1992)).

As a whole, the dialects are much simpler than MSA, with fewer categories of number

and gender on the verb, a lack of case endings, and the lack of the markers of indicative

and subjunctive. In many dialects, the system of personal pronouns lacks the contrast

between masculine and feminine in the plural.

3.2   Arabic Syntax

The following sections will describe some of the basic facts of Arabic syntax, both (MSA) and Lebanese Arabic (LA), with emphasis on some parameters that differ from English. These are word order, agreement, and passivization.

3.2.1   Word Order

Most researchers, in agreement with the ancient Arab grammarians, assume that the word order of Classical Arabic is VSO. In MSA and the modern dialects, both VS and SV word orders occur. Most current work in Arabic is based on the assumption, following Zagona (1982), Koopman and Sportiche (1991), Kuroda (1988), Kitagawa (1986), and Speas (1986), that the thematic subject is generated VP-internally. (Aoun et al (1994)). Researchers have proposed at least two explanations of the derivation of VSO and SVO word orders. Mohammad (1989), Fassi Fehri (1989), and Koopman and Sportiche assume that:

- VSO order is derived by verb movement to I

- SVO order is further derived by the subject raising to Spec IP

    These assumptions are illustrated in (1):

(1)

```
            IP
          /    \
       Spec     I'
              /    \
            I        VP
           /\       /  \
         I + V    NP     V'
          /\             |
                         V
                         |
                         t
```
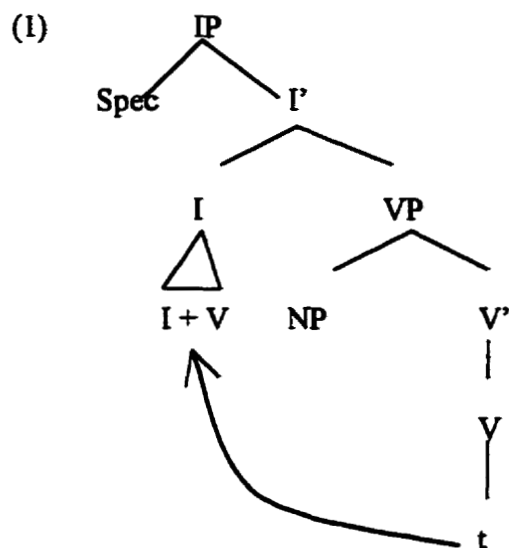
Aoun et al argue that the agreement facts of Lebanese, and other varieties of Arabic including MSA and Moroccan (MA), are best accounted for by assuming that V is in a projection higher than I, and S is in Spec IP. This assumption adds an extra step by moving the verb farther to some higher head position (e.g. F) as in (2):

(2)

```
              FP
             /  \
          Spec   F'
                /  \
               F    IP
              /\   /  \
            I+V  Spec  I'
            /\   /\   /  \
              subject I   VP
                      |  /  \
                      t NP   V'
                        |    |
                        t    V
                             |
                             t
```
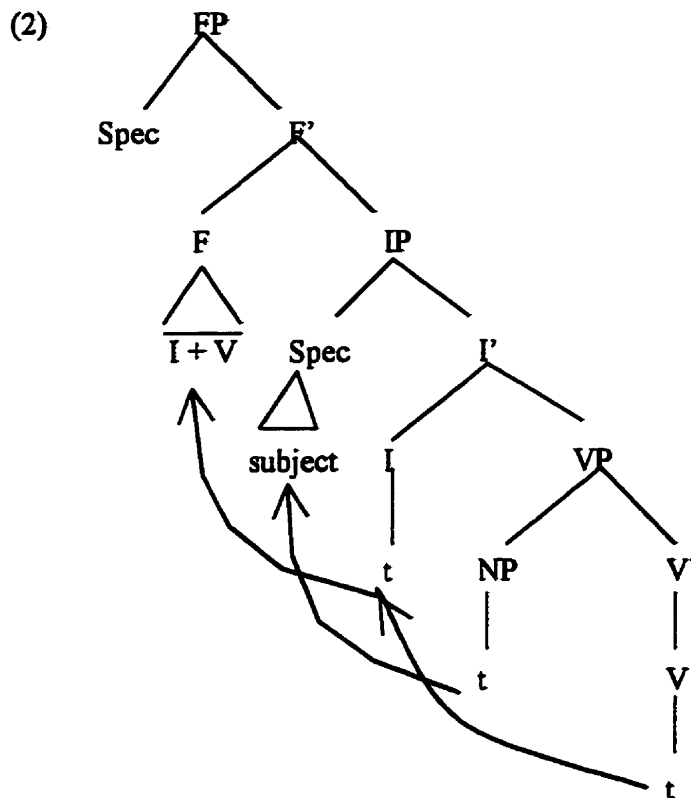
Aoun further argues that agreement in LA and MA is sanctioned by a spec-head relation. For the SV order, the subject in Spec IP agrees with I. For the VS order the verb raises farther up to a head position in which it retains the agreement information gathered in I. To account for the facts of MSA agreement, in which full agreement with Spec IP is not retained in VSO order (agreement obtains only in gender, not in number), he assumes that head raising does not always preserve agreement.

3.2.2 Agreement Facts

The basic working of agreement in Arabic provides a challenge to the researcher who wishes to provide a unified account for the various patterns. For MSA and LA they are as follows. As mentioned, in simple clauses in these languages, two word orders can be observed: VS and SV. In LA the verb agrees with the subject in number under both word orders. Example (3) illustrates this pattern in LA:[1]

(3)   a.   Ne:mo   lə-wla:d.
                 slept (3pl) the-children

         b.   Lə-wla:d   ne:mo.
                 the-children slept (3pl)

         c.   *Ne:m   lə-wla:d.
                 slept (3s) the-children

         d.   *Lə-wla:d   ne:m.
                 the-children slept (3s)

In MSA, in VS order, agreement obtains only in gender. The equivalent of (3c) is grammatical, and the equivalent of (3a) is ungrammatical.

(4)   a.   Na:ma   l-ʔawla:d-u.
                 slept (3ms) the-children-NOM

         b.   *Na:mu: l-ʔawla:d-u.
                 slept (3m,pl) the-children-NOM

The precise mechanism for the licensing of agreement in Arabic remains an issue for further investigation, and is beyond the scope of this thesis. However, the facts of

---

[1] IPA notation has been used for all Lebanese Arabic data.

agreement in Lebanese Arabic do provide us with an opportunity to investigate the

possible effects of L_2 (English) interference in the speech of Lebanese Canadians. Unlike

English, there are some constructions in LA in which subject-verb agreement seems

sensitive to the relative ordering of the subject and verb. These are the conjoined subject

construction, the double subject construction, and the agreement pattern of the

complementizer *?inn* ('that'). These will be considered in Chapter 4: Research Design

and Results.

3.2.3 Passivization

In CA and MSA the passive is marked internally, by the perfect morpheme

CuCiC- (5a) and the imperfect morpheme *C(a)CaC*, (5b) or externally by the prefix

?in (5c):

(5)   a.   *qatala* 'he killed', *qutila* 'he was killed'

      b.   *yaqtulu* 'he kills', *yuqtalu* 'he is killed'

      c.   *fa?ala* 'to act', *?infa?ala*, 'to be acted upon'

The colloquial dialects lack the internally marked passive. Hussein (1993) notes

that LA expresses passive constructions in the following ways:

• Passive participle forms.

Like English, LA has passive participle forms that share some characteristics with

adjectives. There are several patterns of passive participles in LA. Two examples are

maCCuuC, usually derived from the triradical root verbs of the form CVCVC:

(6)   *manaʕ* 'forbid'   >   *mammu:ʕ* 'forbidden'

əl-duχa:n   **mamnu:ʕ** ho:n
def-smoke(NOM) forbidden   here
'Smoking is forbidden here'

and *maCCi:*, derived from the incomplete verbal pattern of the form *CaCa*

(7)   *bana* 'build, make'   >   *mabni:* 'built'

be:t-i   **mabni:** min əl-ħajar
house(poss) built   of   def-stone
'My house is built of stone'

The passive participle has three forms only: masculine singular, feminine singular, and

plural.

- Verbal Passives: Prefixes *ʔin-* and *t-*

The passive form of the triradical active transitive verbs such as *katab*, 'to write',

fataħ, 'to open', and the incomplete verbs such as *bana*, 'to build', is formed by

adding the prefix *ʔin-*. The *ʔi-* is usually dropped. Triradical verbs starting with /ʔ/

take the prefix *t-* instead of the expected *ʔin-*. Examples of this type are *ʔaxad* and

ʔakal, 'to eat', whose passive forms are *tta:xad* and *tta:kal*, respectively.

The prefix *t-* is usually added to transitive verbs whose middle radical is geminated

and to verbs of the form *Ca:CaC* such as *'na:fas'*. For example, the verbs *raʕʕa*,

sakkar, become *traʕʕa*, *tsakkar* respectively.

Wightwick and Gaafar (1998) state that although we see the passive from time to time in Arabic, it is not used as much as it is in English. Wickens (1980:74) also makes the claim that the Arabic passive is of fairly rare occurrence, and that it is virtually never used where the agent's identity is stated. "In fact the Arabic name for it is '_al-majhul_', "the not-known", in token of this fact". In contrast, Hussein (1993:75) in his treatment of Levantine Arabic (which includes Syrian, Palestinian, Jordanian, and Lebanese) asserts that "passive forms are as common in this dialect of Arabic as they are in English or any other language for that matter". So while the form of expression of the passive voice has undergone a change from MSA to the dialects, it is possible that, at least in Lebanese, the frequency of the passive has increased in colloquial usage. With the shift from the internal passive to the use of prefixes, at least for verbal passives, the dialects have moved to a more analytic expression of the passive voice. However, there are two obvious differences from English: there is no "be" form, and the agent is not expressed.

3.2.4 Resumptive Pronouns

Resumptive pronouns in relative clauses are pronouns that occupy the position that a gap created by S-structure movement of a _wh_-pronoun would. In both Standard Arabic and Lebanese, the distribution of resumptive pronouns in relative clauses is as follows: they are prohibited in highest subject position (8a,b), obligatory in direct object position (9a,b), and obligatory as objects of prepositions (10a,b). The following examples are Lebanese Arabic (J. Awwad, personal communication):

(8a)   hajda ǝl-rɪʒeːl ʔɪlli abal ʕali
      this def-man   that met ʕAli
      'This is the man that met Ali.'

(8b)   *hajda ǝl-rɪʒeːlᵢ ʔɪlli abal **huwwe**ⱼ ʕali
      this def-man   that met **he**   ʕAli
      'This is the man that he met Ali.'

(9a)   ʃǝfɪt   ǝl-rɪʒeːlᵢ ʔɪlli abal-oⱼ   ʕali
      saw (1sg) def-man   that met **him** ʕAli
      'I saw the man that Ali met.'

(9b)   *ʃǝfɪt   ǝl-rɪʒeːl ʔɪlli ʕali abal-Ø
      saw (1sg) def-man   that ʕAli met-Ø
      'I saw the man that Ali met ____'

(10a) hajda ǝl-walad ʔɪlli raʔsɪt   muna maʕ-o
      this def-boy that danced(f) Muna with-**him**
      'This is the boy that Muna danced with.'

(10b) *hajda ǝl-walad ʔɪlli muna raʔsɪt   maʕ-Ø
      this def-boy that Muna danced(f) with-Ø
      *This is the boy that Muna danced with.___

The differences in distribution of resumptive pronouns between Arabic and

English are exploited in the tests of competence in Lebanese. These are described in more

detail in Chapter 4: Research Design and Results.

4. Conclusion

In this chapter I have presented an overview of the basic structure of the Arabic

language, the relationship between Modern Standard Arabic and the colloquial dialects,

and some of the educational issues with which Arab countries are faced. Some of the differences between Arabic and English were noted.

In Chapter 4: Research Design and Results, I will give a more detailed treatment of English/Lebanese Arabic differences and how these were utilized in the development of tests of linguistic competence.

CHAPTER 4

RESEARCH DESIGN AND RESULTS

1. The Tests

As mentioned in Chapter 1, the focus of this investigation is the grammatical competence of the subjects. Within Bachman's model of communicative competence, grammatical competence refers to the well-formedness of structures at or below the sentence level, and includes vocabulary, syntax, phonology and morphology. All of these subcomponents of grammatical competence were probed to some degree in both the Lebanese Arabic (LA) and English of all three subjects, in order to determine whether they exhibit linguistic deficits in either of their languages. For both languages the focus of investigation was the spoken language. This was necessary in LA, because it is not a written language. The decision to follow the same course, for the most part, in English was prompted by the subjects' relative comfort with oral testing as opposed to written tests.

Vocabulary: English vocabulary was tested with the PPVT-III vocabulary test. In LA, we relied on the subjects' self-assessments of their vocabulary size and the production data that was evaluated by other native speaker (NS) informants.

Morphology and syntax: The Michigan Test (Grammar) and English Grammaticality Judgment (GJ) test were utilized to evaluate the subjects' English syntax and morphology. The researcher informally evaluated the subjects' spoken English. The

morphology and syntax of LA were tested with a GJ test devised by the researcher.

Native speaker (NS) informants evaluated the subjects' production data.

Phonology: For both English and LA, NSs of these languages informally assessed

the subjects' phonology.

A summary of all tests follows:

- **Interviews**

Subjects were interviewed on topics that included their age of arrival in Canada,

level of schooling reached in Lebanon, exposure to reading in their homes during their

preschool years, and their experience of schooling in Canada. (See Appendix 1,

Interview.)

- **Lebanese Arabic**

1.   Informal taped conversation between subjects (production task)

2.   Story-telling (production task)

The subjects were given a children's book which has pictures without text, the

Mercer Mayer children's story, "A boy, a dog, and a frog", and asked to tell this

story, first in English, then in Lebanese. The stories were taped.

Three NS informants evaluated the conversation and the stories for accent, syntax,

morphology and vocabulary errors, and general impressions of the spoken language.

3.   Lebanese GJ task (probing grammatical competence), an oral test.

- **English**

1.   English GJ task (probing grammatical competence)

      A test consisting of 26 items that, when administered in written format, had

      received consistent judgments from English native speakers. Like the LA test, this

      test was administered in oral format, on audiotape. The audio test was piloted on

      English NS controls, with reasonably accurate results in both written and oral

      formats.

2.   Peabody Picture Vocabulary Test III

      A Lebanese-speaker informant was asked to evaluate the PPVT III for possible

      cultural bias in some items. He was satisfied that cultural differences would not

      affect performance on the test.

3.   Michigan Test of English Language Proficiency, Part I, Written Grammar

1.1   Two-stage Testing

In order to determine whether the subjects' errors were at the level of competence

or performance, a two-stage testing procedure was used. This approach was based on the

work of Vago (1991) in his assessment of attrition in the first language of a bilingual

Israeli speaker of Hebrew and Hungarian. This subject's use of Hungarian (L1) was

limited; her dominant language was Hebrew (L2). In order to ensure that her errors in

Hungarian were not just at the level of performance, but were at the deeper level of

competence, the Hungarian data were gathered and analyzed in two stages:

Data collection (paradigm elicitation): The subject was provided with individual

nominal and verbal stems and was instructed to provide the various inflections that

constitute paradigmatic sets in Hungarian.

Analysis: The information obtained from the subject was analyzed and compared

with the standard dialect of Hungarian, the dialect spoken by the subject's parents.

In subsequent interviews, the subject was presented with her own data, as

individual word tokens (not in the context of paradigms). Data included her forms that

had been identified by NS informants as deviations from standard Hungarian and a

control group of her forms that had been identified as correct in relation to standard

Hungarian. Her own deviant forms that she judged to be acceptable were considered to be

evidence of attrition, at the level of competence, in her morphophonemic system.

Similarly, in this study, research was conducted in two stages. The first stage

included audiotaped casual conversation in Lebanese between two subjects, and a story-

telling task in Lebanese and English, also recorded. The second stage involved testing

with the one error that was observed in these spontaneous production tasks, along with

others designed to test specific areas of L_1/L_2 differences.

2.   Development of Grammaticality Judgment tests – English and Lebanese

White (1989) recommends a research design that does not rely solely on

spontaneous production data, but instead targets the specific areas of grammar to be

tested. The absence of violations in syntax in spontaneous production is not necessarily

an indication of linguistic competence, because the subject might fail by chance or by

avoidance to produce structures that are ungrammatical, or the relevant structures might not arise in the normal course of conversation. It is necessary for the experimenter to be able to manipulate the sentence types to be investigated, rather than relying on their chance occurrence; this is done through GJ tasks. For this reason, we chose to utilize GJ tasks as measures of linguistic competence in both Lebanese and English. Because in conversation all three subjects exhibited native-like command of English, the decision was made to administer a simple GJ test in English as a comparison with English NS controls. A more extensive test was developed to probe competence in LA. To minimize the possibility of response bias (a tendency to accept all sentences), both grammatical and ungrammatical sentences were included in both the English and LA tests. Successful performance involves the rejection of the ungrammatical sentences, and is therefore unlikely to be due to a response bias.

2.1 English GJ Test

Before using an audiotaped GJ test in LA, it was important to establish the reliability of the audiotape format. To this end, a similar task in English was piloted with native English speakers. The test was based on the work of Susan Bennett and Lydia White (Project on Near Native Competence, May 25, 1991, McGill University.)

The test was conducted with 26 sentences that had yielded 100% consistency of grammaticality judgments in a written format. Four sentences that had received inconsistent judgments were also included, but not considered in the final tabulation. The test sentences, along with instructions, were audiotaped, and the test administered to seven native English speakers. Subjects were asked to indicate, by circling an 'OK', 'X',

or '?' on an answer sheet, whether the sentence was possible in English, impossible in

English, or whether they were "not sure". Subjects were asked to focus their attention on

the structure of the sentence, not on the vocabulary. All of the sentences are questions

containing wh-extractions that test the following structures: the Subject Condition,

adjunct islands, the Complex Noun Phrase Constraint, relative clauses, long-distance

extraction of objects, and ECP-subject extractions. The sentences follow:[1] (For the

complete transcript of the GJ test, including the instructions and answer sheet, see

Appendix 2, English Grammaticality Judgment Test.)

1.	*What was a story about read by John?
2.	Who did John expect a letter from?
3.	Which building did you make a drawing of?
4.	*Who did the news about surprise Ann?
5.	Who did the letter from Jane please?
6.	What did the examination of the data explain?
7.	*What did John get excited because Ann bought?
8.	*What did John never believe the story that Anne stole?
9.	*What did John fall because he slipped on?
10.	*What does John believe the claim that Ann stole?
11.	?What did John confirm that Ann had been awarded?
12.	Which trial did you write a story about?
13.	Who was John taking a picture of?
14.	?Who did you arrange that would hand out the tests?
15.	*Who did Jane quit school because she hated?
16.	*Who did a story by please the children?
17.	What did you make a request about?
18.	*What did John fall because he slipped on?
19.	*Who did John love the woman who married?
20.	*Who does Sam believe the claim that stole his car?
21.	What did Jane say that Sam should build?
22.	?Who did the choice of leader annoy?
23.	?Who do you suppose that wants to marry John?
24.	What does John believe that Jane bought for his birthday?
25.	*What did John see the woman that wrote?

---

[1] Sentences 11,14,22, and 23 received inconsistent responses in Bennett's study and in this study, with both English NSs and Lebanese subjects. They were eliminated in the final tabulations, leaving 26 items.

26.   Who do you suppose that John wants to marry?
27.   Who did you announce would be the new English teacher?
28.   What does Ann want to do?
29.   Who does Sam want to fire?
30.   *What did Sam praise athletes who can throw?

As Table 4.1 shows, six of the seven speakers produced results that correlated

highly with Bennett's findings. All six agreed with at least 24 of the 26 judgments.

However, they didn't all agree with the same sentences. Of the 26 sentences that had

shown no variation in Bennett's test, 19 received judgments from all seven informants

that were identical to the judgments of her informants.

TABLE 4.1

English Grammaticality Pilot Test Results

Informant	Number "correct"	% Agreement	"Incorrect" sentences(oral)	"Incorrect" sentences (written)
1 male, 54 yrs	24	92.3%	10, 26	6, 21
2 male, 22 yrs	24	92.3%	5, 27	16
3 male, 19 yrs	24	92.3%	5, 24	5
4 male, 24 yrs	25	96.5%	1	none
5 female, 44 yrs	21	80.8%	1,5,21,24,27	1, 16, 24
6 female, 26 yrs	25	96.5%	26	none
7 female, 51 yrs	25	96.5%	26	5, 17

Two months later, the informants were asked to do the same test in written

format, and the results were slightly more accurate. One possible reason for this is that

when subjects are tested in an oral format, they have less time to edit their responses and make metalinguistic judgments. If so, the oral testing format may provide for a more accurate assessment of a subject's on-line processing than a written test in which subjects have more time to think about their judgments.

On the basis of the reliability of the oral test pilot results in English, I have concluded that the administration of an oral GJ task in Lebanese Arabic would produce similarly accurate results. This English test was also administered to the three subjects as one measure of their English competence.

2.2 Lebanese GJ Test

The following procedure was used to develop the Lebanese grammaticality judgment test:

- Elicitation of LA data in production tasks (story-telling and taped conversation)

- Evaluation of production data by Lebanese NS informants. A speech error in one subject's data was noted and later included in the GJ test.

- Formulation of test items to target English/LA differences and expected areas of attrition in LA. Aoun et al (1994) provided data from which to extrapolate English/LA differences, and Choueiri (personal communication) provided ideas for expected areas of attrition in the LA system of agreement. A bilingual NS informant translated the test instructions and test items into Lebanese, and the test items were (broadly) transcribed by the researcher into "written Lebanese", or Lebanese in phonetic script. For the test items, see Appendix 3, Lebanese Arabic Grammaticality

Judgment Test. A detailed description of the development of the test items will follow in Section 2.3 of this chapter.

- The NS informant read the LA test onto tape. The format, instructions and answer sheets were the same as those in the English pilot test. The sentences were presented in random order. Each sentence was repeated once, and there was a six-second pause between items. After the completion of the 96 items, subjects were presented with four of the sentences again, in two pairs. They were asked to indicate on the answer sheet the sentence in each pair that they preferred. These two pairs of sentences have direct object resumptive pronouns in relative clauses. All four are grammatical, but for each pair, NS informants preferred one sentence to the other. They would use the less-preferred construction more rarely, in order to give the object of the sentence a particular emphasis. This discrimination task was included to determine whether the subjects were aware of this subtle distinction.

- The test was piloted with six Lebanese NS informants who had been away from Lebanon for various lengths of time. Most commented that the instructions were easy to follow and the test was not difficult to do. More recent arrivals, who by their own estimates use their L1 regularly and/or read and write Standard Arabic, achieved more accurate results; those who had been away from Lebanon longer and seldom use their L1 had lower scores (See Table 4.2). Nine items that received inaccurate judgments from both of the informants who were the most recent arrivals were eliminated from the test, leaving 87 test sentences. With the two pairs of sentences in the discrimination task, the total possible score on the test was 89.

TABLE 4.2

Lebanese Grammaticality Judgment Test:

Pilot Test Results

Informant	Age	Age of Arrival	Years in Canada	Estimated use of L1	Read/write Arabic?	Score /89
1	43	42	1	95%	Yes	86
2	16	15	1	60%	Yes	82
4	39	29	10	40%	Yes	81
3	41	25	16	10%	Yes	76
5	17	8	9	20%	No	64
6	14	5	9	15%	No	57

- Finally, the test was administered to the three subjects, and their results were compared with the NS controls. A discussion of these results follows later in this chapter, in Section 3: Test Results.

2.3 Formulation of LA Grammaticality Judgment Test Items

The test items targeted verbal and nominal agreement for definiteness, gender and number, plural formation, conjoined and double subject constructions, complementizer agreement, passives, resumptive pronoun distribution and one error in Sami's speech that was noted by the informants. Some of these items were chosen because of L1/L2 differences, others target expected areas of L1 attrition in the LA system of inflectional morphology. A more detailed description follows.

2.3.1 English/LA Differences

Agreement

Subject-verb agreement in LA and English differs in some ways that were

exploited for the purposes of this study. The relevant constructions are the conjoined

subject construction, the double subject construction, and the agreement facts

surrounding the complementizer *?inn-*, 'that'. A portion of the GJ task was formulated

around those differences. This section contains a description of each of these

constructions and their behaviour in LA as opposed to English agreement patterns.

Conjoined subject construction

In LA, the pattern of verbal agreement involving conjoined subjects is as follows:

In SVO order, the verb agrees in number with the plural subject, as it would with a single

subject. When the subjects are postverbal there are two possible agreement patterns:

The verb may agree with the plural subject:

(1)   **Ra:ho**   ?omar w   ?ali.
        left (pl)[2] Omar and Ali
        'Omar and Ali left.'

or the verb **may agree** as if it were followed by only the first member of the

conjunction:

(2)   **Ra:h**   Kari:m w Marwa:n
        left (3ms) Kari:m and Marwa:n
        'Kari:m and Marwa:n left.'

---

[2] Notations are as follows: (pl): plural; (s): singular; (m): masculine; (f): feminine; (poss): possessive

The pattern in example (2) is not found in English.

Sentences of the type in (2) were included, reasoning that if such sentences are judged to be *ungrammatical*, this could be due to either attrition or L₂ interference.

Double subject construction

The double subject construction occurs in sentences involving the auxiliary *ke:n*, 'be'. It is best explained in comparison to the conjoined subject construction. When used with the auxiliary *ke:n*, as with other verbs, a conjoined subject (not double subject) may be entirely preverbal. In this case, both *ke:n* and the verb agree with it:

(3)   Kari:m   w   Marwa:n   **ke:no** ʕam yilʕabo.
        Kari:m   and Marwa:n   **were** ASP playing(pl)

When the conjoined phrase is entirely postverbal, *ke:n* has the option of agreeing with the whole phrase (4a) or with its first member (4b):

(4)(a)   **Ke:no** Kari:m   w   Marwa:n   ʕam yilʕabo.
         were Kari:m   and Marwa:n   ASP playing(pl)
         'Kari:m and Marwa:n were playing.'

(b)   **Ke:n** Kari:m   w   Marwa:n   ʕam yilʕabo.
         was Kari:m   and Marwa:n   ASP playing(pl)
         'Kari:m and Marwa:n were playing.'

In the double subject construction, one NP precedes the auxiliary. Following the auxiliary is a conjoined NP, the first member of which is a pronoun obligatorily coreferential with the preverbal NP. The auxiliary must agree with the preceding NP (5a). It cannot agree with the following conjoined NP (5b).

(5)(a)   Kari:m **ke:n** huwwe w   Marwa:n   ʕam yilʕabo.
               Kari:m was   he   and Marwa:n ASP playing(pl)
               'Kari:m and Marwa:n were playing.'

(b)   *Kari:m **ke:no** huwwe w   Marwa:n   ʕam yilʕabo.
               Kari:m were   he   and Marwa:n ASP playing (pl)
               'Kari:m and Marwa:n were playing.'

Grammaticality judgment tasks were based on sentences such as (5a) and (5b); if (5a) is judged unacceptable, or (5b) judged acceptable, it would be reasonable to assume that English-like agreement patterns are being observed.

Complementizer agreement:

A third difference between LA and English is the agreement pattern of the complementizer *ʔinn* 'that'. *ʔinn* must have an agreement morpheme attached to it. This morpheme may agree in number with the (null) pronominal subject (6a):

(6)(a)   Fakkar   ʔinne   (ʔana) ruħt.
         thought(3ms) that(1s)   (I)   left(1s)
         'He thought that I left.'

If it doesn't agree with the subject, it takes a default 3rd person masculine singular value:

(6)(b)   Fakkar   ʔinno   (ʔana) ruħt.
         thought(3ms) that (3ms) (I)   left
         'He thought that I left.'

Either pattern is acceptable, but an agreement morpheme is obligatorily present. The grammaticality judgment task included sentences without the agreement morpheme, for example:

(7)   *Fakkar ʔinnØ (ʔana) ruħt.

Where such sentences are judged acceptable, this would indicate attrition and/or L_2 influence.

Passives

As mentioned in Chapter 3, the differences between the LA and English passive constructions are the absence of the auxiliary 'be' in LA, and the absence of the agent. Grammaticality judgment items included LA sentences with 'be' forms inserted. Those judged grammatical may indicate L_2 influence as a factor.

Resumptive pronouns

Resumptive pronouns in relative clauses are pronouns that occupy the position that a gap created by S-structure movement of a *wh*-pronoun would. In English, resumptive pronouns are marginally possible in relative clauses, as in the following example taken from Demirdache (91):

(8)   ? I just saw a girl$_i$ [who$_i$ [John's claim that she$_i$ was a Venusian] made all the headlines].

In Arabic (both MSA and LA) the distribution of resumptive pronouns in relative

clauses is as follows: they are prohibited in highest subject position (9a, 9b), obligatory in

direct object position (10a, 10b), and obligatory as objects of prepositions (11a, 11b):

(9a) hajda əl-rɪʒeːl ʔɪlli abal ʕali
this def-man that met ʕAli
'This is the man that met Ali.'

(9b) *hajda əl-rɪʒeːlⱼ ʔɪlli abal **huwwe**ⱼ ʕali
this def-man that met **he** ʕAli
'This is the man that (he) met Ali.'

(10a) ʃəfɪt əl-rɪʒeːlⱼ ʔɪlli abal-oⱼ ʕAli
saw (1sg) def-man that met **him** ʕAli
'I saw the man that Ali met (him).'

(10b) *ʃəfɪt əl-rɪʒeːl ʔɪlli ʕali abal-Ø
saw (1sg) def-man that ʕAli met-Ø
'I saw the man that Ali met.'

(11a) hajda əl-walad ʔɪlli raʔsɪt muna maʕ-o
this def-boy that danced(f) Muna with-**him**
'This is the boy that Muna danced with (him).'

(11b) *hajda əl-walad ʔɪlli muna raʔsɪt maʕ-Ø
this def-boy that Muna danced(f) with-Ø
*'This is the boy that Muna danced with.___'

Sentences of the above type, both grammatical and ungrammatical, were included

in the GJ test for two reasons. The object constrúctions are different from English, and

resumptive pronouns are a later-acquired structure.[3]

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[3] Precise information on the age at which Arabic-speaking children acquire relative clauses and resumptive pronouns is not available.

Inaccurate judgments on these items could demonstrate either L2 interference or in the case of individuals who make a switch to their L2 in childhood, a failure to acquire the relevant structure.

2.3.2 LA Inflectional Morphology

LA has an extensive system of nominal and verbal agreement. We targeted the following possible areas of attrition in LA inflectional morphology:

Definiteness agreement on nouns and adjectives

(12)   harab əl-kalb   lə-zRiir
       ran   def-dog   def-small
       'The small dog ran away.'

       *harab əl-kalb   ∅-zRiir
        ran   def-dog ∅-small
        'The small dog ran away.'

       *harab ∅-kalb   lə-zRiir
        ran   ∅-dog   def-small
        'The small dog ran away.'

Gender agreement on adjectives

(13)   əl-bɪnt ʒɪʕane
       def-girl hungry(f)
       'The girl is hungry.'

       *əl-bɪnt ʒɪʕan
        def-girl   hungry(m)
        'The girl is hungry.'

Gender agreement on verbs

(14)   əl-walad aʕad   ʕal-kərsi
          def-boy sat(m) [on the]-chair
          'The boy sat on the chair.'

          *əl-walad aʕdɛt ʕal-kərsi
          def-boy   sat(f) [on the]-chair
          'The boy sat on the chair.'

Number agreement on verbs

(15)   *Neːm   lə-wleːd
          slept (3s) the-children
          'The children slept."

          Neːmo   lə-wleːd.
          slept (3pl) the-children
          'The children slept.'

Formation of plurals and duals (nouns)

(16)   *fi   ʔɪtneːn kalb   bəl-beːt
          There two   dog(s) [in the]-house
          'There are two dogs in the house.'

          *fi   tlat   kalbeːn bəl-beːt
          There three dog(dual) [in the]-house
          'There are three dogs in the house.'

Subject 2 (Sami)'s 'error': inaccurate plural form:

(17)   *ʕAli ʕandu arbaʕ aχi
          Ali   has   four   brother (poss, s)
          'Ali has four brothers.'

To minimize the possibility of false ungrammatical judgments, simple vocabulary was used. To ensure that the form we were targeting was the form being judged by the subject, we provided "minimal pairs" in each category. These items are minimal pairs in the sense that the only thing that differentiates between the grammatical and ungrammatical sentence is the particular form being tested. An example of a minimal pair is (13) above, repeated here as (18), which targets gender agreement on adjectives.

> (18)(a) əl-bɪnt ʒɪʕane
>   def-girl hungry(f)
>   'The girl is hungry.'

> (b) *əl-bɪnt ʒɪʕan
>   def-girl hungry(m)
>   'The girl is hungry.

The single difference between (18a) and (18b) is the presence or absence of the gender marker on the adjective _ʒɪʕan(e)_. If a subject judges (18a) to be acceptable, and (18b) to be unacceptable, we may assume that (s)he has knowledge of the rule regarding gender agreement on adjectives. If both are judged acceptable, or the judgments are reversed, it is likely that s(he) doesn't.

3. Test Results

This section contains a discussion of all test results for the three subjects in both languages. Results are summarized in Table 4.3, and a discussion of each subject follows.

TABLE 4.3

Subjects' Test Results: Lebanese and English

	Muna	Sami	Nabil
L1 (Lebanese) Phonology	Good	Good	Perfect
Vocabulary	Limited	Limited	Somewhat limited
Morphology/ Syntax	Production: no errors noted GJ: 73/89	Production: one performance error GJ: 73/89	Production: no errors noted GJ: 73/89
L2 (English) Phonology	Native-like	Near-native: very slight accent	Near-native: slight accent
Vocabulary	Extremely low: Age equivalent 9;01	Average: Age equivalent 22+	Low-average: Age equivalent 14;01
Morphology/ Syntax	Michigan test: 32/40 GJ: 23/26 Spoken English native-like	Michigan test: 38/40 GJ: 23/26 Spoken English native-like	Michigan test: 15/40 GJ: 22/26 Spoken English native-like

SUBJECT #1: *Muna*

LA Phonology: NS informants rated her accent as "fine". One informant noted a slight Canadian English accent; two did not. The informants correctly identified her accent as Beirut, or near Beirut, with some Palestinian influence.

LA Vocabulary: Muna has, by her own estimate, a somewhat limited vocabulary in LA, having "forgotten some words". However, two informants evaluated her story telling as typical of Lebanese culture, in this way: the story has "lots of words", and is "circular". One informant commented on the drama, tension and character development in the story.

This indicates that she possesses a high level of textual competence. Although this area of linguistic competence is not one that we were investigating, it is worth noting.

LA Morphology/Syntax: No specific production errors were noted. One informant commented that she was making some minor mistakes, but the informant couldn't identify them. Two informants noticed no errors. On the GJ test, she scored 73/89. Her errors were scattered over six different constructions but were concentrated in only one area: definiteness agreement on nouns and adjectives. There were nine items in this category, six of which were ungrammatical. Three were lacking a definite marker on a noun, three were missing the definite marker on the adjective. She accepted all three of the grammatical items in this category (definiteness markers on both nouns and adjectives). Of the six ungrammatical items, she accepted four as grammatical: all three of the missing noun markers, and one of the missing adjective markers. We may assume that she did not notice that the markers were missing. Following are three of the sentences that she incorrectly judged to be grammatical. The first two (20, 21) lack the definite marker on the noun, the third (22) lacks the definite marker on the adjective.

(20)   *harab   Ø-kalb   lə-zʀiir
        ran   Ø-dog   def-small
        'The small dog ran away.'

(21)   *(Ø)bɪnt əl-hɛlwe   bəthɛb Omar
        (Ø)girl def-pretty likes   Omar
        'The pretty girl likes Omar.'

(22) *Omar biheb əl-bınt (∅)-helwe
Omar loves def-girl (∅)-pretty
'Omar loves the pretty girl.'

Her score was 100% on passive constructions, verbal agreement on plural

subjects, complementizer agreement and resumptive pronouns in subject and direct object

relative clauses. Table 4.4 shows a comparison of Muna's scores and the scores of the

most accurate NS controls[4]. Where the results indicate a possible area of attrition, this has

been marked with an asterisk.

TABLE 4.4

Comparison of LA Test Results by Category

Muna and NS Controls

Category	Muna	NS controls
Gender agreement: adjectives verbs	6/8 9/10	8/8, 8/8 10/10, 10/10
Verbal agreement: conjoined subjects	10/11	10/11, 11/11
Verbal agreement: double subjects	3/5	5/5, 3/5
Verbal agreement: plural subjects	4/4	4/4, 4/4
*Definiteness agreement: nouns and adjectives	5/9	9/9, 9/9
Complementizer agreement	12/12	11/12, 12/12
Plurals	11/13	13/13, 12/13
Passives	3/3	3/3, 3/3
Resumptive pronouns: Subjects Direct objects *Object of preposition *Distinction between pairs	4/4 4/4 2/4 0/2	3/4, 4/4 4/4, 2/4 4/4, 2/4 2/2, 2/2

---

[4] Even for highly competent native speakers, a less than perfect performance on a GJ test is not unusual. These two NSs are those with the highest scores, and there is some expected variation in their results.

Her overall performance is not indicative of an undeveloped grammar; however, there is evidence of attrition of one structure, noun-adjective definiteness agreement. Other possible areas of attrition are resumptive pronouns as objects of prepositions, and the subtle distinctions in the use of resumptive pronouns in direct object position. The limited number of test items in these latter categories do not allow us to make a definite claim that attrition has occurred.

English Phonology: Her accent is native-like.

English Vocabulary: Of all areas tested, English vocabulary is the area with the most obvious deficit. Her score on the PPVT III was in the "Extremely Low" category, with an age equivalent of 9;01 years. This correlates with the reading scores of grade equivalent 5.5 for the Language Minority Students in Roessingh's (1996) study. This would place her estimated vocabulary size at approximately 4,000-5,000 words, compared to the average high school graduate's approximately 45, 000 words (Pinker (1995:150)).

English Morphology/Syntax: Her spoken English is fluent, and her score on the English GJ task was comparable to the English NS controls at 23/26. Two of the three items that she judged incorrectly were items that, for whatever reason, NS controls also had judged incorrectly. Her score on the written Michigan Test (Grammar) was 80%.

Conclusion

Based on these test results, I have concluded that with the exception of her limited L2 vocabulary, all components of Muna's L2 grammatical competence are intact and native like. Vocabulary is the one component of grammatical competence which is amenable to improvement over the course of a person' lifetime. It does not fossilize the way other components of grammatical competence have been noted to do (Cummins (1999)). Muna is challenged in that she has a limited vocabulary in her dominant language, English, but it is not a handicap that is impossible to overcome. In terms of the internal representations of Muna's English and Lebanese syntax and morphology, there is no basis for considering either grammar to be impoverished.

SUBJECT # 2: _Sami_

LA Phonology: NS informants rated Sami's accent as "good", and correctly identified it as Beirut Lebanese, with some Palestinian influence.

LA Vocabulary: Sami's self-assessment of his Lebanese vocabulary is that it is limited. One informant commented that he "seemed to be reaching for the right words". Another informant noted that "He sounds as though he speaks the language regularly, though not as confidently as someone who arrived recently". This informant also noted that his speech was a mixture of MSA and colloquial Lebanese, and that his choice of vocabulary, with "more intellect in the description", indicates that he has achieved a higher level of education in Arabic than Muna. This is a correct assessment.

LA Morphology/Syntax: no errors were noted in word order or agreement in production

tasks. One error was noted in morphology, on the formation of a plural noun. When

presented with the identical item in the Lebanese GJ test, he judged it to be

ungrammatical. This indicates that his original error was a performance error, not a

competence error.

He scored 100 percent accuracy on gender agreement, verbal agreement on plural

subjects, and passives. His judgments of the resumptive pronouns in subject position and

direct object position, in particular the direct object constructions that are used to indicate

particular emphasis on the object, indicate some attrition. Another area of possible

attrition is in the formation of plural nouns. Further testing with a larger number of items

would clarify whether these are in fact deficits. However, his overall performance is not

indicative of an underdeveloped grammar. In the words of one native speaker informant,

he could "go to Beirut and be okay."

His score on the GJ test was 73/89, and his results, compared with NS controls,

are summarized by category in Table 4.5.

TABLE 4.5

Comparison of LA Test Results by Category

Sami and NS Controls

Category	Sami	NS Controls
Gender agreement: adjectives verbs	8/8 9/10	8/8, 8/8 10/10, 10/10
*Verbal agreement: conjoined subjects	8/11	10/11, 11/11
Verbal agreement: double subjects	5/5	5/5. 3/5
Verbal agreement: plural subjects	4/4	4/4, 4/4
Definiteness agreement: nouns and adjectives	8/9	9/9, 9/9
Complementizer agreement	11/12	11/12, 12/12
*Plurals	9/13	13/13, 12/13
Passives	3/3	3/3, 3/3
Resumptive pronouns: *Subjects *Direct objects Object of preposition Distinction between pairs	2/4 2/4 3/4 2/2	3/4, 4/4 4/4, 2/4 4/4, 2/4 2/2, 2/2

* possible areas of attrition

English Phonology: Sami's English is native like, with only a slight accent.

English Vocabulary: His score on the PPVT III was 98, an average score for adult native speakers of English (age equivalent 22+).

English Morphology/Syntax: Sami's score on the English GJ task was 23/26, a high correlation with the English NS controls. The errors he made were on items that English NSs also had judged incorrectly. On the Michigan Test (Grammar), he scored 38/40.

Conclusion

The locus of deficit in Sami's Lebanese Arabic is his vocabulary. Other areas of grammatical competence are adequate, with the possible exception of the use of direct object resumptive pronouns to indicate subtle differences in emphasis.

In English, Sami's dominant language, his speech is native-like in all components of grammatical competence. However, his vocabulary score is lower than expected, given his level of education.

SUBJECT #3: *Nabil*

LA. Phonology: Nabil was recruited for this research after the taped Lebanese conversation had been completed with Muna and Sami. He was therefore not included in that aspect of the study. He did participate in all other parts of the research. Comments on his spoken Lebanese are based on his storytelling task. Native speaker informants rated Nabil's accent as "perfect", sounding like "he just came from Lebanon", and correctly identified it as Beirut Lebanese.

LA Vocabulary: One informant noted a tendency to repeat phrases in the story-telling task, rather than using a variety of descriptive words, which may indicate a limited vocabulary. By his self-assessment, Nabil has lost some Lebanese vocabulary. However, it could also be indicative of other factors such as shyness or discomfort with the task, or his personal style of storytelling.

LA Morphology/Syntax: No errors were noted in word order or agreement in production tasks.

TABLE 4.6

Comparison of LA Test Results by Category
Nabil and NS Controls

Category	Nabil	NS Controls
Gender agreement: adjectives verbs	 7/8 10/10	 8/8, 8/8 10/10, 10/10
Verbal agreement: conjoined subjects	 11/11	 10/11, 11/11
Verbal agreement: double subjects	 3/5	 5/5, 3/5
Verbal agreement: plural subjects	 4/4	 4/4, 4/4
Definiteness agreement: nouns and adjectives	 9/9	 9/9, 9/9
Complementizer agreement	12/12	11/12, 12/12
Plurals	10/13	13/13, 12/13
Passives	2/3	3/3, 3/3
*Resumptive pronouns: Subjects Direct objects Object of preposition Distinction between pairs	 2/4 1/4 2/4 0/2	 3/4, 4/4 4/4, 2/4 4/4, 2/4 2/2, 2/2

*possible areas of attrition

His score on the GJ Test was 73/89, with 100% accuracy on definiteness agreement, verbal agreement for gender, plural subjects and conjoined subjects, and complementizer agreement. His accuracy was low on the resumptive pronoun structures, with scores of 2/4 on subject clause constructions, 2/4 on preposition constructions, and 1/4 on direct object resumptive pronoun structures. He also had difficulty with the items that tested the

subtle distinctions in direct object resumptive pronoun use, preferring the second (less commonly used) item in both cases. The nine errors on resumptive pronouns accounted for more than half of the total number of errors on the GJ test.

English Phonology: His English speech is native-like, with only a slight accent.

English Vocabulary: Nabil's PPVT III score was in the low-average range for native speakers of English of his age, with an age equivalent of 14;01.

English Syntax/Morphology: Nabil's spoken English is native-like. No inappropriate word choices or errors were noted. His score on the oral GJ test was 22/26, comparable to the scores of the native speaker controls. However, his score on the written Michigan Test was 15/40, a low score. Nabil felt that this result was due to his difficulties with reading English. He was not able to read the test questions.

Conclusion

The results do not indicate deficits in Nabil's Lebanese Arabic phonology. He has lost some vocabulary. He notices this when he returns to Lebanon, and has to "work around it" when he can't remember a word. With respect to syntax, it is possible that he has either lost or failed to acquire the knowledge of the use of direct object resumptive pronouns in relative clauses. Further testing with more test items would clarify this.

Nabil's spoken English is native-like, with only a slight accent. His English vocabulary is within normal range for his age, even though at the time of testing he had

spoken English for only six years. His conversational English and the oral test of English

syntax indicate near-native competence.

4. Statistical Analysis

As mentioned in Section 2.2 of this chapter, the Lebanese GJ test was piloted with

six NS controls. Their results on the test, along with those of the three subjects, are found

in Table 4.7. The scores are ranked from highest to lowest:

TABLE 4.7

LA Test Scores Related to Age of Arrival, Education Levels, Language Use and Years in Canada

S/I	Score __/89	Age	AOA	Years in Canada	L1 Ed level yrs	L2 Ed level yrs	% L1	% L2	R/W L1?	R/W L2?
I 1	86	43	42	1	13		95	5	Yes	Yes
I 2	82	16	15	1	9	9	60	40	Yes	Yes
I 4	81	39	29	10	18		40	60	Yes	Yes
I 3	76	41	25	16	18		10	90	Yes	Yes
S 1	73	20	8	13	1	12	35	65	No	Yes
S 2	73	33	11	22	4	16	20	80	No	Yes
S 3	73	17	11	6	4	12	30	70	No	Yes
I 5	64	17	7 ½	9	2	10	20	80	No	Yes
I 6	57	14	5	9	0	8	15	85	No	Yes

S: Subject, (Muna, Sami, Nabil). I: Informant, other native speakers of LA.
AOA: Age on arrival in Canada;
L1/L2 Ed level: Level of education in years;
%L1/L2: The speaker's estimate of relative use of both languages;
R/W L1/L2: Read and write in respective Ls.

The Pearson Product Moment Test, a nonparametric statistical analysis of the results, shows the following correlations (significant at the .05 level), between the test scores and the following variables:

- age of arrival in Canada: correlation of .785
- .percentage of use of L1: correlation of .732
- years of education in Arabic: correlation of .720
- ability to read and write Arabic: correlation of .773

A correlation of greater than .66 is considered high. These results lend support to the claim that the Lebanese GJ test is a valid tool for assessment of grammatical competence in Lebanese speakers. (For the statistical analysis, see Appendix 4, Lebanese GJ Test Results, Nonparametric Statistical Analysis.)

CHAPTER 5

CONCLUSION

1.   The Research Questions Revisited

As stated in Chapter One, my specific research questions were the following:

"Were the subjects' difficulties in school related to a language deficit in either their L1 or

L2 or both, and if so, is it a deficit in language *knowledge*, or in language *skills*? Is the

locus of the deficit in the representation of their grammars, and if so, in what areas –

syntax, morphology, phonology, or vocabulary?"

With respect to the overall grammatical competence of the three subjects, the

answer to the first question is that, based on this research, it is not possible to say that a

lack of grammatical competence is the *source* of their school difficulties. They are

competent speakers of both Lebanese Arabic and English. Their conversational fluency in

both languages is adequate to meet their communicative needs, and they use both

languages freely. All are able to discuss ideas, feelings, and hopes in English, to tell a

story in Lebanese, and to return to Beirut, use their Lebanese dialect, and as one

informant expressed, "be just fine". There has been some attrition in Lebanese for all of

the subjects, especially in vocabulary, but this is not evidence of undeveloped language.

Their scores on the Lebanese GJ task compared well with the scores obtained by highly

educated speakers of the same dialect who have been away from Lebanon for the same

length of time as the subjects.

With respect to English, conversational fluency and scores for all three subjects on the English GJ test indicate competence in English syntax that is native-like. For all three subjects, English phonology is native or near-native. On the Michigan written grammar test, two of the three subjects obtained scores over 80%. The third could not read the questions well enough to answer them; his low score is therefore not indicative of an impoverished grammar, but of a reading problem. With respect to vocabulary, the English scores for two of the three are within normal range for native speakers of English.

Muna's vocabulary is the one area of linguistic deficit in English. Her reading level and PPVT III vocabulary score both place her at the academic level of a mid-elementary school student, indicating a relationship between her poor vocabulary and her low reading level. This does not establish a causal relationship between the two, only that there is a relationship. To attribute school failure to her vocabulary deficit without thorough evidence would be to fall into the same error that many teachers and school professionals have done with other language minority students. That error assumes a correlation between vocabulary scores and IQ, attributes school failure to the student's bilingualism/lack of intelligence/culture, and assumes the student is not capable of handling academic tasks. Since Muna's reading scores and vocabulary score correlate, her vocabulary score would seem to be a valid indicator of her school performance; it is not necessarily an indicator of her potential. The question could easily be posed in reverse: "Has her failure to learn to read above a Grade Four level contributed to her impoverished vocabulary?"

The good news for Muna is that vocabulary is one area of Grammatical

Competence that can be improved over the course of a lifetime. Her low vocabulary is a

quantitative deficit. In conversation, she chooses words accurately and appropriately to

discuss her opinions and ideas. In that sense, she possesses the qualitative framework on

which to build a more extensive lexicon.

The following diagrams are adaptations of Bachman's model which illustrate each

of the subjects' grammatical competence.

FIGURE 5.1

GRAMMATICAL
COMPETENCE
Muna

Phonology/   **Vocabulary**   **Morphology/Syntax**

L1: Good phonology   L1: Some attrition   L1: Possible loss of definite markers
                                                      on nouns/adjectives
                                                 Slight attrition in other areas
                                                 GJ score: 73-89

L2: Native-like   L2: Very low   L2: Spoken English native-like
                         Age equivalent 9 yrs.   GJ: native-like
                                                 Michigan grammar: 80%
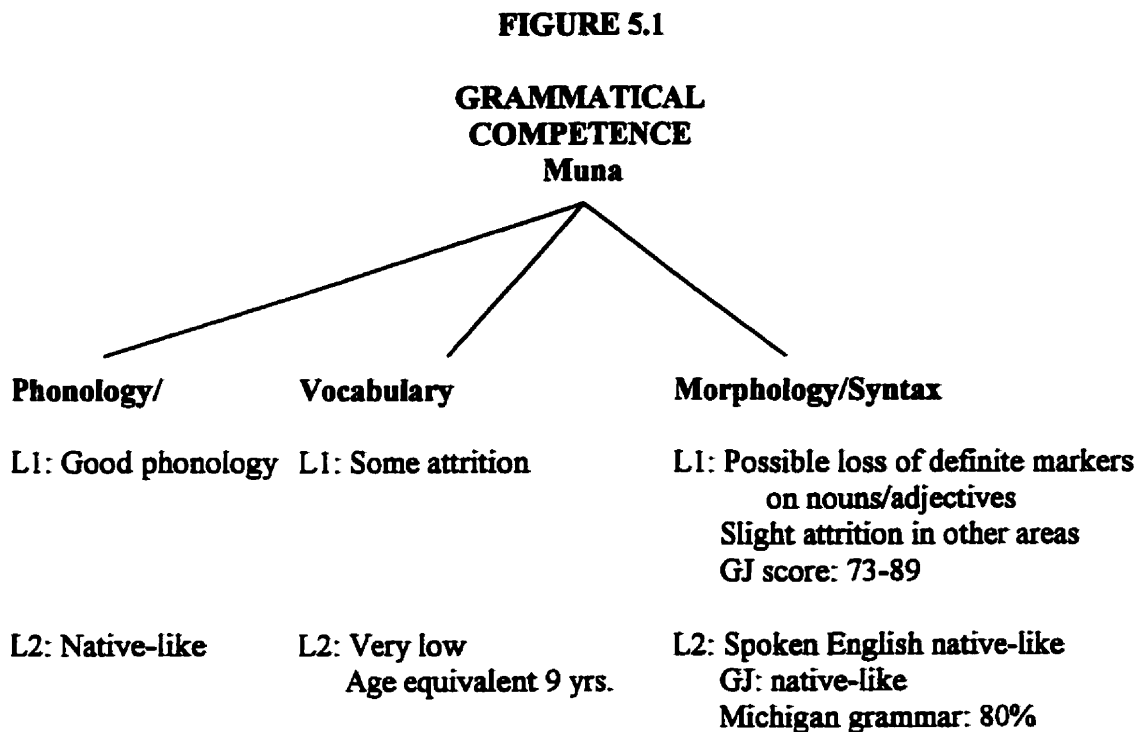
Deficit: Muna has not acquired age-appropriate vocabulary in English.

FIGURE 5.2

**GRAMMATICAL
COMPETENCE
Sami**

Phonology	Vocabulary	Morphology/Syntax
L1: Good	L1: Some attrition	L1: Possible problem with resumptive pronouns. Slight attrition in other areas. GJ score: 73/89
L2: Slight accent	L2: Average. Incongruent with level of education	L2: Spoken English native-like, GJ score: native-like (23/26) Michigan grammar: 95%

FIGURE 5.3

**GRAMMATICAL
COMPETENCE
Nabil**

Phonology	Vocabulary	Morphology/Syntax
L1: Perfect	L1: Some attrition	L1: No production errors, GJ score 73/89 Problem: Resumptive pronouns
L2: Slight accent	L2: Low-average Age equivalent 14 yrs.	L2: Spoken English native-like GJ score native-like (23/26) Michigan grammar: 38.5%

Deficit: L1: Syntax - Resumptive pronouns

In summary, although it is not possible to say with certainty why these individuals had school difficulties, it is possible, for two of them, to eliminate lack of grammatical competence as a reason for those difficulties. For the third, an impoverished vocabulary may be a contributing factor; with respect to syntax, morphology and phonology, her grammatical competence is native-like.

Based on the results of this research, my conclusion is that the deficits all of these subjects exhibit are predominantly in their language *skills*, in the language abilities of reading and writing.

2. Relationship of Findings to Earlier Research

This is a case study of three individuals, and each of them is unique with respect to family background and values, personal attributes and prior school experiences. It is not possible, with this small study, to answer the broader question of why language minority students drop out of school at rates twice as high as majority students do. However, when each case is considered in light of Wells', Collier's, and Cummins' research, we see possible explanations for why these three *individuals* struggled in school. Conversely, the three cases lend support to those earlier research findings.

2.1 Preschool Literacy

Wells' research indicated that an important factor in children's school success is the appreciation of literacy in the home environment and an introduction to books in the preschool years. On the basis of his research, Wells observes, "What children like Rosie (the child with lowest score on all the tests) need, I am convinced, is a personal

introduction to literacy through stories. Listening to a story read to the whole class is no solution, for they have not yet learned to attend appropriately to written language under such impersonal conditions. For them, what is required is one-to-one interaction with an adult centered on a story. Such an experience provides not only an introduction to literacy but also an entry into a shared world that can be explored through the sort of collaborative talk that is the most effective way of facilitating children's learning and language development." (Wells (1986:159)).

Wells' research was conducted with monolingual children. Children learning to read in a second language face more complex challenges than monolingual children face; if preschool literacy activities are important for monolingual children's school success, exposure to literacy must be at least as important for second language learners.

Story telling in Arab culture is rich, and primarily oral. Many parents are not literate themselves, and among those who do read and write Arabic, there is some reluctance to read stories in Standard Arabic to their children, thinking that MSA will be too difficult for the child to understand. Only one of the three subjects in this case study remembers being read to as a child, and that experience was infrequent. This lack of exposure to books before attending school may have been a factor in their school experiences with reading in English.

2.2   Age of Arrival Related to Acquisition of CALP

Collier's (1987) research compared the school performance of language minority students in three different groups, based on age of arrival: 5-7 year olds, 8-11 year olds,

and 12-15 year olds. She found that the students who arrived at 8-11 years old required less time to achieve grade level norms than the students who arrived at 5-7 years old. This difference was attributed to the higher level of schooling in L1 that the 8-11 year-old arrivals had achieved prior to beginning L2 schooling.

The three subjects in this case study confirm Collier's findings. All were between 8 and 11 when they left Lebanon. Muna was 8 years old, and her first year of schooling had been interrupted by the civil war. As far as her L1 literacy skills are concerned, she more closely fits the profile of the 5-7 year old arrivals in Collier's study, because when she left Lebanon she had no Arabic literacy skills other than the ability to write some Arabic letter forms. Of the three subjects, Muna is the one who has experienced the most difficulty in acquiring English reading and writing, and is the one who dropped out of high school in frustration.

Both Sami and Nabil were 11 years old when they began school in Canada, and both have been more successful in school than Muna. They each had three years of schooling in Arabic before leaving Lebanon, and even though neither can read or write Arabic now, it is likely that their early L1 school experiences laid some kind of foundation for later academic success. Even though both struggle with English reading and writing, they are confident in their ability to achieve their academic and professional goals. In spite of their limitations, Sami is a successful financial analyst, and Nabil remains hopeful that he will be able to pursue further education in a technical field. As Nabil expressed it, "I know how to learn. I just need the tools."

2.3   The BICS/CALP Distinction and Assessment

As noted in Chapter 2, immigrant children may acquire fluency in conversational L2 (BICS) within two years, but require four to eight years to achieve grade level norms in academic language proficiency (CALP). When dealing with a child who is conversationally fluent, teachers and other professionals often overestimate the child's ability to cope with language in the academic setting. Improper assessment then can lead to a child's premature exit from ESL support programs into mainstream classes where the support for continued L2 development is minimal.

Muna, Sami, and Nabil all recall having learned conversational English within a few months of their arrival in Canada. All three provide examples of how a facility with spoken language can mask a difficulty with, or failure to acquire, the use of written language. Sami and Nabil report being in ESL programs for only a few months after starting school. In Nabil's case, perhaps with some extra ESL support or a longer time in school, he could have achieved mastery of the academic uses of English. As it is, he is now seeking that help outside of the school system.

In Muna's case, her school progress was interrupted by two extended visits to Lebanon. The first visit occurred after she had attended school for four years in Canada, the first three years with ESL support. While in Lebanon, she spoke Lebanese and received most school instruction in MSA. Upon her return to Canada 15 months later, she was placed in a regular Grade 8 classroom with no ESL support. This combination of family circumstances, inappropriate assessment and placement, and lack of ESL support made it impossible for her to catch up academically. By the time she left school to return

to Lebanon the second time, she was in her Grade 11 year and failing. She did not attend

school in Lebanon during this second visit, and dropped out of high school within a few

months of her arrival back in Canada.

3.   Unanswered Questions

In Chapter 1, the issue of Muna's proficiency in Lebanese Arabic was raised. Her

peers at school had informally assessed her Arabic as undeveloped. We are left now with

the discrepancy between that assessment and her test results in Lebanese. If Muna has

grammatical competence in the syntax, morphology and phonology of her L1, why did

Muna's peers evaluate her L1 as "baby Arabic"? The NS informants who listened to her

speech on tape did not share this evaluation. I offer the following as possible explanations

for the difference:

- *Competence errors vs. performance errors*: A speaker will likely use more careful

    speech in a test situation than in casual speech with friends and family. Muna

    probably used the "best" Lebanese that she was capable of using when she was aware

    that her speech was being recorded. This Lebanese would be a more accurate

    reflection of her grammatical competence than the casual speech situations at school,

    where performance errors and sloppiness are not a concern. An example of the

    difference between competence and performance is the following:

    One of the comments at school about Muna's Arabic was related to gender:

    "Everybody knows when you talk about boys you have to say **he** – not **she**."

    (Roessingh (1996:266)), indicating that Muna was omitting the feminine marker, the

suffix or infix [-Vt] on verbs, [-e] on adjectives. Yet in the GJ test, she correctly

identified all sentences with gender errors as ungrammatical, and obtained an overall

score of 15 out of 18 on gender items, indicating competence in this area of her L1

morphology.

- *Dialect differences*: Muna's later-arriving peers were literate in Standard Arabic, and

  would have a more extensive L1 academic vocabulary. They likely were accustomed

  to hearing the language of school and were able to function in Educated Spoken

  Arabic, a mixture of colloquial Lebanese and MSA. In contrast to this more

  "academic" language, colloquial Lebanese would sound "simple".

- *Sociolinguistic competence:* It is possible that due to socioeconomic class differences

  Muna was using a more casual speech register than her Lebanese peers. Another

  possibility is that she was using a style of speech that is appropriate in English casual

  conversation, but does not transfer appropriately to Arabic.

Another question that this study has raised is the question of Nabil's

representation of resumptive pronoun structures in LA. The GJ test results indicate that,

unlike Muna and Sami, he either has failed to acquire resumptive pronouns or has lost

them almost completely through attrition. Of all three subjects, he is the least likely not to

have this grammatical structure. He was the oldest when he left Lebanon (11 years old),

so he would be most likely to have acquired the structure, and he has been in Canada the

shortest time (six years), so would be least likely to have lost resumptive pronouns

through attrition. With the data available, it is not possible to say what the reason might be for his test results.

The question of whether the subjects' LA test results show evidence of attrition or of failure to completely acquire some grammatical structures is not addressed by this case study. This is a question that further research could help to clarify. A longitudinal study with younger immigrant children that tracks their L1 language progress or attrition over a period of years would give a more complete basis for drawing conclusions.

3.1   Suggested Improvements to the LA Test

Though efforts were made to ensure the accuracy of the Lebanese GJ test, it is not possible to know with absolute certainty that the targeted items were the items actually tested in all cases. One example is the following pair of items, a singular/plural contrast of the noun *kalb*, 'dog':

(1)   lə-kle:b   hɛbɛl
        def-dogs(p) stupid(pl)
        'Dogs are stupid.'

(2)   *əl-kalb   hɛbɛl
        def-dog (s) stupid(pl)
        'Dogs are stupid.'

All of the subjects made the "wrong" judgment on one or both of these items, judging (1) to be unacceptable, and/or (2) to be acceptable. It is not possible to know where the problem is, the plural *kle:b*, the singular *kalb*, or the adjective *hɛbɛl*.

Greater accuracy would be assured if the subjects were asked, preferably by a

native speaker of Lebanese, to provide the corrections for the items that they found

unacceptable.

4.   The Larger Question

Canada is committed to multiculturalism. We accept approximately 230,000

immigrants each year, more than 85% of whom have a first language other than English

or French. It is likely that current immigration trends will continue, affecting the

demographics of those who live, work and attend school here. The increase in the

language minority school population is evident in our major urban centres:

- From 1987-1996, the city of Richmond, B.C. recorded an increase of 2,581%

  in its ESL population.

- ESL students make up 48% of the school enrolment of the city of Vancouver;

  Metro Toronto schools report a similar proportion of students whose L1 is

  neither English nor French.

- The Calgary Board of Education has an enrollment of approximately 100,000

  students. The number of language minority students who enter this school

  system is estimated at approximately 1,000 per year, including Canadian-born

  and foreign-born. A conservative estimate of the number of students who may

  be language minority and who may benefit from English language support is

  10,000-15,000 students (Roessingh (1996:7). In 1998, the number of students

in this jurisdiction who received the ESL funding grant was approximately 3,000.

A conservative estimate of the high school dropout rate for ESL students in Alberta is double that of the general population. It is not overstating the case to say that for every language minority student who fails to succeed at school for reasons of misassessment, lack of funding for ESL support, or insufficient time to complete school due to a high school age cap, there is a larger failure. These ESL dropout stories are stories of frustrated ambitions, wasted talent, and a personal and societal cost that could be avoided.

Canada's changing demographics demand that we address the language learning requirements of a multicultural, multilingual student population. The larger question is whether or not we are willing to do so. If we do not meet the legitimate educational needs of our language minority students, we will continue to create a marginalized population of underachievers who will never know their academic potential, and will be ill equipped to contribute to society. If we choose to provide fair and equitable educational opportunities for all students, majority and minority alike, we stand to benefit from our multicultural diversity.

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APPENDIX 1

INTERVIEW

1. How old are you?

2. Where were you born?

3. (For those not born in Canada) How old were you when you came to Canada?

4. What is your first language, the language that your parents spoke at home when you were young? Are there other languages spoken in your home besides your first language?

5. Do you know how to read in your first language? At what age did you learn?

6. Did your parents or other relatives read stories to you when you were a preschooler? In what language?

7. What language(s) have you been taught in at school? If you attended school in another language besides English, how old were you?

8. Do you feel more "at home" in English or in Arabic?

9. Would you tell me about your experience of attending school in Canada? Was it difficult for you to switch to a new language (English)? How did you handle that? Did you feel that it was easy or hard to catch up with the English-speaking students? Did you eventually feel comfortable in English at school, and how long did it take to reach that point?

10. How far did you go in school?

11. What are you doing now that you have finished school?

12. What are your goals for the future?

13. When you speak Lebanese, are you aware of making errors in the language?

APPENDIX 2

ENGLISH GRAMMATICALITY JUDGMENTS
TRANSCRIPT OF AUDIOTAPE TEST INSTRUCTIONS

Speakers of a language seem to develop a 'feel' for what is a possible sentence, even when they have never been taught any particular rules. For example, in English, you might feel that the sentence 'Mary is likely to win the race' is a possible sentence, whereas the sentence 'Mary is probable to win the race' is not a possible sentence.

You will hear 30 sentences on this tape. We want you to concentrate on how you feel about these sentences. Native speakers of English often have different intuitions about such sentences, and there are no right or wrong answers. We want you to tell us for each one whether you think it sounds possible or impossible in English. Concentrate on the structure of the sentence, not on the vocabulary. If you think that a sentence sounds possible, circle 'OK' on your answer sheet. If you think it sounds impossible, circle 'X'. If you are not sure, circle the question mark.

Now we are ready to start. Remember, if you think the sentence sounds possible, circle 'OK'. If you think the sentence sounds impossible, circle 'X'. If you are not sure, circle the question mark. Now we will begin.

(Introduce sentences in this manner: "Sentence number 1", "Sentence number 2", etc.)

1.   *What was a story about read by John?
2.   Who did John expect a letter from?
3.   Which building did you make a drawing of?
4.   *Who did the news about surprise Ann?
5.   Who did the letter from Jane please?
6.   What did the examination of the data explain?
7.   *What did John get excited because Ann bought?
8.   *What did John never believe the story that Anne stole?
9.   *What did John fall because he slipped on?
10.   *What does John believe the claim that Ann stole?
11.   ?What did John confirm that Ann had been awarded?
12.   Which trial did you write a story about?
13.   Who was John taking a picture of?
14.   ?Who did you arrange that would hand out the tests?
15.   *Who did Jane quit school because she hated?
16.   *Who did a story by please the children?
17.   What did you make a request about?
18.   *What did John fall because he slipped on?
19.   *Who did John love the woman who married?
20.   *Who does Sam believe the claim that stole his car?
21.   What did Jane say that Sam should build?
22.   ?Who did the choice of leader annoy?

23. ?Who do you suppose that wants to marry John?
24. What does John believe that Jane bought for his birthday?
25. *What did John see the woman that wrote?
26. Who do you suppose that John wants to marry?
27. Who did you announce would be the new English teacher?
28. What does Ann want to do?
29. Who does Sam want to fire?
30. *What did Sam praise athletes who can throw?

This is the end of the list. Thank you for your help.

ANSWER SHEET FORMAT

1	OK	X	?
2	OK	X	?
3	OK	X	?
4	OK	X	?
5	OK	X	?

APPENDIX 3

LEBANESE GRAMMATICALITY JUDGMENTS

DEFINITENESS AGREEMENT

1. harab əl-kalb lə-zʀiir
    ran def-dog def-small
    'The small dog ran away.'

2. *harab əl-kalb Ø-zʀiir
    ran def-dog Ø-small
    'The small dog ran away.'

3. *harab Ø-kalb lə-zʀiir
    ran Ø-dog def-small
    'The small dog ran away.'

4. əl-bɪnt əl-hɛlwe bəthɛb Omar.
    def-girl def-pretty likes Omar
    'The pretty girl likes Omar.'

5. *(Ø)bɪnt əl-hɛlwe bəthɛb Omar
    (Ø)girl def-pretty likes Omar
    'The pretty girl likes Omar.'

6. *əl-bɪnt Ø-hɛlwe bəthɛb Omar
    def-girl (Ø)-pretty likes Omar
    'The pretty girl likes Omar.'

7. Omar baddu jitjawwaz əl-bɪnt əl-hɛlwe
    Omar want (3s) marry (inf) def-girl def-pretty
    'Omar wants to marry the pretty girl.'

8. *Omar bihɛb əl-bɪnt (Ø)-hɛlwe
    Omar loves def-girl (Ø)-pretty
    'Omar loves the pretty girl.'

9. *Omar bihɛb (Ø)bɪnt əl-hɛlwe
    Omar loves (Ø)girl def-pretty
    'Omar loves the pretty girl.'

GENDER AGREEMENT (ADJECTIVES)

10. əl-bɪnt ʒɪʕane
    def-girl hungry(f)
    'The girl is hungry.'

11. *əl-bɪnt ʒɪʕan
    def-girl hungry(m)
    'The girl is hungry.'

12. əl-kalb   ʒɪʕan
    def-dog(m) hungry(m)
    'The dog is hungry.'

13. *əl-kalb   ʒɪʕane
    def-dog(m) hungry(f)
    'The dog is hungry.'

14. *əl-walad ʒɪʕane
    def-boy   hungry(f)
    'The boy is hungry.'

15. əl-walad ʒɪʕan
    def-boy   hungry(m)
    'The boy is hungry.'

16. *əl-walad zaʕleːne
    def-boy   sad(f)
    'The boy is sad.'

17. əl-walad zaʕleːn
    def-boy sad(m)
    'The boy is sad.'

VERBAL AGREEMENT(GENDER)

18.   əl-walad aʕad ʕal-kərsi
       def-boy sat(m) [on the]-chair
       'The boy sat on the chair.'

19.   *əl-walad aʕdɛt ʕal-kərsi
       def-boy   sat(f) [on the]-chair
       'The boy sat on the chair.'

20.   *əl-bɪnt aʕad   ʕal-kərsi
       def-girl sat(m) [on the]-chair
       'The girl sat on the chair.'

21.   əl-bɪnt aʕadɛt ʕal-kərsi
       def-girl sat(f) [on the]-chair
       'The girl sat on the chair.'

22.   əl-bɪnt səbħɛt bɛl-mai
       def-girl swam(f) [in the]-water
       'The girl swam in the water.'

23.   *əl-bɪnt səbəħ   bɛl-mai
        def-girl swam(m) [in the]-water
       'The girl swam in the water.'

24.   əl-walad ʕamʒisbaħ   bɛl-mai
       def-boy is swimming(m) [in the]-water
       'The boy is swimming in the water.'

25.   *əl-walad səbħɛt   bɛl-mai
       def-boy   swims(f) [in the]-water
       'The boy swims in the water.'

26.   əl-walad byɔʕd ʕal-kɛrsi
       def-boy sits(m) [on the]-chair
       'The boy sits on the chair.'

27.   *əl-walad btəʕɔd ʕal-kɛrsi
      def-boy   sits(f) [on the]-chair
      'The boy sits on the chair.'

VERBAL AGREEMENT: PLURAL SUBJECTS

28.   *Ne:m   lə-wle:d
      slept (3s) the-children
      'The children slept."

29.   Ne:mo   lə-wle:d.
      slept (3pl) the-children
      'The children slept.'

30.   *Lə-wle:d ne:m.
      the-children slept (3s)
      'The children slept.'

31.   Lə-wle:d   ne:mo.
      the-children slept. (3pl)
      'The children slept.'

VERBAL AGREEMENT: CONJOINED SUBJECT

32.   Ra:ho Omar w   Ali.
      left (3pl) Omar and Ali.
      'Omar and Ali left.'

33.   Ra:ħ   Kari:m w Marwa:n
      left (3ms) Kari:m and Marwa:n
      'Kare:m and Marwa:n left.'

34.   Ne:mo   Omar w   Ali
      slept (3pl) Omar and Ali.
      'Omar and Ali slept.'

35.   Ne:m   Omar w   Ali
      slept (3s) Omar and Ali
      'Omar and Ali slept.'

36. Ke:no Kari:m w   Marwa:n ʕam jilʕabo.
     were Kari:m and Marwa:n ASP playing (pl)
     'Kari:m and Marwa:n were playing.'

37. Ke:n   Kari:m w   Marwa:n ʕam jilʕabo.
     was (3ms) Kari:m and Marwa:n ASP playing
     'Kari:m and Marwa:n were playing.'

38. *Kari:m w   Marwa:n ke:n ʕam jilʕabo.
     Kari:m and Marwa:n were ASP playing(pl)
     'Kari:m and Marwa:n were playing.'

39. *Kari:m w   Marwa:n ke:no ʕam jilʕab
     Kari:m and Marwa:n were ASP playing (s).
     'Kari:m and Marwa:n were playing.'

40. Omar w   Ali ke:no ne:mi:n
     Omar and Ali were sleeping (pl)
     'Omar and Ali were sleeping.'

41. Ke:no Omar w   Ali ne:mi:n.
     Were Omar and Ali sleeping (pl)
     'Omar and Ali were sleeping.'

42. Ke:n Omar w   Ali ne:mi:n
     was Omar and Ali sleeping (pl)
     'Omar and Ali were sleeping.'

43. Kari:m w   Marwa:n ke:no me:ʃi:n.
     Kari:m and Marwa:n were walking(pl)
     'Kari:m and Marwa:n were walking.'

VERBAL AGREEMENT: DOUBLE SUBJECTS

44. Kari:m, ke:n huwwə w   Marwa:n ʕam jilʕabo.
     Kari:m was he   and Marwa:n ASP playing.
     'Kare:m and Marwa:n were playing.'

45. *Kari:m, ke:no huwwə w   Marwa:n ʕam jilʕabo.
     Kari:m were   he   and Marwa:n ASP playing.
     'Kari:m and Marwa:n were playing.'

46. Omar, keːn huwwə w Ali neːmiːn.
Omar was he   and Ali sleeping(pl)
'Omar and Ali were sleeping.'

47. *Omar, keːno huwwə w Ali neːmiːn.
Omar were he   and Ali sleeping(pl)
'Omar and Ali were sleeping.'

48. Kariːm, keːn huwwə w   Marwaːn meːʃiːn.
Kariːm was he   and Marwaːn walking(pl)
'Kariːm and Marwaːn were walking.

49. *Kariːm, keːno huwwə w   Marwaːn meːʃiːn..
Kariːm were he   and Marwaːn walking (pl)
'Kariːm and Marwaːn were walking.'

PASSIVE SENTENCES WITH "BE" FORM

50. *keːn ʔɪnkatab   lə-kteːb mɪn zameːn
was (passive)write the-book "on time"
'The book was written a long time ago.'

51. ʔɪnkatab   lə-kteːb mɪn zameːn
(pass)write the-book "on time"
'The book was written a long time ago.'

52. *keːn ʔɪnʕata   Omar tlat hadeːja
was (pass)give Omar three gifts
'Omar was given three gifts.'

53. ʔɪnʕata   Omar tlat hadeːja
(pass)give Omar three gifts
'Omar was given three gifts.'

54. *keːn ʔintalab   mɪnʕAli ʔɪnno jruḥ
was (pass)ask from Ali that   he leave
'Ali was asked to go.'

55.   ʔɪntalab   mɪnʕAli   ʔɪnno jruḥ
      (pass)ask   from Ali   that   he leave
      'Ali was asked to go.'

COMPLEMENTIZER AGREEMENT
(Personal pronouns in brackets were not included)

56.   Fakkar   ʔinne   (ʔana) raḥət.
      thought (3ms) that (1s) (I)   left (1s)
      'He thought that I left.'

57.   Fakkar   ʔinno   (ʔana) raḥət.
      thought (3ms) that (3ms) (I)   left
      'He thought that I left.'

58.   *Fakkar   ʔinn (ʔana) raḥət.
      thought (3ms) that (I)   left (1s)
      'He thought that I left.'

59.   Fakkarɪt   ʔinno   (huwwə) raḥ yiӡi
      thought (3fs) that (3ms) (he)   will come.
      'She thought that he would come.'

60.   *Fakkarɪt   ʔinnØ (huwwə) raḥ yiӡi
      thought (3fs) that   (he)   will come (3s)
      'She thought that he would come.'

61.   *Fakkart   ʔinnØ (ʔinta)   raḥət
      thought(1s) that   (you)(2s) left(2s).
      'I thought that you left.'

62.   Fakkart   ʔinnak (ʔinta)   raḥət.
      thought (1s) that (2s) (you)(2ms) left (2ms)
      'I thought that you left.'

63.   *Fakkart   ʔinne   ʔinta   raḥət.
      thought (1s) that (1s) you (2ms) left (2ms)
      "I thought that you left.'

64. Fakkart   ʔinnkun (ʔintu)   rɛħtu.
     thought (1s) that (2pl) (you) (2pl) left (2pl)
     'I thought that you left.'

65. Fakkar   ʔinno   ʔintu   rɛħtu.
     thought(3s) that (3s) you(2pl) left (2pl)
     'He thought that you left.'

66. *Fakkar   ʔinnØ (hinne) raːħo   ʕal-beːt
     thought (3ms) that   (they) went (3pl) home.
     'He thought that they went home.

67. Fakkar   ʔinnun   (hinne) raːħo
     thought (3ms) that (3pl) (they) left (3pl)
     'He thought that they left.'

FORMATION OF PLURALS

68. ʕAli ʕandu arbaʕ ʔɪχwen
     Ali has   four brother(pl)
     'Ali has four brothers.'

69. *ʕAli ʕandu arbaʕ aχi
     Ali   has   four brother (poss)
     'Ali has four brothers.'

70. *Rana ʔanda arbaʕ ʔiχweni
     Rana has   four   brothers (poss)
     'Rana has four brothers.'

71. ʕAli ʕandu tlat   ʔɪχwen
     Ali   has   three brother(pl)
     'Ali has three brothers.'

72. Kariːm ʕandu ʔɪχteːn
     Kariːm has   sisters (dual)
     'Kariːm has two sisters.'

73.   *ʕAli ʕandu tlat   ʔɪχət
      Ali   has   three sister(s)
      'Ali has three sisters.'

74.   *Kariːm ʕandu tlat   ʔɪχti
      Kariːm has   three sister (poss)
      'Kariːm has three sisters.'

75.   *Kariːm ʕandu tlat   ʔɪχweːti
      Kariːm has   three sisters (poss)
      'Kariːm has three sisters.'

76.   *fi   ʔɪtneːn kalb   bəl-beːt
      There two   dog (s) [in the]-house
      'There are two dogs in the house.'

77.   *fi   tlat   kalbeːn   bəl-beːt
      There three dog(dual) [in the]-house
      'There are three dogs in the house.'

78.   fi   tlat   kleːb   barra
      There three dogs(pl) outside
      'Three dogs are outside.'

79.   lə-kleːb   hɛbɛl
      def-dogs(pl) stupid(pl)
      'Dogs are stupid.'

80.   *əl-kalb   hɛbɛl
      def-dog (s) stupid(pl)
      'Dogs are stupid.'

RESUMPTIVE PRONOUNS - DISTRIBUTION

Subjects: (not allowed)

81.   hajda əl-rɪʒeːl ʔɪlli abal ʕali
      this def-man   that met ʕAli
      'This is the man that met Ali.'

82. *hajda əl-rɪӡeːlj ʔɪlli abal huwwej ʕali
     this def-man   that met he   ʕAli
     'This is the man that (he) met Ali.'

83. hajda əl-walad ʔɪlli bihɛb əl-kalɛb
     this def-boy   that loves def-dog
     'This is the boy that loves the dog.'

84. *hajda əl-waladj ʔɪlli bihɛb huwwej əl-kalɛb
     this   def-boy   that loves he   def-dog
     'This is the boy that (he) loves the dog.'

Direct Objects (obligatory)

85. ʃəfɪt   əl-rɪӡeːlj ʔɪlli abal-oj ʕali
     saw (1s) def-man   that met him ʕAli
     'I saw the man that Ali met.'

86. ʃəfɪt   əl-rɪӡeːlj ʔɪlli ʕali abal-oj
     saw (1s) def-man   that ʕAli met-him
     'I saw the man that Ali met.'

87. *ʃəfɪt   əl-rɪӡeːl ʔɪlli ʕali abal-Ø
     saw (1s) def-man   that ʕAli met-Ø
     'I saw the man that Ali met'.

88. *lə-wleːd ʃeːfu əl-kalɛb ʔɪlli əl-walad bihɛb-Ø
     def-children see def-dog that def-boy loves Ø
     'The children see the dog that the boy loves'.

89. lə-wleːd ʃeːfu əl-kalɛbj ʔɪlli bihɛb-oj əl-walad
     def-children see def-dog   that loves-him def-boy
     'The children see the dog that the boy loves.'

90. lə-wleːd ʃeːfu əl-kalɛbj ʔɪlli əl-walad bihɛb-oj
     def-children see def-dog   that def-boy loves-him
     'The children see the dog that the boy loves.'

Object of Preposition (obligatory)

91.   *hajda əl-walad ʔɪlli muna raʔsɪt   maʕ-Ø
       this def-boy that Muna danced(f) with-Ø
       *This is the boy that Muna danced with.___

92.   hajda əl-waladⱼ ʔɪlli raʔsɪt muna maʕ-oⱼ
       this def-boy that danced Muna with-him
       'This is the boy that Muna danced with.'

93.   hajda əl-walad ʔɪlli maʕ-o   raʔsɪt muna
       this def-boy that with-him danced Muna
       'This is the boy that Muna danced with'.

94.   abalɪt   ə-sabeⱼ ʔɪlli ʕali rah ʕalbe:t   maʕ-oⱼ
       met (1s) def-boy that ʕAli went [to the]-house with-him
       'I met the boy that Ali went home with.'

95.   abalɪt   ə-sabeⱼ ʔɪlli maʕ-oⱼ   ʕali rah ʕalbe:t
       met (1 s) def-boy that with-him ʕAli went [to the]-house
       'I met the boy that Ali went home with.'

96.   *abalɪt   ə-sabe ʔɪlli ʕali rah ʕalbe:t   maʕ-Ø
       met (1s) def-boy that ʕAli went [to the]-house with-Ø
       *I met the boy that Ali went home with.'

You have heard all of the sentences. Now, you will hear 4 of the sentences again, in 2 sets of pairs.
For each pair, you will have 4 choices:

The first sentence is better.
The second sentence is better.

Both sentences are equally good
Both sentences are equally bad.

If the first sentence is better, circle 1. If the second sentence is better, circle 2.
If both sentences are equally good (or possible), circle the OKs. If both sentences are equally bad (or impossible), circle the Xs.

Here is the first pair:

1. sentence 85
2. sentence 86

again,

1. sentence 85
2. sentence 86
Here is the second pair:

1. sentence 89
2. sentence 90

again,

1. sentence 89
2. sentence 90

This is the end of the test. Thank you (in nice Lebanese)

APPENDIX 4

LEBANESE GJ TEST RESULTS
NONPARAMETRIC STATISTICAL ANALYSIS

		AGE	V3 Age of Arrival	V4 Years in Canada	V5 Score _/89	V6 L1 Educ'n Years	V7 L2 Educ'n Years	V8 %L1	V10 Read/ Write L1
AGE	Pearson Correlation	1.000	**.852	.248	.632	**.819	-.650	.310	.631
	Sig. (2-tailed)	.	.004	.520	.068	.007	.058	.416	.069
V3 Age of Arrival	Pearson Correlation	**.852	1.000	-.295	*.785	**.830	**-.802	*.683	**.819
	Sig. (2-tailed)	.004	.	.441	.012	.006	.009	.043	.007
V4 Years in Canada	Pearson Correlation	.248	-.295	1.000	-.311	-.021	.287	*-.721	-.347
	Sig. (2-tailed)	.520	.441	.	.415	.956	.453	.028	.361
V5 Score /89	Pearson Correlation	.632	*.785	-.311	1.000	*.720	-.461	*.732	*.773
	Sig. (2-tailed)	.068	.012	.415	.	.029	.212	.025	.015
V6 L1 Education Years	Pearson Correlation	*.819	**.830	-.021	*.720	1.000	*-.790	.292	**.902
	Sig. (2-tailed)	.007	.006	*.956	.029	.	.011	.446	.001
V7 L2 Education Years	Pearson Correlation	-.650	**-.802	.287	-.461	*-.790	1.000	-.366	*-.793
	Sig. (2-tailed)	.058	.009	.453	.212	.011	.	.333	.011
V8 %L1	Pearson Correlation	.310	*.683	*-.721	*.732	.292	-.366	1.000	.536
	Sig. (2-tailed)	.416	.043	.028	.025	.446	.333	.	.137
V10 Read/ Write L1	Pearson Correlation	.631	**.819	-.347	*.773	**.902	*-.793	.536	1.000
	Sig. (2-tailed)	.069	.007	.361	.015	.001	.011	.137	.

N=9

** Correlation is significant at the 0.01 level (2-tailed).

• Correlation is significant at the 0.05 level (2-tailed).