

PEOPLE'S DEMOCRATIC AND REPUBLIC OF ALGERIA  
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

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ABOU BAKR BELKAID UNIVERSITY-TLEMEN  
FACULTY OF LETTERS AND LANGUAGES  
DEPARTMENT OF FOREIGN LANGUAGES  
SECTION OF ENGLISH

*Social Meaning and Linguistic Aspects of Code  
Switching  
The Case of First - Year Students and Teachers in the  
Biology Department*

*Dissertation submitted to the Department of Foreign Languages in  
Candidacy for the Degree of "Magister" in Sociolinguistics*

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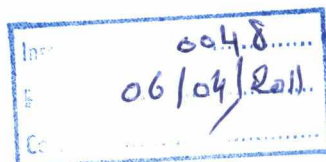
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*2009-2010*

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*Academic year*  
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# Dedication

This research work is dedicated to:

My dear parents and siblings who helped me a great deal in keeping  
my spirits up;

My intimate friends Abdelbassat, Abdelkader, Mohammed, Hamza,  
Ibrahim, Samir, Fatima, Rafika, yasmine and Besma;

Dennis, Beth, Kate and Claire Murphy.

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## **Abstract**

The purpose in the present research work is to consider, in the light of the most competing theories and models, the language contact phenomenon called 'code switching' from both social and structural perspectives. Code switching indeed characterizes bilinguals' language behaviour. It is a fact that speakers who have command of two (or more) languages often alternate, or even mix, between the two codes at their disposal. There is clear evidence that in Tlemcen Department of Biology -the case in point in these study- students, who are bilingual in Arabic and French, perform code switching on a daily basis.

Through the use of different methods for data collection and elicitation techniques, the empirical study this research work is based on attempts to define the social forces that motivate students to select between the two codes in their repertoire, and to discover the various functions code switching may serve in bilingual discourse. It also aims to show that mixing elements from two linguistic systems in a single sentence is not random but a rule-governed behaviour.

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## List of Abbreviations and Acronyms

- AA: Algerian Arabic
- B: Borrowing
- CA: Classical Arabic
- CAT: Communication Accommodation Theory
- CM: Code Mixing
- CP: Projection of Complimentizer
- CS: Code Switching
- EL: Embedded Language
- H: High Variety
- L: Low Variety
- L1: First Language
- L2: Second Language
- LC: Language Contact
- ML : Matrix Language
- MLF: Matrix Language Frame
- MSA: Modern Standard Arabic
- NP: Noun Phrase
- SA: Standard Arabic
- VP: Verb Phrase

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# Phonetic Symbols

The list includes phonetic symbols used in Classical/ Modern Standard Arabic, and tends to ignore the different dialectal realizations.

**1. Vowels:** The table shows the six vowel phonemes in Arabic (three short and three long) in addition to the shwa, and tends to ignore other realizations that results from the phonetic environment of each segment.

Short	Example	Gloss	Long	Example	Gloss
a	q <b>a</b> lam	pen	a:	f <b>a:</b> r	mouse
i	ʕ <b>i</b> lm	science	i:	z <b>i:</b> t	oil
u	d <b>u</b> b	bear	u:	m <b>u:</b> s (dialectal)	knife
ə	b <b>ə</b> nt	girl			

## 2. Consonant

Symbol	Example	Gloss	Symbol	Example	Gloss
ʔ	ʔar <b>ʔ</b>	land	ð	d <b>ð</b> ab	lezad
b	b <b>a</b> rd	cold	ʔ	ba <b>ʔ</b> a: <b>ʔ</b> ah	potato
t	t <b>u</b> ra:b	groud	z	<b>z</b> ala:m	darkness
θ	θ <b>a</b> lʒ	snow	ʕ	ʕ <b>a</b> jn	eye
ʒ	ʒ <b>a</b> dwəl	table	ɣ	ɣ <b>u</b> ra:b	crow
h	h <b>a</b> li:b	milk	f	f <b>i</b> :l	elephant
χ	χ <b>u</b> bz	bread	q	q <b>a</b> bla	before
d	d <b>u</b> b	bear	k	k <b>a</b> taba	He wrote
ð	ð <b>i</b> ?b	wolf	l	l <b>a</b> jl	night
r	r <b>a</b> ?s	head	m	m <b>ə</b> ski:n	poor
s	s <b>a</b> ʒf	sword	n	n <b>a</b> :s	people
ʃ	ʃ <b>a</b> rq	east	h	h <b>a</b> wa:ʔ	air
ʂ	ʂ <b>a</b> hn	plate	w	w <b>a</b> ləd	boy
			j	j <b>a</b> d	hand

# **General Introduction**

## General Introduction

Communication is one way we express ourselves and we do this through language. For those with the linguistic repertoire of more than one language, it is common to display their linguistic ability. What sometimes ensues is a fusion of different languages, a phenomenon termed 'code switching'. It is one of the unavoidable consequences of language contact situations. The question regarding such linguistic behaviour has lingered on in discussion both in theory and practice for several decades. Therefore, the literature on this topic is abundant, including sociology, anthropology, linguistics, etc. The present research work considers this linguistic phenomenon with the aim of exposing some of its important aspects. The research work is structured in three chapters.

Chapter one provides a general overview on the theoretical, analytical, and practical questions most prevalent in the study of code switching. However, since this phenomenon is studied from so many perspectives, the chapter will necessarily omit important elements of the literature. It provides a number of definitions of code switching put forward by leading figures in the field of contact linguistics. It also includes a classification of the phenomenon in terms of 'external' code switching, that is cross linguistic switching where speakers alternate between two different, unrelated linguistic systems, and 'internal' code switching, which concerns alternation between the various regional and social dialects in one speech community or which can be of a diglossic nature, i.e. switching back and forth between the High and Low varieties.

The chapter also gives a general review on the phenomenon in the light of two competing models: the semantic model developed basically by Gumperz, and the markedness theory advocated by Myers-Scotton. The former treats code switching as a contextualization cue that provides a means for speakers to signal how conversations are to be interpreted. The latter, however, sees that each language in a multilingual community is associated with particular social roles. The chapter also sheds some light on the tight relationship between code choice and identity and reveals how bilinguals

may show convergence and social approval or divergence and disapproval via language alternation when they decide, by linguistic means, either to accommodate their interlocutor or keep them out of their social sphere. The chapter does not only take account of the social nature of code switching when it treats it as a discourse strategy and focuses on the functions it serves, but it also considers its linguistic aspects, particularly the different grammatical constraints that operate on mixing linguistic elements from two linguistic systems within a single sentence. It also shows the difference between the two closely related manifestations of language contact, that is code switching and borrowing.

The second chapter represents a brief reflection on the sociolinguistic profile of Algeria, a community full of linguistic intricacies. Such complexity is due to various factors that all together interact to result in a community with three competing codes. First, Arabic is constitutionally recognised as the national and official language of the State. Secondly, French is politically regarded as the first foreign language but, on linguistic stands, it echoes the status of co-official language alongside Arabic. Finally, Berber, following recent political changes, has also gained the title of national language.

The coexistence of three different codes within a single nation state makes it a diglossic and multilingual community at the same time. In the parlance of the functional distribution and specialization of each code, Algeria constitutes a good instance of Ferguson's (1959) classical diglossia, with Standard Arabic as the High variety and Algerian Arabic as the Low entity. It is also representative of Fishman's (1967) extended diglossia if the correlation between French and Algerian Arabic (and Berber in some areas) is to be considered.

The chapter also exposes some particular focus on borrowing, and this is to make the difference between code switching and borrowing more clearly. At the same time, it tends to ignore some other linguistic phenomenon, not least language transfer, interference and semilingualism.

Chapter three, a field study based on both quantitative and qualitative methods, is the core matter of this research work with the ultimate goal of answering the following questions:

- What are the external factors that impose code choice in bilingual conversations?
- What functions does code switching serve?
- What are the syntactic constraints that operate on Algerian Arabic-French switching?

To provide adequate answers to the set of research questions, the investigation will take place in the department of biology at Abou Bakr Belkaid University, Tlemcen. The site of research is chosen because of its dynamic nature: while Arabic is the shared mother tongue of the informants taking part in the investigation, French is their exclusive language of instruction.

Because code switching research has progressed in two distinct, yet complementary, approaches, this investigation phase will be divided into two parts: sociolinguistic and structural. It will also be guided by several works from various researchers, such as Gumperz (1982), Myers-Scotton (1993), and Zentella (1997). In addition, there are pre-conceived ideas obtained from the review of literature, which will be either affirmed or refuted after the data is analysed.

The first two research questions will be dealt with from a purely sociolinguistic viewpoint. Concerning the external factors that may constrain linguistic choice, experiments will be done in relation to three factors that are expected to affect bilinguals' code selection. These are the topic discussed, the participants involved, and the ecological setting of the linguistic transaction. Regarding the functions code switching may serve, however, one may hypothesize that bilinguals tend to alternate between the two codes in their repertoire to compensate for the lack of proficiency in one language or the other; to clarify an idea or a concept that might be best explained in one language instead of the other; and to accommodate the interlocutor by adopting the same language choice.



The third research question, on the other hand, requires a structural perspective. The analysis of Algerian Arabic-French mixed sentences will be in the light of three predominant grammatical constraints: the 'free morpheme' and the 'equivalence of structures' constraints proposed by Poplack (1980), and the 'Matrix Language Frame model' (MLF) put forward by Myers-Scotton (1993b), and see whether Algerian Arabic-French switching obeys or violates the claims of such major proposals.

# Chapter One

## 1.1. Introduction

Sociolinguistics has often been defined as the study of language in relation to society. The emergence of such subfield of linguistics was but the outcome of the intersection of earlier works in different disciplines. It was “the run-off of the social sciences movement when it belatedly met with structural linguistics” (Chambers & Trudgill 1998:187). Sociolinguistics, in fact, benefited substantially from (at least) three disciplines: dialectology, sociology, and anthropology, along with the rigorous considerations of formal linguistics. First, the core of study in dialectology, which appeared almost a century before sociolinguistics, has been regional dialects in rural communities. Secondly, sociology is primarily concerned with investigating the relationships between social institutions and individual behaviour, without giving ample importance to language. Thirdly, anthropology has always considered language as a crucial part of the culture of a given community. Finally, and perhaps most importantly, central to formal linguistics is the *structure* of language in its own right. Its main task is to construct a theory that helps understand language (its nature, how it is acquired/learned, and its cognitive characteristics). Chomsky (1965), the more influential formal linguist, aims to find a *universal grammar* (UG) structure that could account for the *similarities* in the organisation of languages, without needing to appeal to the social context in which language is learned and used. For him, “linguistic theory is concerned primarily with an ideal speaker-listener in a completely homogeneous speech community” (Chomsky 1965:3), and thus he claims that the task of the linguist is to characterize what speakers *know* about their language, not what they *do* with it. Thus, focus is on only one aspect of language behaviour, that is *competence*, at the expense of the other equally important facet, that is *performance*.

With such high formalism, linguists, periodically over the last century, have proposed to bring their own studies closer to the other field of social inquiry. The American anthropologist, Sapir (1929), urged linguists to move beyond diachronic and formal analyses for their own sake and to “become aware

of what their science may mean for the interpretation of human conduct in general” (Sapir, 1929:207). He suggests that anthropology, sociology, psychology, philosophy and social science generally would be enriched by drawing on the methodologies as well as the findings of linguistic research. He also exhorted linguists to consider language *within* its broader *social setting*.

However, it was only by the 1960s, particularly with the advent of Labov (1963/1966) that a wave of researchers offered a new venue for a more socially engaged linguistics Sapir had called for four decades earlier. Such (socio)linguists address the most important questions about language ( its use, variation, and change). They do not but concur with Wardhaugh (1996:6) when he writes, “an adequate theory of language must have something to say about the use of language”. Language variation within the broader community or the individual speaker is a fact that cannot be denied. However, though variation is central to sociolinguistic investigations, language contact and its outcomes also make up an important construct of macrosociolinguistics.

## 1.2. Language Contact

Within a single nation state, there may exist a myriad of language. The variety of one group may expose regular variation and systematic differences from that used by other groups. Such linguistic groups are said to be using different regional and social dialects. In some cases, dialectal differences are so great and significant and reinforced by the so-called communication barrier. This latter may be physical, like a chain of mountains, or social of political, racial, class, or religious kind that comes to separate groups of speakers one from the other. However, in many other cases, especially in the present era where technology prevails in the social life of people, communicative isolation is less pronounced. Contact between different groups is obviously a social phenomenon, a phenomenon that nearly always involves a *linguistic* dimension. Once different linguistic groups are in *direct* touch, they have a natural, spontaneous tendency to seek ways of bypassing the language barrier facing them, and it is also typical for

their varieties to influence one another according to circumstances, notably large-scale, long-term contact.

Just as the same way as dialects within a single nation influence each other, different languages may also have slight/considerable impact on one another once their users are in contact. The study of speech communities characterised by language contact<sup>1</sup> (hereafter LC) phenomena has always been an interesting domain of sociolinguistic research. Interest in linguistic outcomes of LC may go back to the 19<sup>th</sup>c during the heyday of historical linguistics scholarship, where many scholars gave a kind of relevance to the phenomenon of LC (Muller, 1875; Schmidt 1872; and Schuchardt, 1884), which continued to attract attention even in the early decades of the 20<sup>th</sup>c (Sapir, 1921; Bloomfield, 1933) to witness after that a period of decline activity to such extent that contact linguistics all but disappeared as a subfield of linguistics during the 1940s, a flourishing era of structuralism (Winford, 2002).

During the 1950s, a new wave of scholars engaged in LC research. It was in the wake of Weinreich's (1953) work 'Languages in Contact' that contact linguistics could stand as a fully fledged subdiscipline of linguistics with new directions and specific goals. Prior to Weinreich, there was a zeal for analysis of only linguistic aspects of LC outcomes, to the exclusion of the socio-cultural perspective. "There was, before Weinreich (1953), no systematized theory of language contact", Clyne<sup>2</sup> (1987:456) reports. Since that time, substantial researches held by leading figures have focussed on the matter (Ferguson & Gumperz, 1960; Poplack 1980; Myers-Scotton 1993; etc).

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<sup>1</sup> This Field is also known as *Contact Linguistics*, and the term was first introduced at the 'First World Congress on Language Contact and Conflict', held in Brussels in June 1979.

<sup>2</sup> Clyne (1987b) reports that the work of Weinreich and Haugen in the 1950s can be considered the beginning of sociolinguistics. It is also true that their work established the ground for the emergence of language contact as a subdiscipline of linguistics in its own right.

Far from conceiving LC as an individual enterprise, sociolinguists recognise that it is always the outcome of socio-political/ socio-cultural forces. Historically, LC has taken place in large part under conditions of social inequality resulting from wars, conquests, slavery, migration and otherwise. As contact motivations, trade and urbanization are to be regarded too. LC is the social fabric of interaction between different linguistic groups worldwide. The more frequently they are in *direct* contact, the stronger the influence on their language varieties is. However, it is in no way a prerequisite for different groups to be in direct, actual touch to face foreign language influence. The mass media, technology, as well as education systems and political ideologies of imperialistic powers, all may contribute to the occurrence of LC situations. Such a *distant* contact may influence even those well-stable homogeneous communities of monolinguals who have little, if no, direct contact with users of other languages. A clear case may relate to languages of wider communication (LWC), not least English. Through a language diffusion policy, English has become a *de facto* global language gaining status and (sometimes) discarding indigenous languages especially in post-colonial states.

Depending on some linguistic and extra linguistic criteria, language contact has in some times and places been short-lived, whereas other situations have produced long-term stability and acceptance by multilingual communities<sup>3</sup>. LC may lead/involve phenomena, such as language shift, lingua francas, pidginization, creoles, bilingualism, borrowing, and code switching. In this research work, we shall attempt to consider the last phenomenon, that is code switching, from both linguistic and social standpoints. But, let us first have an overall view about the nature of code switching.

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<sup>3</sup> "Many sociolinguists use the term 'bilingualism' to refer to individuals, even if they are trilingual, quadrilingual, etc. , and reserve the term **multilingualism** for nations or societies, even if only two languages are involved" (Trudgill, 1992:13). This research work will employ descriptive labels in the same way too.

## 1.3. Code Switching

### 1.3.1. Preliminaries

#### 1.3.1.1. Definitions

Code switching (hereafter CS)<sup>4</sup> is a direct, automatic outcome of language contact, and a linguistic behaviour that prevails in most, if not all, multilingual communities. Speakers who have control over more than one language are known for their ability to choose or even mix codes during a communication episode according to specific circumstances. Because CS has been dealt with from a great many perspectives, such as formal linguistics, psycholinguistics, clinical linguistics, philosophy, to name only a few, and given the different interests of each field of research, scholars do not seem to arrive at a consensus and share a single definition of the term. One major area dealing with such a linguistic phenomenon is sociolinguistics. Many scholars in the field use a definition similar to that of Milroy and Muysken who define CS as “the alternative use by bilinguals of two or more languages in the same conversation” (1995:7). Even Auer and Myers-Scotton, who show a lot of disagreement on how or why code switching occurs, nonetheless sound quite similar in their definitions of the phenomenon. Auer (1984:1) refers to CS as “the alternating use of more than one language,” while Myers-Scotton (1993a: vii) mentions “the use of two or more languages in the same conversation.” Romaine (1995) adopts the same definition of Gumperz, who sees CS as “the juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or subsystems” (Gumperz, 1982:59).

Code switching may characterize a number of situations. It is a feature of stable multilingual communities, where different cantons, sometimes with different linguistic belongings, come to be politically unified under one flag, such as Belgium and Switzerland. It may also result from colonialism, which generally

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<sup>4</sup> The term *code switching* is also sometimes written, *code-switching* or *codeswitching*.

leads to a post-colonial situation where a foreign language acts as the (co-)official language for the newly independent state. Migration also may result in the formation of minority groups who generally develop a bilingual competence in their native tongue and the language of the host community. School curricula are of paramount importance too, as speakers of non-standard varieties are urged to learn the standard variety for academic and socio-political purposes. Also, some people must learn a language they do not normally speak. For instance, in Finland, where both Finnish and Swedish are recognised as official languages, Finns must learn both languages.

### 1.3.1.2. Historical Flashback

Though CS is apparently a hallmark of multilingual communities worldwide, it has become a dominant topic and a phenomenon that generates a great deal of pointed discussion only in the last few decades. Negative connotation concerning the linguistic status of CS had prevailed for a long time. The phenomenon had been regarded as a rustic form of language use, some kind of deviation from a norm, and an aberration of the 'correct' language. Amazingly, such views are echoed not only in public usage but also by the so-called fathers of modern linguistics, not least Bloomfield. For example, in describing the linguistic profile of a Native American speaker, Bloomfield (1927:395) states:

White Thunder, a man around 40, speaks less English than Menomini, and that is a strong indictment, for his Menomini is atrocious. His vocabulary is small, his inflections are often barbarous, he constructs sentences of a few threadbare models. He may be said to speak no language tolerably.

It obviously appears from Bloomfield's description that he does not regard his informant as a fully competent speaker in either of the languages in his linguistic repertoire (Boztepe, 2005)



In the same vein, in his highly-acclaimed 'Languages in Contact', no doubt Weinreich (1953:73) justifies such considerations of CS, describing the *ideal bilingual* as the one who:

[S]witches from one language to the other according to appropriate changes in the speech situation (interlocutors, topics, etc.), but not in an unchanged speech situation, and certainly not within a single sentence.

Such a characterization assumes the existence of the *imperfect bilingual* that supposedly has less than ideal competence in either language at his disposal.

Some early studies have mentioned sketches about CS, but the phenomenon was generally dealt with as 'part' of a larger discussion to the extent that it has not been noticed. Amongst the early studies to deal with issues of language choice was Barker's (1947) description of language use among Mexican Americans in Tucson, Arizona. Barker sought to answer why speakers conduct conversations in the Spanish language on one occasion and in English on another and on certain occasions, they alternate during the same conversation between the two.

Though it explicitly disregards intrasentential CS in the above quote, Weinreich's (1953) classic work no doubt was also an important station for CS research. Weinreich's proposal is that bilingual individuals possess two separate linguistic varieties, which they employ on separate occasions. One of those inspired by Weinreich's book was Vogt, whose 'language Contacts' (1954) is cited as the first article to use the term *code switching* in the field of linguistics. Though interested exclusively in diglossia, not CS, Stewart (1968) also provides an excellent example of CS between Haitian Creole and French. Although such scholars have not considered CS as a linguistic phenomenon to be treated in its own right, they have been a source of inspiration for other researchers.

The year 1972 is often cited as a reference point of CS scholarship. Blom and Gumperz's 'Social Meaning in Linguistic Structures' (1972) was a groundbreaking paper, not least for introducing types of CS as well as social

motivations of language choice. Since that time, huge numbers of scholarly influential works have flooded CS literature (e.g. Poplack, 1980; Myers-Scotton, 1993; Rampton, 1995; Benson, 2001; etc).

### 1.3.1.3. Code Switching Classification

Language alternation<sup>5</sup> may occur in all types of communities, whether they be monolingual or multilingual. As far as the latter is concerned, switching is between two or more different linguistic systems- very frequently, two discrete entities called 'languages'. This is classified as *external* or *cross-linguistic* CS. Here, alternation may be between:

- Cognate- domestic languages.
- Non cognate and cognate languages.

However, switching in a monolingual community denotes:

- A diglossic context, where speakers tend to make use of two language varieties ( H and L) for two different functions
- Speakers may also switch back and forth between the different social and regional dialects available in their repertoire to avoid communication breakdowns through a process of speech accommodation.

In such a case, i.e., monolingual context, CS is classified as being *internal*, as switching occurs between different varieties of the same language.

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<sup>5</sup> The term *language/code-alternation* is sometimes used here in a similar sense as *code switching*, but this should not be confused with the technical definition of the term 'alternation', since, according to Muysken (2000), switching and alternation all refer to different processes.

Scholars, however, do not always agree on precisely what kinds of alternation should be included under the designation 'code switching'. Some would exclude alternation between dialects of the same language. Others put different language varieties in different activity types (diglossic) aside. But, in fact, Blom and Gumperz's work (1972), which is regarded as the first research to consider CS as a linguistic phenomenon in its own right, deals, not with CS between different languages, but with alternation between dialects of Norway in Hemnesberget. Also, Gumperz's (1982:59) original definition of the term, asserting "grammatical systems or subsystems," implies that alternation may occur, not only between discrete varieties (such as English, Spanish, French, etc.), but it may also occur between a (standard) language and its related dialects, or between the different dialects spoken throughout the community. Thus, CS is an umbrella term for quite different types of bilingual and bidialectal language alternation. Such a view is captured in Trudgill's (1992) definition which views CS as "the process whereby bilingual or bidialectal speakers switch back and forth between one language or dialect and another within the same conversation" (p.16). Such a definition is broad enough to incorporate just about any kind of language varieties. However, preference for studying switching between different languages rather than between dialects is not really surprising, since the utterances contributed by each speaker are generally easily distinguished in alternation between languages and therefore making the data more accessible.

The distinction between 'language' and 'dialect' is quite harsh. It is agreed on among (socio)linguists that "standard varieties are just as much dialects as any other dialect" (Trudgill, 1994:16), and the difference between the two labels is made mainly upon socio-political rather than linguistic grounds. One of the most frequently used aphorisms in dealing with this dichotomy is that a language is a dialect with 'an army and a navy'. "The term 'language', then, if from a linguistic point of view a relatively nontechnical term.", report Chambers & Trudgill (1998:5). This blurring in the use of descriptive labels stresses the legitimacy of using the first part of *code switching*, that is 'code', in a more

neutral way for it is suggestive of any system (standard variety, dialect, register, etc.) used for communication (Wardhaugh, 2006).

The study of CS in conversation has developed in two distinct but related directions: Social and Structural. The social (sociolinguistic) approach, on the one hand, sees CS primarily as a discourse phenomenon focusing its attention on the social motivations for code choice and the specific discourse functions it serves. The structural approach, on the other, is specifically concerned with its grammatical aspects. Its focus is on the identification of syntactic constraints on CS. It should be noted at the outset, however, that these approaches are not in contradiction but complementary. This chapter first sketches the sociolinguistic research on CS, with a focus on the competing theories and models most prevalent in the consideration of this linguistic behaviour.

### **1.3.2. Social Dimensions of Code Switching**

#### **1.3.2.1. Basic Studies**

Following several years of work, Gumperz's interest in language choice was increasingly triggered. His earlier work was carried out in northern India (Gumperz 1958, 1961, 1964a, 1964b), focussing on Hindi and its range of dialects as well as the different functions served by each variety. While working with the Institute of Sociology at Oslo University, Gumperz met Jan-Petter Blom. Together Blom and Gumperz (hereafter B & G) set out to study verbal behaviour in a small fishing town of about 1,300 people. In their agenda-setting article (1972) on switching in Hennesberget, Norway, a diglossic community, with Bokmål, a standard variety acting as the H(ight) variety, and Ranamål, a local vernacular serving as the L(ow) variety, B & G found that alternating codes among the local people was both patterned and predictable. They asked why, despite their substantial similarities and the fact that most speakers commanded both varieties, Bokmål and Ranamål were largely maintained as separate entities.

Using an integrated ethnolinguistic approach, they identified two different types of code choice: *situational switching* and *metaphorical switching*.

### 1.3.2.1.1. Situational Code Switching

Situational switching refers to language alternation by the same speaker in different speech situations, though the speaker's utterances within each situation are monolingual. In other words, such a type of switching occurs when the language varieties used change in accordance with the situation in which the conversants find themselves. In multilingual communities, particularly *homogeneous* ones, different languages are linked with different settings. The codes are likely to be separated by physical distance, and only one is used in each environment. A prototypical instance of such a case may relate to bilingual children raised by monolingual immigrant parents. The children use the parents' language, for example, at home and the host community's language with outsiders in the school, street, market, etc. Here, two codes are associated with two so-called 'domains', in which a particular language variety is specified by the setting. The social context where the speech exchange occurs constrains code choice, and sociocultural norms and expectations (macro-level organisation of society) link different codes to different communities (home, school, street, market, etc).

In much the same way that a chameleon changes its skin colour as it moves from one setting, for instance sand, to another, like herb, bilinguals change their codes as the situation changes too. It is a serious social gaffe to use the wrong code in an inappropriate context, since "each language has a social function which no other language could fulfil" (Hudson, 1996:52).

Three factors stand out as having an influence on code selection and these are *participants*, *topic*, and *setting*. In situational switching, the predominant factor influencing code choice is that of participants (McClure, 2000).<sup>6</sup> Code

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<sup>6</sup> In Jacobson (2001)

switchers use one variety, for example, at home and another at school taking into account those they are talking to. Just as the ability to move along the continuum of style of one language (style shifting) is crucial, for example we speak differently to our boss than we do to our intimate friends; using one code instead of another is also momentous for successfully navigating social situations. Even Hymes (1962) in his 'ethnography of speaking'<sup>7</sup>, where he identifies a range of constituents that are crucial in the analysis of the speech economy of a community, emphasizes the importance of both 'situation' and 'participant', both have to do with the social organisation of the community.

Situational switching denotes changes in the participants' rights and obligations (RO), that is their status and role membership. It occurs when participants switch to an in-group language to talk with in-group members, such as a doctor talking to another doctor, and a patient talking to his companion using the shared language (supposedly that the two doctors and the two patients are bilingual in the same languages while having two different native tongues). Both doctors and patients switch-codes when they talk to out-group members. Thus, code selection is conditioned by the kind of relationships between participants.

Instances of situational CS are usually fairly easy to classify for what they are. What is observed is that one code is used in a certain set of situations and another in an entirely different setting. However, the changeover from one to another may be instantaneous. Sometimes the situations are socially prescribed that they can even be taught. Others may be more subtly determined but speakers readily observe the norms. Here, however, it deserves mention that this kind of switching is different from diglossia.

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<sup>7</sup> The 'ethnography of speaking' is concerned with the situations and uses, the patterns and functions, of speaking as an activity in its own right. The concept of 'communicative competence' is a central one in Hymes' ethnography of speaking.

### 1.3.2.1.2. Metaphorical Code Switching

The classic example offered by B & G (1972:424-25) denotes that, for example, in clerk-resident exchanges at the community administration office in Hemnesberget, greetings and inquiries about family affairs were undertaken in Ranamål, the vernacular, while conversations about the business transaction occurred in Bokmål, the standard variety. In this instance, there has been no change in the physical setting, only in the topic. This pattern was referred to as metaphorical switching. Such observations led the two scholars to postulate that CS could be motivated not only by the physical context (i.e. location) of the interlocutors but also by the topics they discuss. Metaphorical switching is then topic-related and predictable. Here, it is “the choice of language that determines the situation” (Hudson, 1996:53), not the other way round.

Unlike situational switching, where the two codes are physically separated, “in metaphorical switching, one topic is spoken of entirely in one language or another” even within a single occasion (Callahan, 2004:17). Metaphorical switching occurs when speakers tend to evoke elements of a certain domain, and do so by switching to the language characteristic of that setting.

Amazingly enough, in this type of language modulation, some topics might be discussed in either code. However, because the choice encodes certain social values, the selection gives a distinct flavour to what is said about the topic.

One striking feature revealed from B & G’s research is that metaphorical switches were subconscious. Instances of this type were taken from students who were native to Hemnesberget and thus native speakers of Ranamål. To avoid any kind of pressure, the experiment was conducted in an informal setting in the home of one of the informants where spontaneous interaction was present. With the use of some elicitation strategies, B & G could ensure a wide range of topics to be tackled. As they reported, the students spoke in their dialect when talking about casual topics such as drinking habits, and switched to the standard variety when talking about more academic topics. Once the informants listened to the

recordings of their conversations, they not only were appalled that their speech had diverged from their dialect, but they also promised to refrain switching during future discussions.

Metaphorical switching is often cited in the case of immigrants who adopt the host community's language to discuss cultural concepts that do not exist in their place of origin.

Inspired by Ferguson's (1959) seminal article on 'diglossia', Fishman (1965-1972) introduced the concept of 'sociolinguistic domain'<sup>8</sup> to refer to the general social situation and behavioural co-occurrence in which speakers use one code or another. In his macro-level approach to language choice, Fishman focuses on the correlations between code selection and types of activity. This is apparent in his following statement:

'Proper' usage dictates that only *one* of the theoretically co-available languages or varieties *will* be chosen by particular classes of *interlocutors* on particular kinds of *occasions* to discuss particular kinds of *topics*'

(Fishman, 1972:437)

The major criticism to Fishman's model relates to the fact that it does not consider what the speaker *accomplishes* as a result of alternating between available codes in his linguistic repertoire. Societal factors do form the basis and provide a general framework for code interpretation, at least partially, but certainly do not determine language choice in all cases.

B & G (1972) refined the concept of domain-specificity to include the idea of metaphorical switching, that is the use of a code to discuss a topic that would normally fall into a domain different from the one in which the conversants are physically present. For instance, during a family dinner, where L is normally expected, members may switch to H to discuss about work or school. On the reverse, at work, where normally H is used, interlocutors may use L to discuss about family. This differs quite considerably from Fishman's approach. For B & G, speakers are acting and active participants directing the conversation and

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<sup>8</sup> Fishman & Greenfield (1970) identify five domains of language behaviour for a Puerto Rican community in New York City: family, friendship, work, religion, and education.



not a kind of “sociolinguistic robots able to talk only within the constraints laid down by the norms of their society” (Hudson, 1996:53). Thus, when there is conflict between function and situation, as in the example given above where topics involving science are found in an informal context or where family matters are dealt with in a formal setting, “the result tends to be a mishmash of both language forms, in other words there is a breakdown of diglossia” (Keller, 1982:88).

Not all scholars seem to share the view about B & G’s research (1972), precisely in the use and validity of the terms *situational* and *metaphorical* switching (e.g. Prides, 1979; Breitborde, 1983; Maehlum, 1996; etc.). Auer, for instance, offers a critique of situational/metaphorical distinction in which he states that “the distinction between situational and metaphorical code-switching must be criticized from both ends [...] the distinction collapses and should be replaced by a continuum” (Auer, 1984:91). However, no one dares devalue B & G’s pioneering contribution. One ought to argue that it was B & G who first introduced CS as a type of bilingual *skilled performance* in a model *par excellence* to account for the social motivations embedded in code selection. Myers-Scotton, a leading figure in the study of CS socially and structurally, asserts the extent to which the 1972 research was influential, pointing out that “even though I was doing field work intermittently from 1964 to 1973 on language use in African multilingual communities, I never recognized CS as a special phenomenon until 1972” (Myers-Scotton, 1993a:48).

### **1.3.2.1.3. Gumperz (1982): Further Considerations**

By 1982, Gumperz’s work on code choice seemed to reach fruition. He largely extended previously advocated concepts and considerations. His new work is very important for emphasizing the creative use of CS and also for suggesting some linguistic constraints on code alternation (Myers-Scotton, 1993a). In the new collection, Gumperz introduces the term *Conversational CS*

which is 'metaphorical' in relating information about how the speakers 'intend their words to be understood' (Gumperz, 1982)- a label that seems synonymous to metaphorical switching discussed earlier in 1972.

Gumperz (1982) also stresses the notion that CS is a "contextualization cue" (p.98), where he views the code, the dialect, style shifting processes, in addition to prosodic features of speech and formulaic expressions of monolingual choices, as implicit ways of conveying meaning as part of the interaction between speakers. In this respect, Gumperz (ibid: 98) reports:

Code switching signals contextual information equivalent to what in monolingual settings is conveyed through prosody or other syntactic or lexical processes. It generates the presuppositions in terms of which the content of what is said is decoded.

Like other contextualization cues, language alternation may provide a means for speakers to signal how conversations are to be interpreted.

Out of his analyses of numerous speech communities, Gumperz offers a list of six CS functions, which is "by no means exhaustive" (ibid:81). He suggests: quotations, addressee, specification, interjections, and personalization vs objectivization. Some of his rubrics refer to motivations; others are structurally based. It is noteworthy that the functions Gumperz identifies are quite similar to the 'contextualization cues' he describes in the volume.

Triggered by Gumperz's work, other researchers, most importantly Auer(1984, 1988, 1995), further developed Gumperz's *interactional* perspective by employing conversation analysis techniques in their research in order to analyse performance data on CS. Specifically, Auer's *sequential approach* to code switching is made manifest in his following statement: "Any theory of conversational code-alternation is bound to fail if it does not take into account that the meaning of code-alternation depends in essential ways on its 'sequential environment'" (Auer, 1984:116)<sup>9</sup>. For Auer, the sequential embeddedness of

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<sup>9</sup> In Milroy & Muysken (1995).

meaning in bilingual conversation is “relatively independent” of its social meaning for the community (ibid: 132).

Despite the criticism his works received and maybe some ambiguities in the use of descriptive labels, perhaps no linguist has been more influential in the study of code switching than Gumperz. “There is no question of Gumperz’s extremely positive influence on CS research” (Myers-Scotton 1993a:55). His model- the interactional/semantic model- on CS and contextualization has ample impact on the fields of sociolinguistics, linguistic anthropology, and the sociology of language, a work that stimulated and paved the way for other researchers interested in the domain of language choice and code alternation. One of these is Myers-Scotton.

### 1.3.2.2. The Markedness Model

Myers-Scotton describes her Markedness model in the book ‘Social Motivations for Codeswitching: Evidence from Africa’ (1993a)<sup>10</sup>. The model is principally developed on the basis of the researcher’s work on Swahili-English in Kenya. Its basic assumption is Fishman’s (1972) normative framework: “Habitual language choice in multilingual speech communities is far from being a random matter of momentary inclination” (p.437). According to Myers-Scotton, each language in a multilingual community is associated with particular social roles, which she calls rights-and-obligations (RO) sets. Speakers use the codes in their repertoire to index the RO holding between participants. For Myers-Scotton, in any communication situation there exist an unmarked, expected RO set and a marked, differential one. By speaking a particular language, a participant signals his understanding of the current situation, and particularly his relevant role within the context. It follows that language users are rational, and choose speak a language that clearly marks their RO, relative to other speakers, in the conversation and its setting. By using more than one

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<sup>10</sup> Myers-Scotton discussed similar issues and developed the markedness model in code choice prior to the publication of this book (e.g. Myers-Scotton 1972, 1976, 1983). Myers-Scotton 1983 actually laid out the Negotiation Principle and six maxims, including the *unmarked choice* and *exploratory choice* maxims that figure in the refined model. However, as the fullest expression of the model, it is Myers-Scotton 1993 that has influenced much subsequent work.

language, speakers may initiate negotiation over relevant social roles. Myers-Scotton assumes that speakers must share, at least to some extent, an understanding of the social meanings of each available code. If no such norms existed, conversants would have no basis for getting the significance of particular code choices.

The markedness model is stated in the form of a principle and three maxims. Following Grice's (1975) 'co-operative principle'<sup>11</sup>, Myers-Scotton formulates 'the negotiation principle', for which she claims universality and predictive validity, as underlying all code choices in bilingual speech:

Choose the *form* of your conversation contribution such that it indexes the set of rights and obligations which you wish to be in force between speaker and addressee for the current exchange.

(Myers-Scotton, 1993a:113)

The negotiation principle represents the theory's central claim. Three maxims follow from this principle:

1) The unmarked choice maxim: the speaker switches from one unmarked (i.e. expected) code to another coincide with situational changes during the interaction. It states, "Make your code choice the unmarked index of the unmarked RO set in talk exchanges when you wish to establish or affirm that RO set" (ibid:114).

2) The marked choice maxim: applies when the speaker chooses to negotiate the RO balance for such purposes as increasing social distance or creating an aesthetic effect. It states, "Make a marked code choice [...] when you wish to establish a new RO set as unmarked for the current exchange" (ibid: 131). Making the marked choice is thus a conscious bid for a new RO set. Speakers employ code choices rational, as a means of setting out their social

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<sup>11</sup> The cooperative principle describes how people interact with one another. as phrased by Grice, it states "Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged" (Grice, 1975:45)

standing according to the negotiation principle. Marked choices are often accompanied by prosodic features such as pauses.

3) The exploratory choice maxim: states, "When an unmarked choice is not clear, use CS to make alternate exploratory choices as candidates for an unmarked choice and thereby as an index of an RO set which you favour" (ibid:142). Thus, it occurs when an unmarked choice in accordance with community norms is not obvious from situational factors. It applies in cases where, for example, there is a clash of norms and role relationships as in the case of a conversation between a brother and a sister at the brother's place of business in the presence of other customers, as opposed to home, their usual place of meeting. The sister uses Lwidakho, their shared mother tongue, which signifies solidarity. The brother, on the other hand, speaks in Swahili, the national lingua franca, to let his sister know that she is being treated as a customer (ibid). Here, the brother uses CS in an exploratory way to establish the favoured social balance.

The markedness model has been sharply criticized by proponents of the conversation analysis approach, for it is basically built upon Fishman's (1965-1972) approach, which views linguistic choices as predictable on the basis of the domain in which they occur. Meeuwis & Blommaert (1994), for example, argue that the model is a static and mistaken view of indexicality and social behaviour where speakers are described as simply following, or not following, rules for already existing norms. Of course, one can argue that speakers learn these norms as part of the language socialization process. Nevertheless, the markedness model is probably the most influential and most fully developed model to account for the social indexical motivations for CS. It is an attempt to incorporate the micro- and the macro-perspectives into CS research.

### 1.3.2.3. Code Switching and Identity

In a community, be it monolingual-multidialectal or plurilingual, where different linguistic varieties and ethnic groups coexist side by side, language is a, if not the, central feature acting as an indicator of speakers' identity and a marker of their social affiliation. Our use of language can influence our self-concept and identity. Cultural influences are also echoed in our language and similarly influence how we conceptualize who we are and where we come from. Since bilinguals command use of more than one linguistic code, a highly interesting question may be raised concerning the functions CS serves in bilingual discourse and the factors influencing code selection. In other words, how might the use of CS influence one's identity?

The topic of CS and identity has been tackled from many different angles depending on the general framework of the investigators. For example, Herbert (2002) describes the relationship between code selection and identity in terms of social categories, i.e. ethnicity. He reports an example about Johannesburg, an urban African centre characterized with considerable blurring of linguistic boundaries. The everyday speech of many Sotho<sup>12</sup> speakers is riddled with vocabulary and other linguistic features from Zulu. It is noteworthy here that the choice of codes is under conscious control of the speakers. That is, "Sotho speakers may choose to *harden* the ethnic/linguistic boundary by excluding Zulu features from their performance". Alternatively, "they may *soften* the boundary by incorporating such features as well as others to mark their urban identity" (Herbert, 2001:224-25)<sup>13</sup>

Another study conducted by Gumperz and Wilson (1971) in Kupwar, a village in India where about 3,000 inhabitants fall into clearly distinct castes- a specificity to India-, reveals the use of three languages: Marathi, Urdu, and

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<sup>12</sup> Nine languages exist in South Africa and subgroup into two main language clusters: Sotho languages (Northern Sotho, Southern Sotho, Twana); Nguni languages (Ndebele, Swati, Xhosa, Zulu) and two South Africa isolates (Tsonga and Venda).

<sup>13</sup> In Jacobson (2001)

Kannada. Each caste can be identified by its language. However, though the long-term interaction and everyday contact between speakers from the different castes in the village, these languages have coexisted in this way for centuries and they are still totally distinct in vocabulary<sup>14</sup>. Gumperz and Wilson suggest that the motive behind this is that the linguistic differences serve as a useful symbol of caste differences, which are very strictly maintained; hence identity in cross-ethnic exchanges is safeguarded.

On the other hand, some researchers discuss the link between language choice and identity in economic terms. In a study of the larger sociopolitical context of Canada, ethnographic observations and sociolinguistic investigations led Heller (1988b) to make the point that CS is one of the most powerful and potentially effective strategies at the disposal of bilinguals. Her findings show that such a strategy permits Anglophones in Quebec, for example, to achieve a position in a largely-controlled francophone corporate culture, while still laying claim to an Anglophone identity, with its associated value on the international scale.

Moreover, some other researchers go to consider the previously addressed relationship in pedagogic terms. A study by Liang (2006) observed the use of CS in high school Chinese immigrant students. In particular, Liang focuses on how these students perceive their use of first language (L1) and second language (L2) in group related class activities. The findings reveal how much language and identity are intertwined. Liang found that students were often “torn between identifying with compatriots in L1 and gaining membership in mainstream classes in L2, between maintaining L1 and developing L2, and between using L1 for academic discourse and for developing academic discourse in L2” (p.143). Such studies reveal instances in which peer pressure can influence what language a bilingual student uses and what effects it has on identity.

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<sup>14</sup> Gumperz & Wilson's (1971) findings are generally used to discuss matters of language 'convergence'. The three languages have distinct vocabulary. As far as *syntax* is concerned, however, these languages have become much more similar in Kupwar than they are elsewhere.

Even Gumperz in his late work (1982:95) refers to the two codes in switching as the “we-code” and the “they-code”, to mean “the ethnic language of a bilingual community, and the language of the wider society within which that community forms a minority” (Sebbah & Wootton, 1998:252)<sup>15</sup>, categorizing them in terms of their primary function— i.e. solidarity. While the former is associated with in-group relations and informal activities, and is aesthetically undervalued, the latter refers to the majority language that often serves as the communication tool for out-group relations with the mainstream community. Potentially explaining speakers’ choice of we- and they-codes, Grosjean (1982) provides a concise but comprehensive outline of the factors in the following table:

<b>FACTORS INFLUENCING LANGUAGE CHOICE</b>	
<p><i>Participants</i></p> <input type="checkbox"/> Language proficiency <input type="checkbox"/> Language preference <input type="checkbox"/> Socioeconomic status <input type="checkbox"/> Age <input type="checkbox"/> Sex <input type="checkbox"/> Occupation <input type="checkbox"/> Education <input type="checkbox"/> Ethnic Background <input type="checkbox"/> History of speakers’ linguistic interaction <input type="checkbox"/> Kinship relation <input type="checkbox"/> Intimacy <input type="checkbox"/> Power relation <input type="checkbox"/> Attitude toward languages <input type="checkbox"/> Outside pressure	<p><i>Situation</i></p> Location/Setting Presence of monolinguals Degree of formality Degree of intimacy <p><i>Content of Discourse</i></p> Topic Type of vocabulary <p><i>Function of Interaction</i></p> To raise status To create social distance To exclude someone To request or command

**Table 1.1: Grosjean’s (1982:136) List on Factors Influencing Language Choice**

<sup>15</sup> in Auer (1998)



The opposition of we- and they-codes exposes particular types of social relationships. LePage and Tabouret-Keller (1985:181), in their notion of *acts of identity*, report that:

[T]he individual creates for himself the patterns of his linguistic behavior so as to resemble those of the group or groups with which from time to time he wishes to be identified, or so as to be unlike those from whom he wishes to be distinguished.

In sum, studies of CS and identity show that close observation of bilingual discourse can yield both empirically and theoretically rich understanding of the *functions* of code alternation in bilingual social encounters. Code selection is used as an important index of ethnic affiliation and symbol of solidarity among members of the speech community. Identity may act as an imposing force determining linguistic choice. Since languages tend to become associated with idealized situations and groups of speakers, the use of multiple languages “permits people to say and do, indeed to *be* two or more things where normally a choice is expected”(Heller 1988b:93).

### 1.3.2.3. Code Switching as an Accommodation Process

Inspired from the Theory of Information, and developed by the British social psychologist of language, Howard Giles, Accommodation Theory (also known as Communication Accommodation Theory ‘CAT’) seeks to explain the process whereby conversants adjust their accent, dialect or other language characteristics according to the language of the other participant(s). CAT can be extended to help explain the social and psychological reasons for CS in conversation. In a community whose members are, at least to some extent, proficient in more than one language variety, speakers often alternate between codes or even mix them. In-group members generally switch to the language of the wider community when they come to interact with out-group members. A good area where CS may be explained under CAT relates to service encounters. A study by Pan (1997) may perfectly reflect accommodation in CS. The study was conducted in Hong Kong and Guangzhou, Peoples Republic of China, in service encounters where natural everyday interaction is common. Cantonese is

the native tongue of either site. The standardization of Mandarin, or Putonghua as it is referred to in the original study, in the 1950s, followed by economic boom in China since the 1980s, has increased the status of Mandarin in the whole of China, being a key to political dominance and academic advancement. With the incorporation of Hong Kong in 1997 (which was under British control), Mandarin has made its way to Hong Kong. The study tried to seek language choice in both geographical sites. Pan offers four types of situations summarised in the following table:

Type of code-switching	Guangzhou		Hong Kong	
	Count	Percentage	Count	Percentage
Complete	4	13 %	11	36 %
Mixed	11	37 %	9	30 %
Parallel	0	0 %	9	30 %
No-switching	15 *	50 %	1 *	3 %
Total	30	100 %	30	100 %

**Table 1.2: Yuling Pan (1997:108) Types of code-switching in Guangzhou and Hong Kong**

1) Complete code-switching: takes place when both the server and the customer switch from one language variety to another. In this case, the first one or two sentences are in Cantonese, and afterwards the interaction is switched into Mandarin. Both the server and the customer then use Mandarin to conduct the service encounter.

2) Mixed codes: means the participants use Cantonese and Mandarin contemporaneously and switch between the two codes back and forth. The whole interaction is mixed with elements from the two languages varieties.

3) Parallel codes: mean that one participant (usually the server in this case) uses Cantonese and the other participant (the customer) uses Mandarin. There may be a perfect understanding between the conversants using the two codes. But even if there is a difficulty in getting the meaning across, neither participant switches to the other's code when talking.

4) No switching: is the situation where the speech exchange is conducted in one language variety (either Mandarin or Cantonese) without any influence of the other.

From table 1.2, the striking difference between the two sites is found in the patterns of 'no-switching' and 'parallel codes'. Pan mentions that in Hong Kong, the one interaction in the no-switching case is in Cantonese, and for the Guangzhou site, the 15 no-switching cases are all in Mandarin. This means, in Guangzhou, if the customer initiates the interaction in Mandarin, it is more likely that both the server and the customer will carry out the interaction in Mandarin. Also, while all patterns of switching are present in Hong Kong, the case of 'parallel codes' seems to be absent in Guangzhou context. Thus, in Hong Kong it is likely to find that while the customer uses Mandarin, the server uses Cantonese, and only Cantonese, throughout the whole speech exchange.

Though the overall aim of Pan's study is to show how economic and political changes are reflected in language choice in either site, the link between CS and accommodation might be well discussed in the light of such findings, namely in the patterns 'no-switching' and 'parallel codes'. The first pattern reflects what is frequently attested. That is, in the majority of service encounters in multilingual communities, accommodation to the customer's linguistic choice comes at the first turn. CS is used as a face to face strategy by salesmen to accommodate their customer. The switch here may have economic ends. This is what is found in Guangzhou. However, the use of parallel codes in Hong Kong either stresses distance and linguistic differences (though most inhabitants are Chinese) or reflects, implicitly or explicitly, an ideology supporting political goals. The case of this pattern in Hong Kong, though it may relate to the ability

to understand Mandarin and inability to produce it, may also clearly indicate political attitudes explained under the slogan 'one country, two systems' and given the reason that the basic law stipulates that Hong Kong "shall enjoy high degree of autonomy" in all matters except foreign relations and military defence.

This leads to conclude that Mandarin is more widely *accepted* and thus more frequently used (as the standard official language) in Guangzhou than it is maybe in Hong Kong. The case of no-switching in Guangzhou reflects Giles' notion of *convergence*, when speakers modify their speech to make them resemble more closely that of the people they are conversing with, hence seeking approval in social encounters. In contrast, parallel codes in Hong Kong echoes Giles' form of *divergence* to show how speakers signal social distance or disapproval.

In the whole, the early work of Blom & Gumperz in 1972, Gumperz's 1982 elaborated research, the sequential approach advocated by Auer (1995), in addition to Myers-Scotton's Markedness model (1993a), all together contributed enormously in establishing CS as a distinct phenomenon of language contact worth studying in its own right. These approaches constitute social dimensions of CS. The next sub-section will try to shed some light on the other important dimension, that is structural.

### **1.3.3. Structural Dimensions of CS**

#### **1.3.3.1. Switching or Mixing: What is the Difference?**

Early studies, specifically B & G (1972) research, on CS issues emphasize a neat separation between the varieties involved in the process of CS. In situational switching, the codes are found in different physical environments; in metaphorical switching, a topic is discussed in one code or another. Such types denote that the different codes are, not in free, but in complementary distribution.

However, what is also very common is that speakers who are bilinguals in the same languages often mix codes and use linguistic elements from the different language varieties available in their repertoire when they come to interact with one another, with no real change in both setting and topic. This process of swapping between varieties occurs with a kind of rapidity and density to the extent that, sometimes, it is no easy task to decide which language they are speaking. Such a phenomenon is very noticeable in everyday bilinguals' performance. The question of how to refer to such a pattern of linguistic behaviour is a bone of contention and a matter that generates much more heat than light. As with some other aspects of LC phenomena, research on CS is plagued with the thorny issue of terminological confusion. Not all researchers use the same terms in the same way, nor do they agree on the territory covered by the term 'code switching'.

Some researchers (Kachru, 1978; Sridhar & Sridhar, 1980; Poplack, 1980; etc) insist on a clear distinction between code-mixing (CM) and CS. McLaughlin (1984), for example, refers to CS as language changes occurring *across* phrase or sentence boundaries, whereas CM takes place *within* sentences and usually involves the insertion of single lexical items. In this vein, the term code-mixing is used "to refer to all cases where lexical items and grammatical features from two languages appear in one sentence" (Muysken, 2000:1) -intrasentential switching-, whereas CS is reserved for intersentential switches. Thus, CM suggests a hybrid form drawing from distinct grammars; CS denotes speaker's movement from one grammatical system to another. Under this view, the following example involving English and Spanish includes one CM and two code switches:

And all of a sudden, I started acting real *curiosa* (strange), you know. I started going like this. *Y luego decia* (And then I said), look at the smoke coming out of my fingers, like that. And then *me dijo* (he said to me), stop acting silly.

(Valdés Fallis, 1982:220)

However, many other researchers use 'CS' as a cover term under which different forms of bilingual behaviour are subsumed. This is well apparent in many sociolinguistic definitions of CS (see sub-section 1.3.1.1). Heller, for

instance, defines it as “the use of more than one language in the course of a single communicative episode” (1988a:1).

Such complexity at the terminological level can be compared to that between loan-words and borrowings. Many scholars notice that it remains a matter of individual preference, though some researchers, most notably Muysken (2000), give clear reasons for why a distinction should be made. In this research work, CS is used as an umbrella term, and code-mixing is regarded as only one type of switching along with situational and metaphorical switching. When ‘CM’ is used, it is then employed in an *ad hoc* manner, exactly to describe switching occurring at the same time within a *single* conversation, and even here it is included under the wide heading CS.

In some areas where CS is very common and where there is a continuously increased mixing of different codes, it may become normal for words from different linguistic systems to be used together in everyday interaction. This may lead to a relatively stable *mixed code*<sup>16</sup>. Creoles are thought to develop from pidgins as they become nativized. Come-mixing is similar to the use of pidgins but while a pidgin is created and used across groups that do not share a common language, come-mixing occurs within a setting where speakers have more than one code at hand.

Code-mixing, or *conversational CS* as it is also named, does not consider the situation or topic in which the speech exchange may fall in, but rather the structure of utterances. In a stretch of discourse between bilinguals, one speaker may start with one language variety then adopt a few words from the other then go back to the first for a few more words and so forth. There is a sense in which a person is capable of using, say, two languages, A and B, and also C (a range of hybrid forms that can be used with comparable bilinguals but not with monolingual speakers of A or B).

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<sup>16</sup> There are names for a hybrid variety, often with a facetious or pejorative sense. For example, in India, Hindish and Hinglish are used for the widespread mixing of Hindi and English.

Poplack (1980) cites three types of conversational code switching:

- 1) Intersentential CS: occurs when a change of language happens at a clause or sentence boundary, i.e. where each clause/ sentence is in one language or the other.
- 2) Intrasentential CS: takes place *within* a clause/ sentence boundary, including also word boundaries. It may be a process of inserting a bound morpheme, noun, verb, or even a phrase in a sentence.
- 3) Extrasentential CS: is the case where tags, exclamations, and ready-made expressions (such as, 'I mean', 'you know', etc), from the donor language<sup>17</sup> are inserted into the recipient language. Bautista (1980:247) provides a good example from Tagalog-English switching:

The proceedings went smoothly, *ba* [Tagalog tag]?

The proceedings went smoothly, didn't they?

The mixing of linguistic elements from two or more grammars constitutes a meeting ground for sociolinguists and asocial linguists. With no doubt, some switches are permitted, others are not to occur. Why? The question of how free this alternation is of paramount importance from a structural standpoint.

### 1.3.3.2. Grammatical Constraints on CS

Interest in CS research started with much focus on the sociolinguistic parameters of code alternation and with specifying the conditions and motivations under which one code or another is selected. By the late 1970s and early 1980s, an interest in the linguistic structure of CS took hold. The use of elements from, say, language A into language B seems to fit perfectly in

<sup>17</sup> The donor language is the minor language or lending language in a code-switched utterance to which single or minor features are inserted in the base language. The terms 'donor', 'lending' and 'embedded' language will be used in the same way in this research work. However, the recipient language is the main language in a code switched utterance to which a majority of phonological and morphological features of discourse can be attributed. The terms 'matrix', 'base' and 'host' language will be used interchangeably throughout this research work.

bilingual speech. A number of questions have been raised in relation to such linguistic behaviour. How can two distinct codes narrow their differences in such a way as to result in discourse involving language mixes within a single sentence? How can the units from two codes be organized into a *cohesive* relationship? Can these units of another code fit in *anywhere* in the first code? If not, what are the appropriate places for these units? In the whole, it was the development of a structural approach to account for the nature of the grammar underlying bilingual language mixture, as Poplack & Meechan (1995:199) put it:

Do speakers operate with a single base grammar which is on occasion overlaid with lexical items from another language, or are different grammars activated at different times? If the latter is the case, what structural principles govern the juxtaposition?

Mixing codes may take place at any level of linguistic structure. But because intersentential switching only involves utterances that follow the syntax of one code or the other, intrasentential switching has attracted most linguistic attention, as it displays various kinds of hybrid structures that require structural analysis and explanation.

Intrasentential switching was considered syntactically random rather than rule-governed linguistic behaviour. Labov (1971) claims that, in contrast to phonological and syntactic variation in Black English, alternation between Spanish and English in conversation is random. He proclaims that “no one has been able to show that such rapid alternation is governed by any systematic rules or constraints and we must therefore describe it as the *irregular mixture* of two distinct systems” (Labov, 1971:457, italics added). Lance (1975) was the first investigator to question whether CS has any syntactic restrictions. He concluded that there are none regarding where the switching can occur, however. But CS research has come a long way over the past three decades. It is known today that the phenomenon is not a purely idiosyncratic behaviour, but rather it occurs at specific switch points. The example provided by, for instance, Pfaff (1979) involving English-Spanish demonstrates that mixing cannot occur randomly in a sentence:



I went to the house *Chiquita*.

I went to the little house.

Such an example indicates that no alternation occurs between a (English) noun and a following modifying (Spanish) adjective. Gumperz (1976, 1982) also discusses the linguistic constraints on CS, and offers a total of nine restrictions. Other major works on syntactic constraints were carried out by Timm (1975), Kachru (1975), Wentz & McClure (1976), etc. However, the most comprehensive work came first from Poplack (1980), then, a year later, Sankoff & Poplack (1981), who propose two major constraints that stand up to now in the forefront in discussing grammatical restrictions on CS, the 'Free Morpheme constraint' and the 'equivalence constraint'.

### 1.3.3.2.1. The Free Morpheme Constraint

It entails the forbidding of CS "between a bound morpheme and a lexical form unless the latter has been phonologically integrated into the language of the bound morpheme" (Sankoff & Poplack, 1981:5). Such a constraint limits the potential switch sites to word boundaries only. Accordingly, it is possible to switch any constituent within a sentence provided that it is a *free morpheme*. Thus, the following sentence involving the insertion of an English item into a Spanish sentence is permissible:

El *pope* es polaco (The pope is Polish)

Again, English-Spanish switch *flipeando* (flipping) is a permissible Spanish form, whereas *run-eando* (running) is not, as the verb stem 'run' is not phonologically adapted into Spanish phonology (ibid).

### 1.3.3.2.2. The Equivalence Constraint

Sankoff & Poplack (ibid:57) consider that “the local co-grammaticality or equivalence of the two languages in the vicinity of the switch holds as long as the order of any two sentence elements, one before and one after the switch point, is not excluded in either language.” Such a constraint predicts that CS may occur at points where the surface structures of the two languages map onto each other. Again, for example, in Spanish-English CS, switches may not occur between nouns and adjectives in the noun phrase because attributive adjectives in English typically precede the head noun, whereas in Spanish they follow it. In this case, a switch, if it is to occur, will violate a syntactic rule of either language.

In their large corpora analysis of Spanish-English intrasentential switching, Sankoff & Poplack’s focal zone of interest is on the equivalence-based switching containing more than one lexeme, rather than single morpheme switches, which, though theoretically recognised, take no share in their discussion. After surveying the structural integrity of the component languages in CS, they argue for a separate grammar in CS, drawing, but distinct, from the two monolingual grammars. It is the speaker’s command of either grammar that permits to code switch. This is made on the basis that switching involves neither hesitations nor pauses, but flexibility and rapidity. In this sense, Poplack (1982:260) reports that “[...] possibly emanating from a single code-switching grammar composed of the overlapping sectors of the grammars of L1 and L2.” This view juxtaposes the standpoint that one or the other code involved in CS acts as the base language and the other as the embedded language.

Out of their analysis, Poplack and her associates suggest sites for possible Spanish-English switching such as:

- Between subject noun phrase (NP) and verb phrase (VP);
- Between verb and complement clause;
- Between a noun and a following relative clause;

At the same time, they offer sites where switching is in no way allowed.

Poplack claims universal validity for both constraints, the free morpheme and the equivalence morpheme constraints, but critics are generous enough to offer so many counter-examples, drawing from Spanish-English studies as well as different language dyads, notably Nartey (1982), Bentahila and Davies (1983), Myers-Scotton (1993b), Berk-Seligson (1986), to name just a few. While the free morpheme constraint has been less challenged, though counter-evidences are present especially from agglutinative languages such as Turkish and Maori, the equivalence constraint receives acid criticism. For instance, Myers-Scotton (1993b:28), in her Nairobi corpus analysis, mentions that there exists a clash between Swahili and English word order within the noun phrase. While English calls for a head-last NP, Swahili requires a head-first NP, as it is illustrated below:

Unaweza kumpata amevaa	nguo	nyingine	<i>bright.</i>
	Clothes	other	bright

(You can find her wearing other bright clothes)

Pandit (1990:45) also reports counter evidence from English-Hindi CS, where a Hindi post positional phrase is switched for an English prepositional phrase:

John gave a book	<i>ek</i>	<i>larakii</i>	<i>ko.</i>	(John gave a book to a girl).
	a	girl	to	

So many other sides in the constraint's framework have been tackled with huge numbers of counter-examples. However, one ought to argue that, despite many exceptions that the model fails to account for, at the same time, it scores some success in suggesting some structural conditions under which CS is more likely to occur, and in proposing several points of structural mismatch which disallow insertion, basically in Spanish-English switching. Sankoff and Poplack's work remains a touchstone, for it constituted a sound basis for the latter works.

### 1.3.3.2.3. The Matrix Language Frame Model

Myers-Scotton distinguishes two types of CS as far as the speakers' bilingual competence is concerned. If the speakers have sufficient access to the grammars of either language, and hence proficiency in both languages, the result is termed *classical CS*. On the other hand, in many contact situations, "when speakers do not have full access to the grammatical frame of the intended ML, part of the abstract structure comes from one variety and part from another" (Myers-Scotton & Jake, 2000:2). The concern matter in this research work will be the former type, since Myers-Scotton builds a structural model of CS in the light of classical CS.

As a unit of analysis, Myers-Scotton favours the use of *CP* (projection of Complementizer) at the cost of the term 'intrasentential' which has been used broadly and consistently in the literature, and her argument is that "even within a sentence, the grammars may not be in contact" (Myers-Scotton, 2002:55). In this way, a CP is identical to a clause with a complementizer (COMP). As a matter of fact, 'for they were happy' is a clause with 'for' as a COMP. A bilingual CP may consist of:

- Matrix language (hereafter ML) islands which have only ML morphemes, and then governed by ML structure.
- Embedded Language (hereafter EL) islands that consist of only EL morphemes, and thus controlled by EL grammar.
- Mixed constituents including morphemes from both ML and EL in a structural frame organized by ML grammar.

It is the third CP which attracts much linguistic attention. The notion of asymmetry is arguably central to many language contact phenomena. Joshi (1985), for example, suggests that CS is characterized by an asymmetry with respect to the degree of participation of the language varieties involved, reporting that "speakers and hearers generally agree on which language the mixed sentence is 'coming from.' We can call this language the *matrix language* and the other language the *embedded language*" (Joshi, 1985:190-91).

Such a feature, i.e. asymmetry, inspired by Joshi and some other preceding works (Sridhar & Sridhar, 1980; Bokamba, 1988; etc), and which is disregarded in Poplack's (1980, 1981) syntactic considerations of CS, urged Myers-Scotton (1993b) to present a framework termed the 'Matrix Language Frame model' (MLF). Such a model aims primarily "to account for the structures in intrasentential CS", rather than intersentential switching which she considers as being less challenging (Myers-Scotton, 1993b:5).

Central to the MLF model is the dichotomy 'Matrix Language' vs. 'Embedded Language'. Myers-Scotton emphasizes the point that the codes within a single bilingual mixed CP do not participate *equally*. She sees that "one, and only one, of the participating varieties is the source of the abstract grammatical frame of the constituent. This frame is called the Matrix Language" (Myers-Scotton, 2001a: 24)<sup>18</sup>. However, the other language(s) participating in CS is the Embedded Language, which constitutes limited material, notably content morphemes inserted within the larger CP. In these terms, the ML is the more dominant, and might be identified as the language in which the morphemes or words are more used in speech.

Under two principles, the 'morpheme order' and the 'system morpheme' principles, Myers-Scotton proceeds to identify the ML in bilingual mixed CPs. Before reviewing the two principles, it is paramount to consider the dichotomy content-system morphemes. The latter include inflections and most functional words, and "they are defined by the features [-thematic role receiver/assigner]" i.e., they do not participate in the thematic role grid. This is in contrast with content morphemes "which either receive thematic roles (most nouns and adjectives) or assign them (most verbs, some prepositions) thematic roles" (Myers-Scotton, 1997:220)<sup>19</sup>. Thus, the grammatical frame of any sentence, or say CP, is defined as morpheme order and system morpheme. As it is indicated above the MLF model is built on:

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<sup>18</sup> in Jacobson (2001)

<sup>19</sup> In Coulmas (1997)

1. The Morpheme-Order Principle, which states that: “In ML + EL constituents consisting of single-occurring EL lexemes and any number of ML morphemes, surface morpheme order (reflecting surface syntactic relations) will be that of the ML” (Myers-Scotton, 1993b:83). Accordingly, the ML determines the order of the elements in the mixed CP. This is obvious in the following example, involving a single English item inserted in a Swahili NP:

... mambo nengi new--- mapya katika maisha yako  
 Things many new new in life your

(ibid: 85)

In the NP ‘*mambo nengi new*’ (things –many-new), the English item *new* follows its head according to Swahili syntactic restrictions, violating at the same time English syntactic rules.

2. The System Morpheme Principle: Myers-Scotton and Jake (1999:91)<sup>20</sup> report that: “In ML + EL constituents, all system morphemes which have grammatical relations external to their head constituent (i.e., which participate in the sentence’s thematic role grid) will come from the ML”. Such a principle indicates that function morphemes can only be drawn from the matrix language. This is clear in the following example:

Ja ma koka- sin kahvin  
 And I cook- past coffee  
 And i cooked coffee

(Hyltenstam in Myers-Scotton, 1993b:108)

While the content morpheme ‘koka’ (cook) comes from Swedish, the EL in this example, its subject pronoun and past-tense marker, as system morphemes, comes from Finnish.

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<sup>20</sup> in Nicole (2001)

In addition to the previously discussed principles, Myers-Scotton provides another constraint on mixed CPs termed:

**3. The Blocking Hypothesis:** predicts that, "In ML + EL constituents, a blocking filter blocks any EL content morpheme which is not congruent with the ML with respect to three levels of abstraction regarding subcategorization (Myers-Scotton, 1993b:120). Under this principle, Myers-Scotton restricts the role of the EL even more by allowing only certain embedded language content morphemes to occur in mixed constituents.

While progressing over the years (Myers-Scotton & Jake, 1999; Myers-Scotton, 1999b; Myers-Scotton, 2002), Myers-Scotton supported her MLF model with two auxiliary theories: the 4-M model and the Abstract Level model. Under these recent extensions, the other type of CS, that is not classical CS, receives attention too. Such recent elaborations will not be discussed in this research work. What should be pointed out is that even after such elaborations and revisings, the major original theoretical claims of the MLF model remain the same, with a base language contributing the order of elements in mixed bilingual CPs and providing system morphemes in such constituents. But how do we identify the matrix language in the first place? Myers-Scotton identifies it as the language of more morphemes in any code-switched utterance. However, it is relevant to mention that the ML may change even within the course of a single conversation. In other words, what was regarded as EL items at the beginning of a conversation may be considered, as they participate more and more, ML items by the mid or the end of the same conversation.

Some other early minor proposals of constraints include:

- The size of constituent constraint, defined by many scholars (e.g. Gumperz and Hernandez-Chavez, 1975; Poplack, 1980; and Berk-Seligson, 1986) and states that major and main constituents, such as clauses and sentences, tend to be switched more frequently than lower-level constituents, i.e. nouns, verbs, adjectives, etc.

- The closed-class constraint: states that closed class items (pronouns, prepositions, conjunctions) cannot be switched (Joshi, 1985).
- Adverbial constructions may be switched, as in ‘*vamos next week*’ (we’ll go next week), but not as interrogatives: ‘when *vamos*’ does not appear to be accepted (Aguirre in Hoffmann, 1991:144).
- The Functional Head Constraint reveals that CS cannot occur between a functional head (COMP, determiner, inflection, etc) and its complement, like sentence, NP, VP (Belazi et al, 1994).

Though universal validity could not be achieved by the proposed constraints, which largely remain language-specific instead, it is obvious that CS is in no way random. “Just as monolingual speech and writing is rule governed, so is speech [...] that involves more than one language or language variety. There are systematic patterns we can observe” (Muller & Ball, 2005:50)<sup>21</sup>.

Interestingly, in the MLF model, CS is conceived as something akin to borrowing. Furthermore, no clear-cut distinction exists between the two manifestations of language contact. This is in contrast with Poplack’s (1980) approach in which the two phenomena are treated as separate entities. This is to be discussed below.

### 1.3.3.3 Code Switching and Borrowing

How free the alternation between the available codes is of prime importance, so is the difference between switches and borrowings (hereafter B)<sup>22</sup>. If lexical loans are to be treated as distinct entities and therefore should not be included in the analysis of CS utterances, the boundary between the two phenomena must be clear before the analysis actually starts. This fact

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<sup>21</sup> in Ball (2005)

<sup>22</sup> The concept of borrowing will be discussed as it relates to the study of code switching only. Also, a *borrowed* item will be used in the same sense as a *loan word* throughout this research work.



necessitates considering a relevant question: of the foreign lexical items in mixed sentences, what constitutes borrowing? This problem in fact goes back to what Weinreich *et al.* (1968) called *the transition problem*: Because language change is a diachronic process, we cannot really determine at what point in time a particular lexical item gained the status of a loanword in the recipient language.

CS is a linguistic behaviour typical to *bilingual* speakers, whereas Bs are regularly used by *monolinguals* of a given language, and they have, to some extent at least, been adapted to the phonological system of the base language. However, as some linguists assume, the process of integration is but gradual.

In analyses concerning the dichotomy CS vs. B, higher-level constituents (phrases and clauses) represent the easiest cases for they (largely) avoid the issue of integration. The true challenge lies in deciding on the status of single words. Lone item switching is perhaps the most frequently attested kind, and a bilingual's utterances may contain islands of Bs alongside instances of CS. The researcher analysing CS data inevitably has to face the necessity of tracing a dividing line between what counts as either switches or Bs. The distinction between the two language contact phenomena has been amply discussed, but linguists do not seem to share one common view. To help bring an adequate differentiation, two major contradictory approaches have been postulated with recourse to two chief criteria:

- Degree of EL items integration in the base language;
- Degree of use by monolingual speakers.

To consider the status of single-occurring lexemes in mixed constituents, some researchers emphasize the viewpoint of *integration*. In the two following French-English mixed CP, Grosjean (1982) reflects his understanding of CS (a) and B (b):

a) 'ça m'étonnerait qu'on ait *code-switched* autant que ça'

b) 'ça m'étonnerait qu'on ait *code-switché* autant que ça'

(I cannot believe that we code-witched as often as that)

(Grosjean in Hoffmann 1991:111)

The meaning borne by the two sentences is the same. For Grosjean, a borrowed item should be morphologically integrated, a switch should not.

Again, in his consideration of CS, Haugen asserts the point that if items occur in a host language and they are still called switches, they must show no integration into that language. In this way, he uses the term CS "to refer to the alternate use of two languages including everything from the introduction of a single, *unassimilated* word up to a complete sentence or more into the context of another language" (Haugen, 1973:521, italics added). However, as far as the integration criterion is concerned, Poplack is credited as being the leading figure to deal comprehensively with the dichotomy CS vs. B. According to Poplack and her associates<sup>23</sup>, B and CS are two distinct mechanisms of linguistic behaviour. In her 1980 paper, while analysing performance data of Spanish-English CS from the bilingual Puerto Rican community in New York City, Poplack recognises three types of integration which non-native material might show vis-à-vis what she calls the *base language*. These are phonological, morphological, and syntactic integration. She offers four possible combinations of integration as shown in table 1.3:

**Table 1.3: Poplack's(1980) Identification of Code-Switching Based on the Type of Integration into the Base Language**

Type	Levels of Integration into Base Language			Code-Switching?
	Phonological	morphological	syntactic	
1	✓	✓	✓	NO
2	x	x	✓	yes
3	✓	x	x	yes
4	x	x	x	yes

<sup>23</sup> Sankoff and Poplack (1981), Poplack, Wheeler, and Westwood (1987), and Sankoff, Poplack, and Vanniarajan (1990), for abbreviation purposes, these authors will be referred to as "Poplack and her associates."

On the basis of her analysis, types (2), (3), and (4), showing: (a) syntactic, (b) phonological, or (3) no integration respectively, are still considered instances of CS. In contrast, type (1), that exposes *all* types of integration, constitutes B. While conducting empirical studies in other bilingual communities, Poplack (1988b) discarded the criterion of phonological adaptation to keep only 'morphosyntactic integration', which stands for now as one, out of two, chief criterion in the dichotomy CS vs. B. Such further refinement coincided with the coinage of the category of 'nonce borrowings' (Poplack et al, 1988) to refer to type (1) introduced early in Poplack's 1980 work, with the only difference that this category may or may not show phonological integration. Nonce borrowings are contrasted with established loans. While established Bs are often used by monolinguals, nonce Bs are found in bilinguals' speech. All in all, for this group of researchers, "borrowing involves the grammatical structure of one language only, with the other playing a solely etymological role" (Poplack & Meechan, 1995:208).

On the other edge, some researchers, most outstandingly Myers-Scotton (1992, 1993b) and Gardner-Chloros (1995), *contra* Poplack and her associates, do not see CS and B as two distinct processes, nor do they view such a distinction to be critical. Their argument is that both phenomena may or may not be assimilated to the recipient language. Because she sees them as similar and related mechanisms, falling at either end of a shared continuum, Myers-Scotton (1993b) discards the idea of morphosyntactic integration reporting that it is in no way a must. Instead, she suggests that CS is a gate for B and that loanwords tend to be recurrent in the speech of the individual and gradually become generalized and widespread across the community through increased frequency of use and adoption by monolingual speakers, "nothing more is required" (ibid:182). Following Myers-Scotton, Gardner-Chloros (1995:74) argues that "every loan starts off life as a code-switch". Romaine (1994, 1995) also seems to support the same view.

Thus, as Myers-Scotton explicitly asserts, frequency of use is the *single* reliable criterion to distinguish between the two manifestations of language contact, arguing that items that appear very frequently are regarded as loanwords, whereas those that appear only occasionally constitute switched utterances.

Because the distinction between the two phenomena is blurred at best, “efforts to distinguish codeswitching [...] and borrowing are doomed” and it is paramount that we “free ourselves of the need to categorize any instance of seemingly non-native material in language as a borrowing or a switch” (Eastman, 1992:1).

It is worth mentioning again that both structural and social approaches to code switching analysis are complementing one another. The structural approach tries to identify the features of morphosyntactic patterns underlying the grammar of CS, whereas the social approach builds on this in its attempts to explain why bilingual speakers talk the way they do.

#### **1.4. Conclusion**

Far from being considered as a sign of linguistic decay and a kind of bilinguals' incompetence in either code, research has proven that CS is a development requiring proficiency in the two component codes as well as the additional skill to manipulate them concurrently. Linguists do not but agree with Gardner-Chloros (1995:68) when she considers “[...] code-switching as a special form of skilled bilingual behaviour, to be distinguished from the aberrant manifestations of bilingualism [...] This new type of ideal speaker-listener, whose existence depends on such discrete alternation, is as much of a rare bird as Chomsky's monolingual original”.

Another point in the chapter is the social motivations of CS. Code choice is typically associated with specific situations, topics, and also participants. This kind of skilled performance also reflects the way bilinguals perceive their social belonging and relationships to one another.

The other surveyed area is the syntactic dimension of CS, a common corp shared by both sociolinguistics and structural linguistics. Language alternation is but a rule-governed linguistic behaviour, conditioned by syntactic constraints in much the same way that monolingual utterances are. Also, it is a practice of skilled bilinguals different from other kinds of language hybridization that needs no bilingual competence, such as borrowing.

## **Chapter Two**

## 2.1. Introduction

Algeria is an intricate context worthy of sociolinguistic investigations. Such a complexity is said to be the offspring of various social, political, geographical, and most importantly, historical and ethnic factors. It is agreed among historians that the first inhabitants of North Africa as a whole were the Berber tribes, and therefore the prevailing language was characterized by various types of Tamazight.

North Africa, or what is now called the *Maghreb*, in general and Algeria in particular witnessed two chief historical events that have deeply influenced its linguistic structure. First, the arrival of the Arabs in the mid 7<sup>th</sup> then the 11<sup>th</sup> century resulted in several impacts on the population from great many dimensions: in addition to the spread of Islam which quickly became the dominant religion, the area was largely and definitely swallowed by Islamic culture. Then, because Islam is tightly related to Arabic (the language of Muslims' Holy Book, the Qur'an), it was adopted and learned by most indigenous populations and soon displaced Berber, with the exception of some regions that are still Berberophones.

Secondly, Algeria fell under French rule for a long period which lasted for more than 130 years (1830-1962). During the colonial era, France followed a strict policy of assimilation and imposed French as the language of formal encounters and official activities. Such linguistic imperialism made French a solidly-rooted language, a language that still constitutes an important part in Algeria's linguistic repertoire. The long-term contact between the different autochthonous groups (Berbers, Arabs, and French) has resulted in a community where the dynamics of language contact characterises the daily linguistic performance of Algerian speakers.

## 2.2. Algeria: Competing Codes

### 2.2.1. Arabic

Algeria is one among twenty two nations that make up the construct of the Arab World, and (standard) Arabic is constitutionally recognised as *the sole official* language of the State. Linguists usually consider three major variants Arabic may appear in: Classical Arabic (CA), Modern Standard Arabic (MSA), and Algerian Arabic (AA).

CA is the language of the Qur'an and the language used in pre-Islamic literature<sup>24</sup>. It is then considered normative, for it was the source out of which classical grammarians (e.g. Abu al-Aswad al-Du'ali, al-khalil, Ibn Djinni, etc.) inspired and laid down the rules of the correct usage. It deserves mention that CA remains basically unchanged to this day (Freeman, 1996). In Algeria (the same fact may actually apply to all the Arab nations), CA has actually a limited domain of use restricted to: (i) religious purposes (the reading of the Qur'an, delivering the Friday Sermon, etc), (ii) the language of a large body of classical literature (prose, and especially poetry), (iii) and it is also used by a very few highly trained, eloquent speakers, perhaps more precisely, few *writers* who are considered as a kind of language purists and guardians. In this vein, CA, *contra* Latin which is regarded as a dead language, is a living language *understood* and pretty much *used* by a number of *literate* people in specific domain.

MSA is more or less a simplified version of the former, used mostly in education, printed Arabic publications, government, and the media. The point here is that CA and MSA should better be treated as very close forms, rather than significantly different from one another. The main difference is a question of vocabulary<sup>25</sup>. While CA has a very large lexicon (e.g. *Lisān al-Arab dictionary*), MSA

<sup>24</sup> According to Freeman (1996), CA is prevalent in the literature of pre-Islamic era up to the Abbasid Caliphate

<sup>25</sup> *Lisān al-Arab Dictionary* contains hundreds of words to refer to *lion, horse, sword*, etc. Ancient Arabs used numerous items to name something they revered. In fact, some lexicographers state that each item has a different meaning.



has a relatively smaller one (e.g. *al-mundgid*). This is particularly to meet learners' academic needs with emphasis on the most recurrent lexis. Consequently, it would be a challenging task to read certain texts (pre-Islamic poetry for instance) without a special dictionary. The other important feature is that MSA includes a large number of loanwords, such as /dʒuyra:fja(h)/, /di:muɣra:fja(h)/, /kla:si:kija(h)/ (Geography, demography, classical, respectively). However, such a feature, that is *modernisation*, is a natural, essential part of *corpus planning* (language development), which aims to meet contemporary communication concepts. The crucial point is that as far as syntax and rules of morphology are concerned, CA and MSA follow the same grammatical path, with the former laying down the norms. CA and MSA can be grouped under the designation 'Standard Arabic' (SA)<sup>26</sup>. In this sense, SA is the prestigious variety and the one politically promoted throughout the whole Algerian territory. Being mutually intelligible<sup>27</sup>, SA serves as a lingua franca across the Arabic-speaking World from Iraq to Morocco. It is also the language of official encounters such as the Arabic Summit. It then acts as a unifying force in favour of nationalism, i.e. the sense of the one identity shared by *most* populations in the different Arabic-speaking nations.

AA, or *al-āmmiyya* (colloquial), incorporates the many regional dialects (since no real sociolects are assumed to be identified in Algeria) scattered throughout the country. These dialects are generally mutually intelligible with each other as well as with other dialects of the Maghreb, but are likely to be incomprehensible outside the Maghreb. What is specific to AA (also to Moroccan and Tunisian Arabic, though to a lesser extent) is that items of foreign origin, especially French borrowings, are copious in everyday performance.

<sup>26</sup> The label 'SA' will be used throughout this chapter for short purposes. CA, MSA will be used only when the context necessitates a specification.

<sup>27</sup> SA is actually intelligible to all educated speakers in and outside the Arab World. The main difference may relate to pronunciation, i.e. SA may be realised with different accents. Also, some vocabulary used in North Africa has other equivalents in the Middle East. For instance, the word /ʧama:ʧim/ (tomato) used in the Maghreb is synonymous to /banadu:ra/ in Levantine Arabic.

### 2.2.2. French: a Bane or a Boon?

No discussion of the sociolinguistic profile of Algeria is complete without a reflection on the French language, its status, as well as its domains of use. French is a language worthy of consideration due to Algeria's colonial history. The French invasion of Algeria started in 1830, and by 1902 the current borders were drawn under France's supervision. During the 19<sup>th</sup> century, Africa as a whole was said to be shared by two major European powers: Britain and France. Unlike the British whose main concern was economic, the French policy in francophone Africa aimed to rape, in addition to the economy, the indigenous cultures and identities.

In Algeria, France encouraged European migration from about 1834, and the new comers- the 'pied-noirs' as they are called by the Algerians- confiscated the lands and the properties, creating then a flourishing society removed from the native majority. Algerians had almost no political rights and did not share in colonial prosperity, being forbidden from prestigious positions and having low-level jobs mainly to serve the colonists. Such a settlement was "based on an image of Algeria as a unincorporated extension of France" (Lustick, 1985:7). Under the slogan *l'Algerie française* (French Algeria), France implemented a deliberate, well-organised policy with the ultimate aim of total assimilation. From a linguistic viewpoint, the British usually supported the dominant language in their colonies. As evidence, in Egypt they endeavoured to promote Cairene Arabic to serve as official language. In contrast, France imposed French and worked hard to suppress indigenous languages in all francophone Africa, including Algeria, on the basis that "the African dialects are not languages of civilisation" (Davesne, 1933:6)<sup>28</sup>. Such rigorous imperialistic policy aimed to disparage anything indigenous by violently imposing the French language which constituted, as Kh. Taleb Ibrahimi (1997) argues:

Le français, langue imposée au peuple algérien dans la violence, a constitué un des éléments fondamentaux utilisés par la France dans sa politique de dépersonnalisation et d'acculturation à l'égard de l'Algérie.

(Kh. Taleb Ibrahimi in Dendane, 2007:81)

<sup>28</sup> My translation of Davesne original text: "les dialectes africains ne sont pas des langues de civilization".

Despite the long-term French occupation (1830-1962), Arabic, though entered a vulnerable stage, has, during colonisation and after independence, been able to resist the French suppressive linguistic policy. This is particularly due to four major reasons:

- 1) Arabic was a standard language with a *written* tradition. This is in contrast to the vast majority of African colonies which had too many non-standard *oral* traditions.
- 2) Arabic is deeply rooted in Algerian society due to its religious value, being the language of the Qur'an.
- 3) Algerian families have maintained the use of AA at home, thus the linguistic transmission from one generation to the other was not impaired.
- 4) A kind of literacy was available in religious schools called *al-kuttāb*, which focused on the teaching of the Qur'an and the basic principles of Islamic faith.

Just as attitudes toward Arabic differ considerably and significantly with respect to the individual's linguistic and ethnic background, so do that toward French. Right after independence (1962), Algeria spelled out a policy of Arabisation with the aim of removing French from its colonial position and supplanting it by Standard Arabic on the basis that the latter is a symbol of Arab-Islamic identity, an identity that *most* Algerians share. First president, Ahmed Ben Bella, who initiated the policy of Arabisation in the country's primary schools, on release from French prison (1962), proclaimed his adherence to *al 'Umma l 'Arabiyya*, the Arab nation stating: "Nous sommes des Arabes" (We are Arabs). Such ideological orientation is endorsed by the Algerian constitution: while *Article.2* states that "Islam is the religion of the State", *Article 3*. indicates that "Arabic is the national and official language".

The Arabisation policy is perceived differently by the 'Arabisants' (nationalists and Arabic-educated élite) and the 'Francisants' (French-educated intellectuals). The former group is, of course, for total Arabisation. The philosophical underpinning for this attitude is the ideal of one-language –one nation. Moreover, the Arabisants argue that political independence must go hand-in-hand with cultural independence, and this is only possible if French, an important aspect of neocolonialism, is excluded from all active sectors. For the Francisants, however, Arabic-French bilingualism must be

promoted and this is made on the claim that “French is no longer the property of the old enemy. French as a world language is a tool (linguistic, cultural, social, economic and technical) for humanity, beyond the political borders” (Miliani in Benmoussat, 2003:106). In this sense, French is perceived as a blessing rather than a curse. In short, Arabisation “is still a controversial issue as there are disagreements between all groups of protagonists”, as Ennaji (2005:188) argues.

In fact, there is nothing wrong in promoting Arabic. Indeed, it is a must to protect the language that unifies the whole Arab nation. However, the *time* and the *way* such language policy has been implemented, especially in the education system, are often subject to criticism<sup>29</sup>. There is a consensus that Arabisation was carried in haste and haste leads to waste (this is beyond the scope of this research work).

Though French is now politically regarded as the first *foreign* language, from a linguistic standpoint, it echoes the function of co-official language alongside Standard Arabic. Despite nearly five decades since the departure of the colonist, in addition to the large-scale Arabisation process, French is still alive and kicking and continues to play an important role in the social life of Algerians. It is present in a great deal of prestigious domains, used in government and by heads of the State, commerce, and administration. It is also omni-present in the media, be it spoken or written. It is the language of a number of widely-read newspapers and magazines, such as *Le Quotidien*, *Le Matin*, *Le Soir*, *Liberté*, *L'Echo d'Oran*, *Le Buteur*, etc. French is also widely used in shop-signs and advertisements (see figure 2.1). Though just after independence many places and streets were arabised, the French names are still persisting in people's tongues. It is very likely to hear *Rue de Paris*, *Boulevard Pasteur*, *les Cerisiers*, *Front de Mer*, and so forth instead of the present official Arabic names. More importantly, French is part of the national school curriculum. Now, it is introduced in schools as a compulsory subject to eight year-olds. It is also the language

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<sup>29</sup> Note that Ben Bella's speech, in which he adheres to Arabic identity, was in French. This is only one example reflecting the elite Algerians at that time who were largely Franciscans. Also, as they were under French control, the language of most institutions was French.

of instruction in some fields of Higher Education, specifically technical and scientific majors.

French is a linguistic store upon which Algerians depend a great deal. A huge number of French loanwords are used on a daily basis to the extent that speakers, ironically, cannot find easily an equivalent in Arabic to the borrowed form<sup>30</sup>. What Ennaji (2005) says about French in Morocco as having a special status in the sense that it is neither a foreign language like English nor a national one but a second language perfectly applies to the context of Algeria, as Arabic and French go side-by-side in most walks of life<sup>31</sup>.

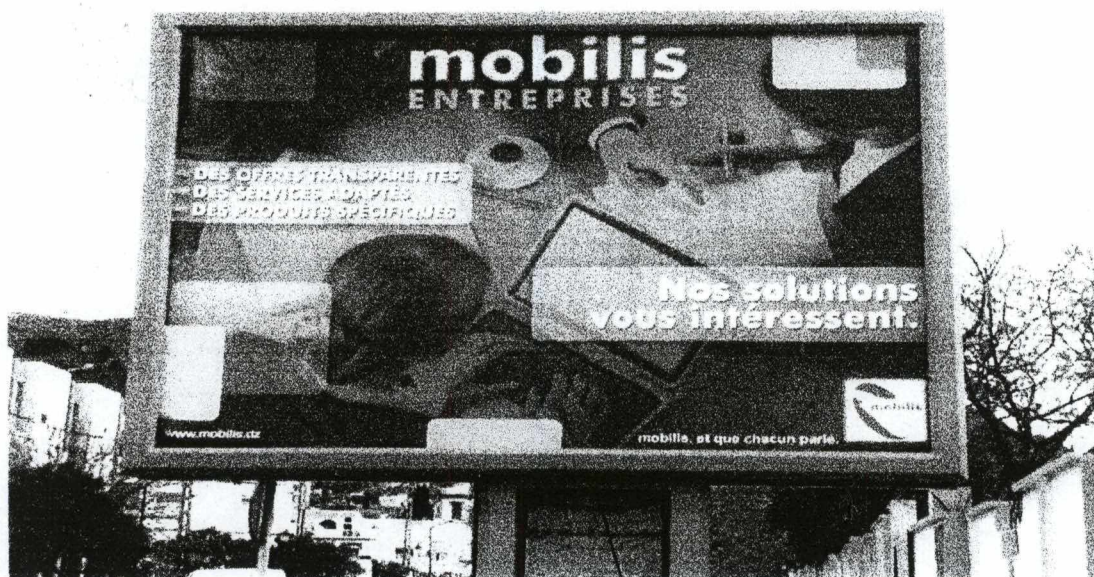


Figure 2.1: Advertisement in French about a National Telephone Company

<sup>30</sup> A Yemeni friend asked a cyber-space keeper this way: [ɖalili: waṭbaʕi: ha:ðə lʒuz?]. Though he used SA, the addressee could not understand what was meant. It was only when a friend of the Yemeni intervened, saying "selectioner et imprimer *ha:d* la partie" ('select then print this part'), that the cyber-keeper could get the meaning across

<sup>31</sup> The Algerian constitution which considers French to be a foreign language is, ironically, written in both Arabic and French

### 2.2.3. Berber: a Political Achievement

Berber<sup>32</sup> is the heading under which a number of closely related language varieties are grouped. It belongs to the Afro-asiatic (formerly called Hamito-Semitic) language family. In Africa, it stretches across a large swathe from Morocco to Egypt, passing through Algeria, Tunisia and Libya, including Niger and Mali as well. The important population dwells in Morocco and Algeria, however. Berbers (Imazighen) are not Arabs, though they usually master Arabic and use it with equal ease. In fact, Berber varieties have existed in North Africa for centuries, if not for millenia; hence they figure more in the history of the region than Arabic which is relatively a latecomer.

In Algeria, the precise number of Berber speakers is unknown, since the country does not consider language data in its censuses, but they are estimated by 1/5 (Chaker, 1984:8-9). The dominant varieties spoken throughout the national territory are:

- *Kabylie (Tha Kvayelith)*: is the second widely used Berber variety worldwide after *Chleuh* (Tachelhit) -the prevailing variety in Morocco-, used principally in Great kabylia in seven wilayas (states): Tizi-Ouzou, Bejaia, Bouira, Boumerdès, Bordj-Bou-Arreridj, Jijel, and Sétif. It is also used by Berber families out of Kabylia in the major cities of Algiers, Constantine, Annaba, and Oran.
- *Chaoui (Tachawit)*, though with fewer native speakers vis-à-vis Kabylie, is used by over a million speaker, localised mainly in the eastern part of the country, in Batna, Khenchla, Sétif, Souk-Ahras, Oum-El-Bouaghi, and Tebassa.
- Touareg, a variety spoken in some remote spots of the Sahara, like Ahaggar.

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<sup>32</sup> Berber is etymologically derived from 'barbaros', which the Greek used in a derogatory way to name anyone who was foreigner or used a different language. For this reason, many intellectuals favour the term 'Tamazight'. In this research work, it is the label 'Berber' that is adopted, as it has been widely used in the literature; it now has no pejorative meaning; and is a cover term that include any variety. 'Tamazight', for instance, is used in Morocco by native speakers to name the variety known as 'Tarifit'.

- There are also some other varieties, like Chenoui, Mzabi, Chleuh<sup>33</sup>, scattered here and there throughout the Algerian State.

In fact, Algeria, like the other Maghreb countries, was dominated by the Arabic language and culture when, in the 7<sup>th</sup> century, the Arabs came as *fātihin* (literary ‘openers’, meaning ‘conquerors’) in the name of Islam. Also, just after independence (1962), Arabic was recognised as *the* national and official language of the State. Consequently, Berber was put aside with no political recognition, and therefore its speakers “felt themselves to be at a disadvantage and argued that independence for them had resulted in no more than an exchange of masters” (Benmoussat, 2003:109). Given the reason that Berbers are more or less conservative people with great loyalty and attachment to their language and culture, an indigenous rights movement emerged denouncing the marginalization of their language, hence their culture. Increased Berber mutiny, along with cultural and political activism, persuaded decision-makers to take serious steps vis-à-vis Berber demands. After a constitutional revision under the supervision of President A. Bouteflika, *article 3 bis*<sup>34</sup> endorsed the promulgation of Berber as a *national* language. The official declaration was made in Algiers on Moharram 27<sup>th</sup>, 1423 corresponding to April 10<sup>th</sup>, 2002.

Since the 1960s, Berber academics have been undertaking ample research on their language, and efforts were/are made to promote it to a standard language. With a sheer observation, Berber seems to follow the same path Haugen (1966) proposes for standardization: selection, codification, elaboration of function, and acceptance. As far as selection is concerned, it is the *kabylie* variety which seems to be favoured and receiving more care (though the constitutional revision explicitly announces the promotion of Berber with its different linguistic variants). This is actually natural to some extent for at least three major reasons: (i) Kabylie has more native speakers than any other Berber variety in Algeria, hence it represents a majority within a minority; (ii) The political demand for an official recognition came in fact from Great Kabylia

<sup>33</sup> In the wilaya of Tlemcen, ‘Chleuh’ is the frequently attested Berber variety, spoken in Beni Boussaid, a Berber ‘aarch’ in the mountain of Asfour on the borders with Morocco, and also in Beni Snouss.

<sup>34</sup> Art 3.bis. (loi n 02-03)- Tamazight est également langue nationale. L’Etat œuvre à son développement dans toutes ses variétés linguistiques en usage sur le territoire national.

more than any other part of Algeria;(iii) Kabylie is the native language of some influential political figures in the Algerian State.

Berber is being codified to allow any interested citizen or even foreigner to learn the correct forms. A resurrection of the writing means was made, calling back an ancient script called *Tifinagh*. About its functional domains, Berber is *de jure* or *de facto* progressively gaining ground. Previously, it appeared on the national TV only for one purpose, for delivering daily bulletin in a short time one or twice a day. In 2009, a totally Berber-speaking satellite channel was launched. In addition to the TV, Berber also appears in some newspapers, and radio stations. The diffusion of such a variety is also made via internet sites and web forums, such as [http:// help.berberber.com](http://help.berberber.com).

What lacks Kabylie is to be taught throughout the country as a mandatory subject just as Arabic and French are. In fact, Berber has been introduced into the school curriculum as a free subject, and the basic law stipulates that interested learners have the option to choose which Berber variety to learn. Due to the lack of consensus on which form should enjoy high esteem and therefore be taught at schools, this remains the main obstacle facing Kabylie. A political decision (which is actually possible) with an orientation to impose Kabylie as compulsory subject is of great weight, and there is no guarantee not to face reluctance and refusal from Arabophones (and even from speakers of other Berber varieties). Lambert (1967:314)<sup>35</sup> states that "one would expect that if the student is to be successful in his attempts to learn another social group's language he must be both able and willing to adopt various aspects of behavior, including verbal behavior, which characterize members of the other linguistic-cultural group". The question that deserves consideration is the extent to which Algerian learners are motivated to learn Berber. In other words, if French and English (compulsory foreign languages in the Algerian school curriculum) are regarded as an open window to the world, what attitudes will Arabophone learners show towards Berber?

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<sup>35</sup> in Paulston and Tucker (2003)



With a worm eye-view, one would conclude that the promulgation of Berber as a national language was an enterprise with pure political ends. Such a decision is due perhaps to two major forces:

- Algeria witnessed a period of decline and great many socio-political upheavals, particularly from 1989 up to, say, 2002. With the advent of President A. Bouteflika, who spelled out a political amnesty known as *La Concorde Nationale*, the country has started to taste stability. This coincided with a Berber, or more precisely a Kabylie riot in 2002 including many demands. The State was neither mighty enough nor willing to enter again internal conflicts. Thus, the old Berber hope was finally achieved through allotting their language the title of *national* language.
  
- Though the first factor is a fact, perhaps the real reason behind such recognition is that things have changed enormously, and now we are living in a new world order where minority rights are defended. Algerian decision-makers are aware enough that any oppression or resistance to continuous Berber calls may put the country in an embarrassing situation at the international scale, and foreign intervention in domestic affairs will be by then a possible key. It is not unexpected that the Berber community may exceed language recognition demands to ask for self-governance. This might be the true implicit reason behind the political decision. This is justified by the two previous Berber revolts in 1963 and 1980, when their demands met a widespread resistance from the State and the Berber language could win no status. In sum, 'joint official' language remains the main target to be achieved by Berberophones.

In fact, allotting Berber the status of national language can be criticized from many angles: On what bases, other than political, has its status been changed?

- Linguistically speaking, Berber has a structural dependency toward Arabic, French, and Spanish, as it contains a huge number of lexical borrowings from

these languages (Boukous, 1997). Thus, it is a language that lacks autonomy.

- Since a minority language could gain status and be introduced into the school programme, it would be a legal demand for Algerian Arabophones to ask for recognition of their regional non-standard Arabic varieties. The same apply to Algerian 'Francisants' who have the right to promote French, since it is, at least linguistically speaking, a second language used in a variety of official domains by a significant population, and more importantly a language of wider communication. Such demands would create a chaotic linguistic situation within a single nation state. The ambit of discussion can be widened to include a comparison between Algeria and, for example, France. If minority languages are to be promoted, why does France, a leading State which claims protecting minority rights, still follow a strict linguistic policy protecting Standard French and discriminating against other indigenous non-standard varieties such as Breton? Then, why does not it consider, for instance, Arabic and Portuguese, whose speakers represent significant immigrant populations?

Brann (1994) proposes four distinctive rubrics under which a national language can be included: 'territorial language', 'regional language', 'language-in-common' (spoken throughout the country), and 'central language' (often given the status of official language). Stewart (1968) also suggests ten functional domains a language may have, including 'provincial' function. From a linguistic viewpoint, Berber is normally supposed to enjoy the status of 'provincial' or 'regional' language at best, since its use is actually restricted to only a region and a minority ethnic group. A 'national' language is supposedly representing the national identity of a whole country. Algerians, however, are not only Berbers but also Arabs, and the great majority are Arabophones.<sup>36</sup> The case of Berber in Algeria is like that of, for instance, Igbo in Nigeria. There, Igbo is treated as a regional language rather than a national language though it is spoken by an important population.

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<sup>36</sup> The Maghreb people are generally referred to as Arab-Berbers. Arabs conquered North Africa in the 7<sup>th</sup> century and constituted unified communities with Berbers. Now, the majority of speakers acquire Arabic as their first language and only minority speakers acquire Berber as their native tongue. Thus, how much time is required to avoid calling them Berbers?

### 2.3. Functional Distribution of Different Codes

Charles Ferguson<sup>37</sup> is credited with being the first linguist to introduce the term 'diglossia' into the English literature on sociolinguistics in an article (1959) entitled 'Diglossia' in the journal 'Word', to refer to a situation "where two varieties of a language exist side by side throughout the community, with each having a definite role to play" (Ferguson, 1972:232). Explaining diglossia, Ferguson identifies four speech communities: the Arab World, Greece, German-speaking Switzerland, and Haiti, considering them as being representative of the phenomenon. His definition makes a division between a High (H) variety and a Low (L) entity- both are linguistically related to, but significantly different from, one another. Therefore, diglossia is not bilingualism.

Ferguson proceeds to explain the sociolinguistic condition under nine headings: some are sociolinguistic (function, prestige, literary heritage, stability, and standardization); others are related to language *per se* (grammar, lexicon, phonology, acquisition). However, the gist of his widely influential article is to demonstrate that the idea of H and L best explain the pervasive linguistic distinction observed in such communities concerning the strict complementary distribution of formal versus informal usage. The two discrepant varieties are kept separate and used in different settings and for different purposes. H, generally the classical or the standard variety, is allocated to official and formal contexts, whereas L, the non-standard variety (varieties), constitutes the usual medium of interaction in spontaneous and informal contexts.

By 1967, Ferguson's original discussion had undergone some changes, when the American sociologist of language, Fishman, refined the definition in two major directions:

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<sup>37</sup> It was William Marçais (1930) who first used the term 'diglossie' to describe the linguistic situation in the Arab World. However, the sociolinguistic phenomenon gained general currency after its appearance in 1959 in the journal *Word*.

- While Ferguson restricts the concept only to two closely related varieties, Fishman proposes that diglossia may be, in addition to Ferguson's original idea, extended to cover even situations where two (or more) genetically unrelated or at least historically distant language varieties occupy the H and L niches (Schiffman, 2004). As a matter of fact, Fishman refers to Paraguay where Spanish, a Latin language, has H status and functions, being used in government and education; Guarani, an American Indian language totally unrelated to Spanish, is spoken by nearly all Paraguayans in informal encounters. However, in such a situation Fishman emphasizes a neat distinction between diglossia and bilingualism, arguing that the former is a feature of society to be dealt with by sociologists and sociolinguists, whereas the latter is a matter for psychologists and psycholinguists as it refers to an individual's ability to behave linguistically in more than one language.
- Following Gumperz, Fishman also broadens the concept of diglossia to encompass even monolingual societies "which employ separate dialects, registers, or *functionally differentiated language varieties of whatever kind*." (Fishman 1972:29; italics in the original).

Under these two new directions, Fishman perceives diglossia in a spectrum ranging from two closely related varieties, along with different stylistic differences, to two (or more) completely distant languages. This further consideration is referred to as *extended diglossia*. However, not all scholars share the view with Fishman as far as the second point (monolingual speech communities) is concerned. "This may be a regrettable development", comments Hudson (1996:50-1) on such view, "as it would seem to make *every* society diglossic, including even English-speaking England [...] where different so-called 'registers' and 'dialects' are used under different circumstances."

Extended diglossia concerns particularly post-colonial situations where H is generally the language of the colonial master, and very often the language of political dominance and L the/an indigenous non-standard variety, which is an index of membership of a peer or ethnic group.

L, have the perception that H is more beautiful, logical and pure, while L is a deviant and corrupt form (Schiffman, 2004). It is not uncommon to hear someone saying [ka:n jahdər bəlluɣa] to mean 'he was using the language'. The word [əlluɣa] ('language'), which means in this context 'the Standard form', is reserved only for the superposed variety (Standard Arabic). These attitudes remain societal judgments and perceptions, however. It follows that, linguistically speaking, all varieties have the same footing as long as they fulfil communicative tasks.

Again, like other diglossic communities, SA is the native tongue of no sector in the society.<sup>38</sup> It is a learned form accessible through schooling. In other words, those who do not attend school will not have access to SA. This is in sharp contrast with some western societies, like France, England, and Germany, where the Standard variety (H) is acquired as the mother language by a significant portion of the total population. This is what Trudgill (1974) refers to as 'standard-with-dialect' contexts. The other point is that SA is more stable, being protected from change by virtue of its association with writing and education. AA is more localised and displays dialectal variations, however.

Because French, though politically considered a foreign language, is a functioning language that fulfils formal and official linguistic tasks along with Standard Arabic, Algeria represents not only a case of classical diglossia<sup>39</sup> but also a good instance of Fishman's (1967) extended diglossia. French is indeed the medium of instruction in a number of faculties in the Algerian university. Lectures in technical and scientific majors, such as civil engineering, architecture, computer sciences, biology, etc, are all exclusively conducted in French. In such contexts, French is allocated to formal settings, namely the classroom; AA is the L variety used among students outside the classroom in natural interactions.

<sup>38</sup> Kh. Taleb Ibrahim (1997) argues that after the 10<sup>th</sup> century (4<sup>th</sup> century of Hegira, the Islamic calendar) no one acquired CA as the native tongue.

<sup>39</sup> Kloss (1966) proposes the terms 'in-diglossia' to refer to Ferguson's description, and 'out-diglossia' for Fishman's (1967) conceptualization of the phenomenon.

Extended diglossia deserves to be discussed in relation to Berber communities, as Berber, in recent years (2002), gained the title of national language. In some parts of Algeria, like Great Kabylia, SA is the H variety being used in education and in government official domains, whereas Kabylic, a Berber variety genetically unrelated to Arabic, plays the role of L being the natural everyday communication vehicle. Here, it is of prime importance to mention that attitudes toward SA may differ among individuals, and there is no guarantee that it is perceived as the superposed, prestigious variety. Being H is due to its official stand. Then, what is said about French and AA functional distribution perfectly applies to French and Berber in Berber-speaking communities. Here, attitudes toward French and willingness to use it may be very positive as Berber communities easily accept the idea that French is a key to modernity and social advancement. It is possible, and actually very likely, that those who show support to French show at the same time a kind of reluctance toward Arabic.

In sum, the following diagram provides a simple, yet interesting, characterization of diglossia in Algeria (in addition to bilingualism too):

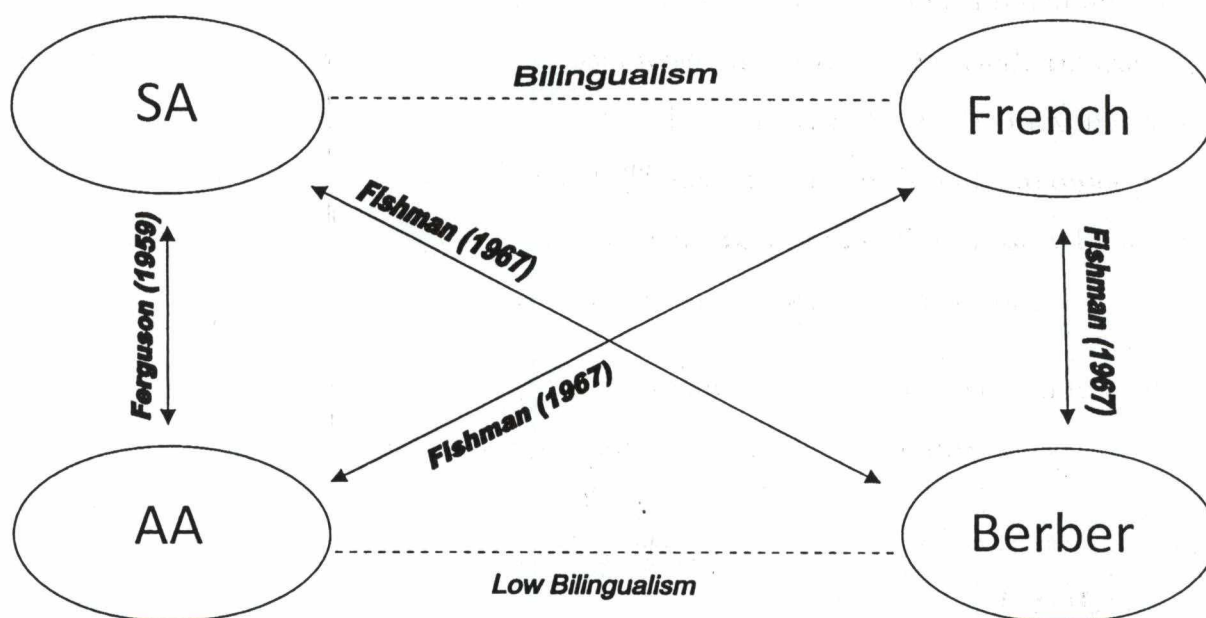


Figure 2.2: Characterization of Diglossia in Algeria

It is momentous to mention that, following several changes, the linguistic situation in Algeria (as well as other Arab nations) does not seem to strictly follow Ferguson's (1959) original conceptualization of diglossia as far as the complementary distribution and the functional specialization of SA and AA are concerned. The designation 'stability', which constitutes one rubric, out of nine, in Ferguson's discussion deserves to be treated in its own right.

### 2.3.1. Stability

Ferguson's definition of diglossia assumes that it is "a relatively stable language situation" (Ferguson, 1959: 435)<sup>40</sup>; Wardhaugh (2006:89) too argues that "diglossia is not ephemeral in nature" but "it appears to be a persistent social and linguistic phenomenon". However, under several political, social, economic, and academic pressures, the stability of diglossia seems to be disturbed. What follows represents the chief outstanding pressures:

- Ferguson (1972) points out that the highly people are accustomed to H and the more frequently they use it, the stronger a blurring of the linguistic differences between H and L is likely to occur. In Algeria, the free, compulsory education offered by the government, reinforced by the Arabisation policy, has started to pick up its harvest. Now, it is in no way ambiguous to hear people alternating between AA and SA in the course of a single conversation. Such behaviour is due to increased familiarity with SA, as the ratio of illiteracy is in continuous decrease. Switching between AA and SA is a linguistic tool people tend to employ particularly when they engage in conversations that include new concepts, such as [əl'awlama(h)] ('globalisation'), or lexical items that have no AA equivalents.

Then, the media are also widely arabised. Such communication means represent an important window for the diffusion of SA. It has also become very common to hear, in a semi-formal encounter (e.g. TV interviews), educated speakers mixing the acrolect (SA) and the basilect (AA) (admixture). This is what is referred to by Ferguson as 'middle language', and is also known as 'educated spoken Arabic'.

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<sup>40</sup> in Hymes (1964)

- The promotion of nationalism, in contrast to nationism, is also a serious factor that may cause diglossia's demise. In the Middle East, for instance, there were and still are attempts to standardize the local dialects. Proponents of, for example, Cairene Arabic and Damascene Arabic see them as the more accurate national languages for Egypt and Syria respectively. A noticeable feature is that previously (maybe up to 2000), movies, series, TV shows, etc, imported from non-Arabic-speaking countries, when translated, were all presented on the TV in SA. Now, with increased desire for promoting national languages, many of such programmes appear in the local vernaculars. Turkish series, which have great fans in the Arab World, are now presented in Lebanese Arabic; some cartoons in Egyptian Arabic; and still a number of Mexican series appear in Moroccan Arabic. The point for Algeria is that it may buy the translated version of such programmes (this is a major reason why Middle-East dialects are generally intelligible for the Maghreb speakers).

SA may face *language shift* if the Arab nations manage to standardize their local vernaculars, and the situation will best be compared to that of Latin. The rise of nationalism with increased demand for national languages in France, Italy, Spain, Portugal, and Romania led to the promotion of local varieties in these countries, resulting in what is now known as *Romance languages*. Latin, which was at a point the H variety and the language of literacy and science, is now considered a dead language.

The other crucial point is made upon academic bases. The fact that SA (as an instance of all H varieties in all diglossic communities) is the mother tongue of no portion in the community, and that children become aware of it until school age, and that colloquial Arabic (including AA), though highly stigmatized, is the genuine mother tongue acquired first and being used on a daily basis, has urged some linguists and language educators to put forward that SA should not be promoted by education systems in and outside the Arab World. This is made on the claim that the best way for an efficient literacy is via the native tongue. While native scholars consider only H as *the* language, linguists insist that L has priority (Schiffman, 2004). Palmer (2007), for instance, when talking about Arabic programmes in the USA, supports the idea that such programmes must promote the teaching of spoken Arabic into their curricula and not SA. Such a view is made upon the point that SA "creates a fake model of oral



proficiency by presenting the students with an artificial variety that is not used by the native speakers” for daily-life communication (Al-Batal, 1995:123). By the same token, in discussing the teaching of Arabic to foreign learners, Younes (1995) proposes that students “should be introduced to both a spoken Arabic dialect and [formal Arabic] from the beginning of an Arabic course” if they hope to function competently in Arabic (p. 233).

However, upgrading AA or any other L variety in the Arab World, if it is to be implemented, is no easy task. Such a procedure makes it a must to pass through a whole *language planning* process. First, in terms of *status planning*, which regional variety to choose? Though language determination (status) is basically policy-driven, it is an act that may generate a lot of problems among the population and lead to social upheavals, for it is not easy to accept the variety of another group to be favoured and therefore imposed on the whole community. Secondly, in terms of *corpus planning* (language development), which accent should enjoy high esteem? Which syntactic structures and morphological forms are to be permitted? Which regional items are to be favoured? Finally, as far as *language in education policy* is concerned, can the prerequisites Bowers (1968) proposes (basic teaching and reading materials, accepted writing system, and teachers who master that variety) be met? Even if such necessities are available, it is a fact that people in general and learners in particular perceive the spoken variety to be less prestigious and less worthy. In this respect, Versteegh (2004:132) writes:

it remains difficult in the Arab world to arouse interest in the dialects as a serious object of study. Many speakers of Arabic still feel that the dialect is a variety of language without a grammar [...] and even in the universities there is a certain reluctance to accept dialect studies as a dissertation subject

What is evident is that there may be no chance for any colloquial Arabic to be the H variety as long as SA is politically promoted and protected. In Algeria, the Standard form still enjoys the highest regard, and it is constitutionally protected and explicitly declared *the* national and official language of the State.

Thus, one should wonder whether such a procedure, which demands linguists of great expertise and a considerable political endeavour, is necessary or not. For it is a highly complex process that may span centuries, why not to think the other way round (increasing the use of SA even colloquially beginning from the home)? If this is to be encouraged and forced, the time-depth factor may lead to a standard-with-dialect community.

- The rise of English as a *global* language is starting to have its influence. English is now a significant language, a language of diplomacy, science, technology and commerce. In Algeria, English is politically regarded as the second foreign language after French, and its use is very limited to the extent that it may perhaps not exceed the classrooms (with the exception of some loan words that are already established in Arabic). However, the sociopolitical changes may, along the line, introduce it as a functioning language that fulfils official domains, and subsequently, polyglossia, instead of diglossia, will be by then the prevalent sociolinguistic phenomenon.

## 2.4. Language Contact Outcomes

### 2.4.1. One Speaker, Multiple Voices

Monolingual communities worldwide are rare. Instead, most communities have more than one language variety at hand. Multilingualism is then obviously a more prevalent global condition than monolingualism, and “A simple indication here is that something like 5,000 languages exist in a world divided into only 200 states”, i.e. about 25 languages per state (Edwards, 1994:44)<sup>41</sup>. Crystal (1997) estimates that two-thirds of the world’s children grow up in a bilingual environment. In this respect, it is worth mentioning that “far from being exceptional, as many lay people believe, bilingualism/multilingualism- which, of course, goes hand-in-hand with multiculturalism in many cases - is currently the rule throughout the world and will

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<sup>20</sup> In Ball (2005)

become increasingly so in the future” (Bhatia & Ritchie, 2004:1), since globalisation, mass media, new technical innovations, in addition to immigration, rule our modern world, and all such socio-economic changes are factors which favour multilingualism.

Chomsky’s (1965) linguistic theory, with its focus on the adult native speaker, often seems angled towards monolingualism, and this is in extreme opposition with the orientation of, for instance, Jacobson (1953) who states that “Bilingualism is for me the fundamental problem of linguistics” (Jacobson in Romaine, 1995:1). Multilingualism, an important outcome of language contact situations, is a phenomenon that has received much scholarly attention from great many perspectives, and research on the matter has grown in quantity, quality, and breadth in recent years. However, the definition of the term has always been a matter of hot debate, and the dimension of such debate is clear in the definitions of two academics which could best be considered as being polarised. While Bloomfield (1935:56) sees multilingualism as “a native-like control of two languages”, Diebold (1961:97) gives a minimal definition when he uses the term “incipient bilingualism” to mean “the initial stages of contact between two languages”. In fact, between these extreme edges, one faces a whole range of definitions. For example, Mackey’s (1957) definition seems quite vague when he states that “we shall therefore consider bilingualism as the alternate use of two or more languages by the same individual” (Mackey in Beardsmore, 1986:1). Hamers and Blanc (2000) point out that an adequate definition must consider multilingualism from a linguistic dimension (individual competence and skill) without excluding the social communicative perspective (social feature), as “language is in the first place a tool developed and used to serve a number of functions, both social and psychological, which can be classified in two main categories: communication and cognition” (p.8).

In discussing multilingualism, theory-builders classify different types and often draw a distinction between ‘individual’ versus ‘societal’ multilingualism<sup>42</sup>, i.e. multilingualism as a personal possession and as a group possession. At the macro-level, that is society, Mackey (1967), in addition to other scholars, insists on a distinction between ‘de jure’ and ‘de facto’ multilingualism. Canada, for example,

<sup>42</sup> Hamers & Blanc (1989, 2000) use ‘bilinguality’ to refer to *individual bilingualism* and reserve ‘bilingualism’ to mean *societal bilingualism*.

represents a good instance of the former, since both English and French are official entities supported by services of the federal government<sup>43</sup>. As it is the case of Algeria, it is a 'de facto' multilingual speech community with Arabic regarded as official, whereas French, a widely *used* and *understood* language, has the status of a *foreign* language. Multilingualism in Algeria is actually the offspring of contextual factors:

- Historical: Algeria fell under the French rule from 1830 up to 1962. The long-term occupation, which was accompanied by the imposition of French as an official language, has created a multilingual independent Algerian society where both Arabic (and Berber in some parts) and French go hand-in-hand in most walks of life.
- Economic: Like most former colonies, Algeria is still suffering from a kind of neocolonialism, i.e. an economic dependency which also involves a linguistic dimension specified by the maintenance of the old colonial language.
- Educational: French takes share in the Algerian school curriculum being introduced alongside Arabic as a mandatory subject at a very young age. Thus, what Mackey (1967:12) proposes when arguing that "bilingual countries were created not to promote bilingualism, but to guarantee the maintenance and use of two or more languages in the same nation" may perfectly reflect Algeria's language education policy.

Societal multilingualism is then a prevalent phenomenon where many parts of the country have at least two languages at their disposal. However, not all the population is bilingual, hence multilingualism is not homogeneous. For instance, in the Sahara (the south) where the French presence during the colonial period was limited, there are unilingual speakers (though in some spots, people may know both Arabic and a Berber variety). However, the Tell (the northern part), mainly urban concentrations which was once breeding places for the colonist and where the relevant population (more than 70%) now live, bilingualism is a predominant feature. Arabic and French are, though with varying degrees, understood and used on a daily basis by a significant

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<sup>43</sup> In this case (de jure), multilingualism is for many times based on a territorial principle. For instance, in Switzerland, which is an officially multilingual state, most people raise unilingually in a canton which typically has one official language: French, German, or Italian (Clyne in Coulmas 1997).

portion of the population. However, some places, specifically the Berber-speaking communities, are described as either bilingual or trilingual. There, the majority of speakers have command over a Berber variety and also Arabic. However, educated speakers are trilingual having control of Berber (the native tongue), Arabic (with its two forms: SA, the language of education; AA, the output of social contact with Arabophone Algerians), in addition to French. Berber children correspond to one group, out of four, Skutnabb-Kangas (1985) distinguishes according to societal conditions under which children raise bilingual. Berbers represent 'children from linguistic minorities', who under strong external pressure have no option but to learn the language of the society at large which is reinforced by government's policy. Also, with internal family pressure, they may be urged to keep the home language<sup>44</sup>.

At the micro-level of analysis, as far as Algerian bilingual speakers are concerned, individual bilingualism is but dependent on a number of internal and external variables, most outstandingly level of education, type of occasion, place of residence (urban or rural), age, attitude, and also motivation. From a psychological perspective, regarding the criterion of skill, or say bilingual communicative competence, Algerian bilingual speakers fall into two categories:

1. Compound bilinguals, i.e. words and phrases in Arabic and French are the same concept. Here, *bāb* and *porte* are two words for the same concept ('door'). These individuals are classified as being fluent in both languages, and are usually referred to as *balanced* bilingual speakers. Such highly developed competence in either code is, to use Adler's (1977) words, a kind of *achieved* rather than *ascribed bilingualism*, since French is actually a learned language accessible mainly through schooling and generally after Arabic (at least AA) is already acquired.

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<sup>23</sup> Berber children feel ill at ease when they first attend primary schools. School is a challenge because they have to learn two new languages (Arabic and French) together with other school subjects. For them, multilingualism and multiculturalism are the norms for the rest of their lives. This is a point from which the Arabisation policy is criticized, and considered as marginalizing the multilingual context and therefore not taking into account the attitudes of the overall Algerian population.

2. Coordinate bilinguals, i.e. words of Arabic and French are mentally kept apart with each word having its own unique meaning. An Algerian bilingual of this sort has different associations for *bāb* and *porte*. Here, it is L1 (Arabic for the most part) which is dominant and may be used to think through the second language. These individuals are sometimes referred to as *subtractive* bilinguals.

If bilingual individuals are to be considered in terms of *active* versus *passive*, both categories are present in the context of Algeria. Highly educated Algerians in particular are qualified as being active bilinguals, i.e. they can speak both Arabic and French, and pretty much even reading and writing them. It is a fact that many Algerians demonstrably not only successfully engage in bilingual conversations, but they are also culturally and linguistically important contributors. An indication here is that a respected number of Algerian writers have many writings and publications in French, such as *Mohammed Dib*, *Rachid Boudjedra*, *Tahar Wattar* and *Asia Djebbar*<sup>45</sup>. However, still many other Algerians are regarded as *passive* bilinguals in that only their receptive skills are relatively developed. Such individuals can understand French but do not speak it. Understanding French is, however, already a great achievement. Under the right conditions and when placed in settings where only French is required, these individuals may easily become active. Such a situation may best be exemplified by the case of Algerians who immigrate to settle in France, and within a period of time they generally reach oral fluency.

No discussion of bilingual competence is complete without taking into account the age variable. It should be noted that the 'base language' changes within the different cohorts of society. It is very noticeable that the old generation, particularly those who attended l'Ecole française (the French school), have a native-like command of French. However, their control of standard Arabic differs from one individual to the other in the sense that some are eloquent speakers, others have a fair competence, and still others have no access to it (though they are obviously fluent speakers of AA). Thus, they have a tendency toward using the French language, especially in formal contexts, or mixing between French and AA in semi-formal situations, and this is

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<sup>45</sup> Asia Djebbar was elected to the 'Academie française' on 16 June 2005 to become the first writer from the Maghreb to achieve such recognition

reflected in language use by the majority of Algerian politicians. On the contrary, the youngsters, who are the product of the Arabisation policy, are more competent in Arabic with varying capabilities in French.

The lack of competence in one language or another generally leads to other linguistic phenomena individuals rely on to compensate for their imperfect knowledge and to avoid communication breakdowns when they come to interact. These are mainly borrowing and code switching.

### **2.4.2. Borrowing**

Haugen (1989:197) states that the term ““borrowing” is the general and traditional word used to describe the adoption into a language of a linguistic feature previously used in another”. Almost all languages are borrowers, and the lexicon of any language can be divided into native and nonnative words. It is widely argued that lexical material is the most likely to be borrowed, and nouns come in the forefront of loanwords. As an indication here, in her analysis of the Zimbabwe corpus, Bernsten (1990:76) reports that, out of all borrowed forms, 78 percent were nouns. In fact, this is no surprise to obtain such high percentage in favour of nouns, since they are the most lexical content and therefore the easiest forms to be incorporated into the lexicon of another language. This is not the case of, for instance, verbs and adjectives which are for the most part associated with bound morphemes.

Borrowing (B) is the by-product of language contact situations. It may result from historical factors, and English perfectly reflects such a case. After defeating and killing King Harold in the ‘Battle of Hastings’ (1066), William the Conqueror was crowned king of England and Normandy. He brought with him a new ruling class made up of French-speaking Normans, who imposed their politics, customs and language on the Anglo-Saxons. Just as those who had wanted to do business with the Romans had had to learn Latin, so those who wanted to be accepted by the Norman power structure had to learn French. Since French served as the language of government, law and religion for nearly 150 years, English was deeply influenced and

became “radically different from the Anglo-Saxon of *Beowulf*[...]with the result that today English contains twice as many words derived from French and Latin as from German” (Green, 2003:11). Loanwords also enter different languages as they become internationally agreed on. It is through conventionalization that the term ‘libero’ is used by all sport commentators on volleyball matches to refer to the free player. It is an Italian word that has been adopted by other languages, since it was Italy, the State whose volleyball championship is the best worldwide, which first introduced the rule to the game.

Single-occurring lexemes of foreign origin in the speech of an individual/community have always been a bone of contention, and theorists do not seem to attend a consensus in deciding on their linguistic status, i.e. whether they are borrowings or code-switched utterances. The two prevailing, conflicting views are those of Poplack and her associates, who insist that an item, in order to be regarded as a borrowing, should be integrated into the base language grammar; and the opposing view of Myers-Scotton and her disciples, who considers that frequency of occurrence, is the *only* reliable criterion to distinguish between the two contact phenomena (see sub-section 1.3.3.3).

In this research work, borrowing is to be dealt with from both perspectives<sup>46</sup>. Regarding the Algerian context, French, for historical considerations, is *de facto* the major lending language. AA is full of French loans, loans that are used in day-to-day interaction regardless of whether the individual speaker is educated or not, proficient bilingual or putative monolingual.

As far as integration is concerned, French loanwords differ in their type of adaptation into AA: some are phonologically assimilated, others morphologically, still others syntactically, whereas a number of lexemes show total assimilation. It is very likely to attest words like [ʧabla] and [butaja], which originate from French *table* and *bouteille* (‘table’ and ‘bottle’, respectively) and whose Standard Arabic equivalents [ʧa:wila(h)] and [qa:ru:ra(h)] are not actually used in AA. Such items are presumably

<sup>46</sup> This sub-section is concerned with cross-linguistic borrowing. In other words, focus is on loanwords that have a foreign origin and not those which are borrowed from Standard Arabic.



known and used by most Algerian speakers to the extent that they are felt to ‘belong’ to AA, as individuals may or may not be aware of their foreign origin. Such instances constitute an integral part of AA, for they have been adapted into its linguistic system both phonologically and morphologically. Taking, for example, [butaja], the French dental /t/ is a bit affricated and altered into an alveolar [t]. Again, because the word *bouteille* is feminine in French, when assimilated to AA it necessitates the insertion of the suffix {-a} at the end of the borrowed item. While {-a} functions as gender-assigner, the suffix {-a:t} works as a plural marker. The plural form of [butaja] is then [butaja:t]. Here the morphology of the original French word aligns that of AA, as {-a:t} is the marker of the *feminine plural* in Arabic like in the word [muslima:t] (‘muslimwomen’). “Practically, the same rules are applied to most French borrowed feminine nouns, but even masculine nouns may carry this plural morpheme”, as in [sɛtada:t], from French *stades* (‘stadiums’) (Dendane, 2007:134). Some other loanwords, though they are feminine may have a *broken plural* form, such as [barwi:t]<sup>47</sup>---[bra:wæt], from French *brouettes* (‘wheel-barrows’). Still other loans have two plural forms, like in:

..... [ətt̪abla:t] feminine plural

[ətt̪abla]<sup>48</sup>:

..... [ət̪wa:bl] broken plural

Consider the word ([ətt̪abla]), the Arabic determiner {al-} (in this case {at-} since /l/ is assimilated) makes the word defined, as {al-} corresponds to the French definite articles *le* and *la*. In other words, the French words *la bouteille* and *le casque* (‘the bottle’ and ‘the helmet’, respectively), when used in AA as borrowed forms are articulated as [əlb̪utaja] and [əlk̪æsk].

<sup>47</sup> [barwi:t] is treated by AA speakers as masculine though it is feminine in French. In contrast, [kamju] (‘lorry’), which is masculine in French, is perceived as feminine in AA.

<sup>48</sup> the gemination [t̪t̪] in this example results from the general assimilation in Arabic of the determiner {al-} in which the /l/ segment is assimilated to the initial consonant of the noun if it belongs to the ʃamsijjah group (t, θ, d, ð, r, z, s, ʃ, ɟ, t̪, z, n, l).

What is said about [butaja] fits the word [madama], from French *madame*. However, in addition to the phonological and morphological adaptation, [madama] is adapted even semantically. While *madame* refers to a married woman (hence respected), [madama] is used by AA speakers, particularly males, in a derogatory way either to refer to a woman in a civilized appearance (e.g. in a short dress) or to a prostitute, without taking her marital status into account. Speakers use [madama] to reflect a sexual viewpoint through a semantic extension of the original French word. This may correspond, to some extent, to what Haugen (1953) refers to as *loanshift*, i.e. incorporating a word from the donor language into the recipient language creating at the same time a new meaning.

Another important feature is that loanwords have no dual form. This is in fact not surprising given that AA, as opposed to SA, does not usually consider such a form nor does French. To precise duality, speakers often insert (at least in some regional dialects) the word [zu:ʒ] ('two') before the loanword in question. In this sense, the dual form of [ʧabla] is [zu:ʒ ʧwa:bl] (or [zu:ʒ ʧa:bla:t])

Because Arabic has only three vowels /a/, /i/, and /u/, and their corresponding long vowels /a:/, /i:/, /u:/, phonological adaptation generally involves replacing the vowel phonemes of French by a closer Arabic one. As for the French nasal /ɔ̃/, it is very frequently replaced by the close back vowel [u] or [un]. For example, the French *camion* ('lorry'), when adapted into AA, is realized either as /kamju/ (the word acquires [-nasal] feature, i.e. realized with no nasalization) or /kamjun/. Here, even the close front vowel after /k/ is articulated as if it was a half-open half-close vowel [e]. The same rule is applicable for the French *citron* ('lemon') which is actually articulated as [ʃiʧro]. However, in addition to the phonological assimilation where both French /s/ and /t/ are velarized, the loanword is semantically extended to denote (usually) lemon juice or any kind of juice.

French words containing the central vowel /œ/ are also subject to phonological assimilation by altering it into [u], since the vowel takes no part in the Arabic phonemic system. It is not uncommon to hear an (especially old illiterate) Algerian

speaker say [kɪrɑ:h lə fju] to mean 'how is the father'. The word [fju] is from French *vieux* ('old(man)'). The vowel /œ/ actually constitutes a challenge even for pupils learning French at initial stages, given that it is generally replaced by [u] or [u:], like in the French *feu* which may be pronounced as [fu:]. The interlocutor who knows French may confuse between French *feu* and *fou* ('fire' and 'mad') in case the loanword occurs in isolation. Such vowel substitution may be generalized to cover even words including /ə/ or /ɛ/. A good example is the word *fenetre* [f(ə)netR] ('window'), which may be uttered as [funetR].

The aforementioned example ([fju]) represents another common verbal behaviour, where the voiced labio-dental /v/ is substituted by its voiceless fricative counterpart [f]. The /v/ substitution is not overgeneralised, as the loanword [fju] is, in fact, associated with the old illiterate speakers. A number of words may be uttered two ways, such as *voyage* ('trip') which can be uttered either as [fajaʒ] or [vajaʒ].

The uvular /R/, which is typical to French and not other Latin languages, is very often altered into the alveolar [r], like in [mərʃi] and [kɑʃab], from French *marché* and *cartable* ('market' and 'schoolbag', respectively). This phonetic realization characterizes the speech of most Algerian males, even those with a high bilingual competence, when speaking French (e.g. president A. Bouteflika).

As far as the possessive case is concerned, borrowings receive the same suffixes that are usually added to Arabic items. The loanword [kɑʃab] appears as, for instance, [kɑʃabi], [kɑʃabəh], [kɑʃabha], and [kɑʃabhum] (this is in some regional dialects, because inflections change from one dialect to the other). The bound morphemes {-i}, {-ah}, {-ha}, and {hum} indicate possession and correspond to the English possessive pronouns *my*, *his*, *her*, *their*, respectively.

Apart from nouns, many French verbs have long slipped into AA and have eventually been integrated into its grammatical system. Consider the following sentence:

(a)- rah *jēmprimih en couleur*.

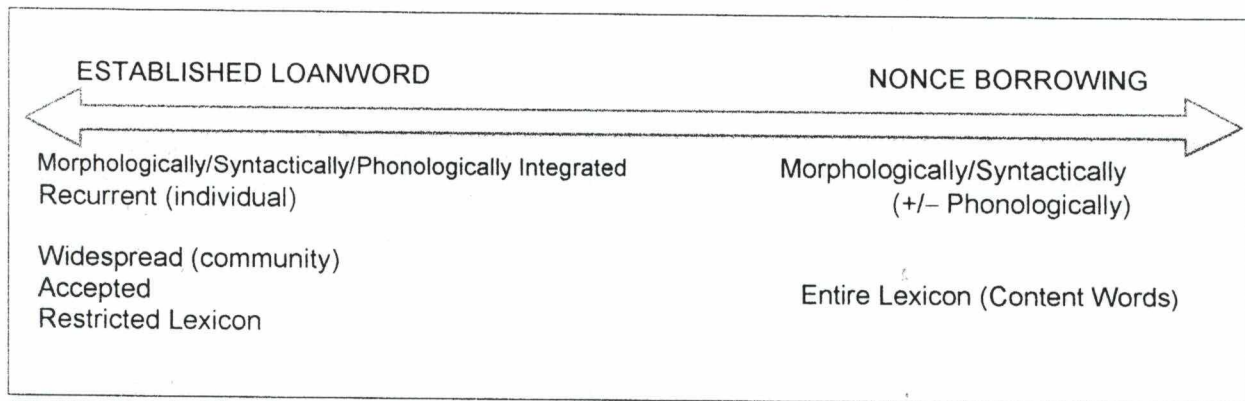
(He is printing it in colour)

In the above example, the verb [*jēmprimi*], which originates from French *imprimer* ('to print'), follows the Arabic tense form, expressing here a present action, given that the verb pattern of actions taking place in the present is [*jafʿal(u)*]. From the verb, it is possible to infer at least three remarks. First, the morpheme {j-} at the beginning of the verb indicates that the doer is a *male*, who can be replaced by the pronoun *huwwa* ('he'). If the doer was a female, the verb would be [*tēmprimi*] - the affixation of the morpheme {t-}, which corresponds to the Arabic pattern *hiyya* ('she') [*tafʿal(u)*]. Secondly, the doer is one person (singular). This is on the basis that the verb ends with the suffix {-i}. If the action was done by more than one person, the resulting verb would be [*jēmprimiw*] - the insertion of the morpheme {-w} echoes a plural action.<sup>49</sup> Finally, the morpheme {-h} at the end of the verb indicates that the object of the sentence is masculine and singular at the same time, referring to, for example, a text. If the object was singular feminine (e.g. *Sura* 'picture'), the bound morpheme would be {-ha}, i.e. [*jēmprimiha*]; if a plural object (whether masculine or feminine), it would be {-hum}, i.e. [*jēmprimihum*].

According to Poplack and her associates (1981), example (a) contains an instance of borrowing (the verb [*jēmprimi*] which shows morphosyntactic integration into AA) along with a code-switched utterance (the NP 'en couleur' which exposes no such assimilation). What should be mentioned is that the degree of integration and type of adaptation into AA differs from one word to the other. Poplack *et al.* (1988) distinguish between what they call 'nonce borrowing' and 'established borrowing'. While the latter shows a complete integration into the base language, the former is morphosyntactically adapted but may or may not show phonological integration. Then,

<sup>27</sup> English 'They' corresponds to three Arabic pronouns: dual for either gender (*humaa*), plural masculine (*hum*), and plural feminine (*humma*). In SA, a present verb with these pronouns will be: *humaa* [*jafʿala:ni*](masculine), *humaa* [*tafʿala:ni*] (feminine), *hum* [*jafʿalu:na*], and *hunna* [*tafʿalna*]. In AA, which ignores the duality, these forms have only one corresponding pattern which is [*jaffaʿlu:*], like in [*jakkatbu:*]( 'they write' ).

established borrowings are common even to unilingual speakers; nonce borrowings are basically used by bilingual speakers as they lack frequency and acceptability. In this approach, lexical borrowing is seen as a continuum ranging from established loanwords to nonce borrowings as shown in figure 3.2. Its advantage is that it allows for lone other-language items to achieve the status of loanwords in time through an increase in their frequency and their adoption by monolinguals.



**FIGURE 2.3: The Continuum for Levels of Borrowing in Code-Switching Utterances**

(Poplack et al. 1987)

As far as the Algerian speech community is concerned, it should be noted that a large number of French words are *used* and *understood* by most speakers, *without* being necessarily adapted into AA grammar. Words like 'rendez-vous', 'stade', 'moto', 'bus', 'merci', to mention but a few, which show no real assimilation, tend to be recurrent, widespread, and recognised by virtually all speakers of the community. According to Myers-Scotton (1993b), and given the reason that such items are part of the daily verbal performance of even *monolingual* speakers, these instances are to be considered borrowed forms. Myers-Scotton proposes frequency of use as *the* single best criterion to link borrowed forms more closely with the recipient language mental lexicon, and these words meet such criterion. French, in fact, represents an indispensable linguistic store on which AA users depend a great deal. For example, words related to cars are generally taken from French and used in AA with no real integration, and if so they may display a partial (phonetic or phonological) assimilation. The AA speaker may name different parts of a car in French, such as *phare*, *capot*, *retrovisueur*, *pare-brise*, *l'essuie-glace*, *bloc cylindres*, *radiateur*, etc ('headlight', 'bonnet', 'driving-mirror', 'windshield', 'wind screen wiper', 'engine

blocks', 'radiator', respectively). But it is a definite challenge and a serious lexical barrier for him/her to find their equivalents in AA (in which these terminology does not actually exist) or even in SA, though (s)he may be a competent speaker of SA. Such linguistic dependency can be discussed in terms of what Myers-Scotton (1993b) calls *cultural borrowings* and *core borrowings*.

Cultural borrowed forms, on the one hand, enter the language abruptly and have the semantic role of filling lexical gaps in the base language (ibid). These are items for objects and concepts new to the culture of the recipient language. Borrowings of this sort are copious in AA. *Radar* and *internet*, for example, appear very frequently in AA, and are actually established even in SA. Arabic *indirectly* borrowed such concepts from English, with French as an intermediary- the two terms are not native words in French, but when used by Algerian speakers they are articulated according to French rules of pronunciation. Again, the Italian word *pizza* and the Spanish item *paella* entered Arabic when the food to which they refer were adopted by the Algerian community.

Core borrowed forms<sup>50</sup>, on the other, are seen to enter a language even though that language already has an indigenous item to refer to the object or concept in question. They are normally redundant and unnecessary and have a gratuitous nature. In AA, and actually even in SA or at least the media language, words like 'reportage', 'mechanisme', 'mondial', etc ('report', 'mechanism', 'world cup', etc) are widely used though Arabic has viable equivalents (here /taqri:r/, /ʔa:lijja:t/, /ʔa:lami:/).

Since core borrowings do not really meet any lexical need in the base language, academics do not but agree with Haugen (1953:373) when he states that borrowing "always goes beyond the actual "need" of language". In Algeria, though it remains a societal judgment, French is often perceived as having a higher *symbolic value* (Cf. Bourdieu, 1991). Thus, AA speakers tend to use more French loanwords as a means of displaying social status. The social prestige associated with French motivates the non-integration (especially phonological) of any type of borrowed items. Those on the top

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<sup>50</sup> It is argued that this category of borrowing is more closely associated with code switching, with most core loans entering the recipient language as code-switched forms (Jones and Singh, 2005).

of the social scale, i.e. the élite bilingual speakers, tend to pronounce borrowed forms consciously as closely to the original as possible. Now, due to a better knowledge of French, (young) speakers try to get rid of broken forms of French. For example, what was once articulated as [biru mən daf] is now produced as authentically as possible *bureau main-d'oeuvre* ('labour office'). Thus, though the time depth is an important force in the linguistic integration of foreign words, assimilation also depends on the borrower's bilingual ability (Haugen, 1950).

On the basis of his work among Turkish/Dutch bilinguals in the Netherlands, Backus (1996) also rejects morphosyntactic integration as a criterion for distinguishing code-switches from borrowings, claiming that it lies, at least partially, within the individual speaker's motivations to ascribe status to single-word foreign items in the recipient language. However, it is noteworthy to consider that the rise of bilingualism and increased awareness of French is an open gate for code switching.

Though French has the lion share being the major lending language, AA contains a considerable number of loanwords from other languages. English, for instance, is now an important linguistic source. The Algerian (young) speakers, intently aware of western culture, have incorporated into their speech performance words like *jazz*, *rock*, *twist*, *hip hop*, etc (these terms are found in virtually all languages of the world). Then, words to do with computer and internet, such as *chat*, *cam*, and *messenger*, are also widely used. Such a linguistic gap is by no means a recent phenomenon. For example, during the Industrial Revolution, French, the old lending language, borrowed a great deal of terminology from English, such as *rail* and *wagon* to denote objects which were introduced from Britain at this time. Again, because Arab scholarship in mathematics and chemistry was quite advanced at a point, a number of Arabic words were adopted by different languages. English, for instance, took, from Spanish, the original borrower, *alcohol*, *algebra*, *cipher*, etc. after WWII, the balance of power fell in favour of the Anglophone countries, headed by the USA, and thus English has progressively become a *de facto* global language. Today, virtually all languages have loanwords, especially cultural borrowings, from English

due to the economic, technological, and scientific advancement of the English-speaking world.

AA also contains borrowed items from Spanish like the adjective *rojo* and the noun *toro*<sup>51</sup> ('red' and 'bull', respectively). However, much of Spanish loanwords are vocabulary items associated with the sea and fishing like 'salabardo' (from Spanish *salabre*, 'scoop nets'), 'maya' ('knot'), and 'pareja'<sup>52</sup> ('fishing boat'). Such borrowings are used mainly along the western coastal line of Algeria, which was at a point under Spanish rule. On the contrary, the eastern part, for historical reasons, uses a number of loanwords inspired by Italian. Berber has also supplied AA with a considerable body of vocabulary by virtue of the long social contact between the Arabs and Berbers. Turkish too, due to the long Ottoman presence in Algeria, provided AA with a number of borrowings.

Until now, the discussion of borrowing throughout this sub-section has covered only words that more or less retain a foreign status. It is possible to identify another category of borrowings referred to as 'loan translation' or 'calque'. In such a case, the linguistic unit has no foreign linguistic features as it appear in the following statement:

-kan ha:jəl ?anzaʕu lqubbaʕa(h) ihtira:mən wa iʕja:bən

(He was smart. I respectfully and admiringly take the hat off)

[?anzaʕu lqubbaʕa(h)] is actually qualqued from French 'tirer le chapeau', an idiomatic expression used to show admiration and respect. Here, the speaker, in addition to the diglossic code switching between AA and SA (SA in italics), analyses the component morphemes of the French idiom and replaces the terms with Arabic ones of equivalent meaning. [?anzaʕu lqubbaʕa(h)] is not likely to make sense to an Algerian, especially the monolingual, if it was not followed by the two other adverbs. Other phrases and idioms may be calqued this way, though loan translation occurs more often between languages which are related to one another, as they share more compatibility.

<sup>51</sup> 'toro' has migrated to Spain from Arabic /θawr(un)/, then back to North Africa in its current form.

<sup>52</sup> 'Pareja' in this context constitutes a good example of loanshift: while the word means originally 'partner', it is used in AA to mean a fishing-boat.



The crucial point in the discussion of borrowing is that it demands no bilingual competence. This is made on the notion that loanwords generally become integral parts of the linguistic system of the recipient language. This is not the case of code switching which characterizes multilingual communities and bilingual speakers as the next sub-sections will show.

### 2.4.3. Code switching

Code-switching is one of a number of the linguistic manifestations of language contact and mixing, which variously include borrowing, language transfer, linguistic convergence, interference, language attrition, language death, pidginization and creolization, etc. CS is the practice of selecting, alternating, or mixing linguistic elements from two or more codes so as to contextualize talk in interaction. This contextualization may relate to local discourse practices, such as turn selection, or it may make relevant information beyond the current exchange, including knowledge of society and diverse identities (Nilep, 2006). Because Algeria is a multilingual society, CS, in its social and grammatical forms, is a phenomenon that prevails in the linguistic behaviour of the speech community in question, being used as a linguistic tool and a conversational strategy by the vast majority of Algerian speakers.

From a social viewpoint, both 'situational' and 'metaphorical' switching obviously appear in daily linguistic transactions. On the one hand, in situational switching, one code is used in a specific context and with particular participants, and the other in an entirely different setting and maybe with different conversants. Here, code selection is constrained by external factors. For instance, in Batna<sup>53</sup>, an eastern Algerian town, Chaoui, a Berber variety acquired as the native tongue by virtually all children in the community, is used with family members and also with other Chaoui speakers in the street, café, market, etc; AA with outsiders (Arabophones); SA in formal contexts and particularly in education; and French in, for example, Higher Education. In such a context, each individual could expect to code-switch. Both the

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<sup>53</sup> Batna is chosen as an example to include Berber. Most parts of the country have Arabic as the native tongue, however.

situation and the participants in the linguistic transaction form important factors that direct code choice and signal role-relationship. While Chaoui acts as a symbol of identity and is associated with in-group membership, Arabic (SA and AA) is reserved for the wider community and used with out-group members. Then, French also has a specific social role allocated neither to Arabic nor to Chaoui.

On the other hand, metaphorical switching takes place within the same context but with different topics. In fact, it is very likely that two Algerian speakers may use French to talk about a computer programme then switch to AA to discuss about a soccer match- the linguistic shift coincides with no real change in the setting but only with the topic.

From a structural standpoint, an exposure to a spontaneous conversation between speakers allows observe the mixing of Arabic (and/or Berber in some areas) and French. This is no surprise if we consider the fact that French is part of the child socialization: in addition to the huge number of French loanwords in AA, the child may also be exposed to a rich, diverse linguistic environment where his/her parents switch back and forth between Arabic (and/or Berber) and French, particularly if they are educated. Consequently, identifying the three types of mixing linguistic material from two (or more) codes Poplack (1980) distinguishes is by no means a hard task as some of our data show (French italicized):

- Extrasentential switching: refers to the insertion of a tag or a ready-made expression in one language into a stretch which is otherwise entirely in another language. Consider the following examples:

(1) *Je crois* ha:kda taqdər təfhamha χi:r.

(I believe this way you can get it better).

(2) χabbrukum ʔəl liʃtima:ʔ mnaqbəl *n'est ce pas?*

(They told you about the meeting before, haven't they?)

In both (1) and (2), the French elements are subject to minimal syntactic restrictions and therefore may be easily inserted in an utterance without violating syntactic rules of either language.

- Intersentential switching: involves an alternation at a clause or sentence boundary as in the following instance:

lʔabt əlkora lba:rəh *Malheureusement je n'ai pas pu marquer un seul but.*

(Yesterday, I played football. Unfortunately, I could not score a goal).

From a structural view, this type of switching is seen as being less challenging, for each clause/sentence is in one language or another and therefore follows the grammar of only one language. At the same time, it seems to require greater fluency in both Arabic and French than extrasentential switching, since higher-level constituents must conform to the rules of both languages.

- Intrasentential switching: occurs within the clause or sentence boundary as in:

mnin ʃuftəh *pour la première fois* ʔraft bəlli jaqdər jʔawənni

(When I saw him for the first time, I knew he can help me)

This type of switching has attracted most linguists' attention, as it involves interaction of two grammatical systems within a single sentence (see sub-section 1.3.3.2).

It is worth mentioning that the three types of switching may be found within one and the same discourse to the extent that deciding which language is the matrix language and which one is the embedded language may, linguistically and psycholinguistically, be extremely difficult if not impossible. Then, this can be made more complicated if the same discourse contains instances of CS along with islands of borrowing.

As far as Algeria is concerned, it deserves mention that in addition to external (cross-linguistic) switching between Arabic (and/or Berber) and French, internal (diglossic) switching is also an emerging behaviour. Increased familiarity with Standard Arabic has caused a blurring in the functional distribution of H and L varieties. It is now not uncommon to hear people in, for example, informal encounters switching between AA and SA in the course of a single communication episode, as the following sentence shows (SA in italics):

ma ʔadna:ʃ *əlhəll əttalawwuθ əlbi:ʔij duk jaqdi* ʔlina.

(We do not have the solution, the pollution will destroy us)

## 2.5. Conclusion

Historical, sociocultural and political factors, have all contributed in making the Algerian speech community a *marché linguistique* to use Bourdieu's term, a market full of intricacies. On the one hand, the functional specialization of Standard Arabic and Algerian Arabic denotes an in-diglossic context, where the former is reserved for formal and official encounters and the latter is employed in casual and spontaneous interactions. Then, the correlation between French and AA (and Berber in some areas) echoes a good instance of out-diglossia. On the other, the persistence of French in most walks of life has resulted in a *de facto* multilingual society.

Thus, the speaker with such complex linguistic repertoire could be expected to exhibit a distinctive verbal behaviour. Intralingually, the speaker readily chooses the variety that best fits the social context (SA or AA), along with the appropriate styles in the selected one. Alternating between the two is also a possible communication strategy. Interlingually, the dynamics of language contact can clearly be noticed. Switching between Arabic (and/or Berber) and French, or mixing them, in addition to a huge number of linguistic borrowings is part of individuals' (particularly educated ones) communicative competence.

## **Chapter Three**

### 3.1. Introduction

The main concern of this research work in general, in this investigation phase in particular, is to: (i) identify the external factors that constrain code choice in bilingual discourse, (ii) depict the functions code switching serves, (iii) and consider the grammatical restrictions that best operate on Algerian Arabic-French mixed utterances.

Code switching scholarship has developed in two distinct, yet related orientations: sociolinguistic and structural. Therefore, this investigation phase is divided into two parts: The first follows a sociolinguistic approach and seeks to provide adequate answers to the first two research questions; the second, on the other hand, constitutes a structural perspective with the avowed aim to determine some syntactic constraints on AA-French switching.

To meet these ends, we have had recourse to two data collection techniques. Research instruments have been selected according to the type of information sought for by the investigator, and the reason behind each tool is to provide evidence for the hypotheses set (see the general introduction).

### 3.2. Data Collection

Before reviewing the instruments used in this investigation, it is worth considering first the site of research.

#### 3.2.1. The Research Site

The setting for the investigation is the Department of Biology at Abou Bakr Belkaid University, Tlemcen. This site has been chosen because of its dynamic nature. French is implemented as the language of instruction for all the subjects (the same fact applies to other scientific and technical departments at university level; in Medicine, Pharmacy, Agronomy, Architecture, Civil Engineering, Mathematics, Physics, etc). The Biology Department receives students from different regions of the country (Tlemcen, Bechar, Naama, Adrar, etc) in addition to a small number of foreign students (who will not be considered in this investigation) from the neighbouring African countries, most notably Niger, Mali and Tchad. The vast majority of students

received their secondary education in scientific streams. Pre-university instruction is exclusively in Arabic, and French, as it has been mentioned elsewhere in this research work, is a compulsory subject in Algerian education curricula introduced to learners at primary schools. However, Higher Education in the above mentioned fields is totally conducted in French.

The department offers two types of formation: LMD and classical. Following recent changes in Algerian Higher Education, the LMD system has been introduced to the department since 2004. The LMD students enroll for six semesters (three years) to get a 'licence' degree. The classical formation appears in two forms: short duration and long duration. The former lasts for three years; the latter for four or five years depending on the specialty followed and the associated degree. Students of Quality Control and Analysis, Animal Ecology, and Plant Ecology receive five years of instruction to obtain an engineering diploma, whereas those at Biochemistry, Microbiology, and Animal Physiology enroll for four years to get a 'Diplôme des Etudes Supérieures' (Higher Degree Studies). This investigation phase is concerned with students of long duration, with a particular focus on Microbiology students.

### 3.2.2. Research Instruments

The investigation relies both on observational and elicitation data collection tools, and this is specified by the use of recording naturally occurring conversations and carrying out interviews.

#### 3.2.2.1. Recordings

In addition to extensive use of the ears and the eyes, we have relied on a tape recorder (Sony Microcassette Corder M-455) to store conversations relevant to the study. The recording process was carried out over a period of four months from December 2009 to March 2010. Students were the primary informants but teachers also took part in the investigation for specific purposes as it will be shown in the coming subsections. The recordings took place *in* and *outside* classrooms but always

within the ecological environment of the Department of Biology. Prior to the data collection, no consent was sought from the informants, i.e. the recordings were done without the participants being aware, neither before nor after the recordings. This is particularly to avoid any pressure that might generate hesitation or anxiety on the part of the informants. Recordings were transcribed to mark for CS in the different conversations between students and also during students-teachers interactions.

The method of audio recording can be done in either analog or digital format. While the former, which was employed in this investigation, converts sound into some storage media so as to allow hear it any time, the latter changes sound into numbers and back into sound. Recording can also be reproduced and played back with no loss in performance. Recording devices are easy to rewind and fast-forward, making it easier to find and identify code switches.

No doubt audio recording, which is the primary instrument here, is the best method to achieve the purpose of the investigation but like every other research method, it has some limitations. The problem of using such a method is the intrusiveness of external devices such as signals from mobiles, which can influence the recording quality. Then, transcribing the conversations was time consuming, with each of the recorded segments taking hours to be transcribed depending on the length of discourse, quality of recorded data, as well as the variety of discourse features such as pauses, sighs, etc. Although one conversation recording is between 7 to 90 minutes in length, the transcribing of a typical single conversation generates a considerable amount of raw data.

#### **3.2.2.2. The Interview**

Data collection has its complexities and demands, and interviewing is an efficient tool upon which an investigator may rely in conducting an empirical research. The interview is a research instrument that, unlike some other tools, requires from the researcher to take share in the current linguistic exchange, as it is the role of the researcher to ask questions, questions that ought to elicit valid responses. In other words, the research must command the interview so as to reach the ends already fixed in mind. The interview can be structured, semi-structured, or unstructured.



In this investigation, interviewing has involved a group of informants rather than a single participant, and this is to ensure natural interaction and avoid anxiety. Only the semi-structured type is used, basically to verify the validity of the concept of 'metaphorical' switching in the site under study.

The semi-structured interview is conducted with a fairly open framework which allows for focused, conversational, two-way communication. It can be used both to give and receive information. Its nature provides deep "illuminating information that cannot be obtained by any other way" (Weir & Roberts, 1993:145). In this type of interviewing not all questions are designed and phrased ahead of time. The majority of them are created during the interview, allowing both the interviewer and the person being interviewed the flexibility to probe for details or discuss issues. This type usually starts with more general questions or topics then gradually moves to the target subject. Among its major benefits is that it is less intrusive to those being interviewed as two-way communication is encouraged. However, such a technique has also its shortcomings in the sense that a lot of extra information may surface during the contact. If this is the case, some relevant data may not be gathered.

Here again, the informants' speech was recorded without them being aware. Interviewing, on the part of the researcher, was in AA. The transcribed tokens of CS are provided in appendix A.

The instruments used allow a qualitative and quantitative analysis of the data gathered. Johnstone (2000:37) reports that "the analysis phase of sociolinguistic research is often quantitative as well as qualitative". The qualitative method investigates what, where, when, in addition to the *why* and *how* decision making. The quantitative one is a numeral data collection method in which the process of measurement is central to the research. In other words, the qualitative method is used for exploratory (i.e. hypothesis-generating) purposes or explaining quantitative results, while quantitative method is used to test hypotheses.

It goes without mentioning, of course, that this investigation phase focuses only on AA-French code switching (cross-linguistic CS), and tends to ignore lexical borrowing and any kind of possible interference from other linguistic systems.

### 3.3. Part One: A Sociolinguistic Analysis of AA-French CS

This part of the investigation considers code switching from a sociolinguistic perspective, and looks for the motivations behind language alternation. In other words, it seeks to: (i) determine the factors that impose the linguistic choice on biology students, and (ii) specify the functions fulfilled by alternating between the two codes in the repertoire.

To achieve the first objective, experiments will be conducted with recourse to three contextual clues, clues that are expected to affect the form of a verbal message in a speech event: *topic* (or range of topics), *participants* (speakers, addressees, and audience), and *setting*, and see whether such factors operate as code determinants or not in our site of research. The first factor, that is 'topic', will be discussed in the light of Gumperz's semantic model, whereas both 'participants' and 'setting' will simultaneously be dealt with under Myers-Scotton markedness model. In considering the three factors, different data collection methods will be employed.

#### 3.3.1. Topic as Code Determinant

In Blom and Gumperz's (1972) 'Social Meaning in Linguistic Structures', *metaphorical switching* states that a topic is entirely discussed in one code or another. Such verbal behaviour demands a competence in either code. For this reason, informants' selection in the experiment mentioned below is based on their linguistic capabilities. The experiment was conducted with advanced students, students of fourth year. Such participants have received all their university instruction in French and they, therefore, have developed a significant bilingual proficiency that, though with varying degrees, enables them engage in conversations requiring only French and keep talking French during the whole speech exchange.

Modeled on Blom and Gumperz's (1972) work in Hemnesberget, Norway, the interview was carried out in an informal context. A friendly meeting was arranged at the cafeteria of the department under investigation, and that was in a good time when the site chosen was quite empty. This is to avoid impeding the recording procedures. Participants included three males (referred to as A, B, and C) and three females (marked as D, E, and F)<sup>54</sup>, in addition to the researcher (R) who is actually an acquaintance of the selected informants. One of the men (A) is a student of biochemistry, whereas the five other informants are all specialized in microbiology. As it was an informal gathering at which refreshments were to be served and given the fact that all participants know each other are, from a methodological standpoint, of prime importance since self-recruitment among the group and spontaneity in interaction were predominant.

Since Algeria is classified as a diglossic community, in natural informal settings, under the right conditions, the medium out of which a conversation between friends is carried out is the dialect (AA). However, because the objective of the experiment is to verify the validity of the idea that code choice in bilingual conversations is topic-related, we intently relied on a semi-structured interview, which was recorded without the participants being aware. The researcher was an active member whose job was to initiate discussion likely to mobilize the group engage in interaction, without loosing control over the whole conversation. Using some elicitation strategies, a variety of topics could be covered. Whenever a point had been discussed for some time, it was our duty to intervene via injecting new questions and comments or even asking for explanations. In doing so, unlike Blom and Gumperz (1972), we would predictably influence the informant's code selection, though all our interventions were in AA, and participants had all freedom to choose among the codes in their linguistic repertoire, namely Arabic and French.

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<sup>54</sup>These informants will be referred to by the same letters throughout this research work.

Far from considering lexical borrowing and lone other-language switches, the results show a complete alternation from AA to French then vice versa. Table 3.1 summarizes the range of topics discussed in relation to the associated language of discourse:

Language	TOPIC							
	Drinks	Biochemistry	Sport	Anatomy	Love	Music	Enzymology	Economic crisis
Arabic	✓		✓		✓	✓		✓
French		✓		✓			✓	

Table 3.1: Topics discussed in relation to the language of discourse.

### 3.3.1.1. Data Analysis

The following examples expose excerpts revealed by the data in relation to some topics (for more examples, check appendix A).

- Topic 1: Chit-chat at the beginning of the encounter<sup>55</sup>

(A): ja χuja rani bayi naʃrəb wa:ħad lpress baʃ ərrijjah rasi *kima* jgu:lu qhiwa əw ga:ru χi:r mən ʃulta:n fi da:ru (Hey brother! I want take a coffee to calm down. As it is said, “a coffee with a cigarettes is better than a king in his castle”)<sup>56</sup>.

(D) wəlli ma: jakmi:ʃ jaddi qahwa əwsi ?ana baʃda naʃrəb waħad əjus nbarrəd bih laʃtaʃ. (And that who doesn't smoke, shall he/she take a coffee too? Personally, I want a juice to get rid of my thirst)

<sup>55</sup> Items in italics are treated as borrowings, either because they are integrated into AA grammar (e.g. /əwsi/, from French *aussi*, ‘also’) or because they are recurrent in the speech of people (e.g. *jus*, ‘juice’).

<sup>56</sup> All the examples will be accompanied by a somewhat literal translation into English

- Topic 2: Scientific discourse resulted from the researcher's intervention with the aim to push (A) talk about the effects of coffee on the human body:

(A) La caféine c'est quoi? C'est un composé chimique du café et aussi un alcaloïde présent dans plusieurs aliments. En plus, c'est un stimulant psychotrope, hm hm stimulant du système nerveux central. Aussi, il a un rôle récréatif et médical en même temps. Par contre le jus contient un acide citrique très très dangereux pour l'estomac.

(The caffeine is what? It is a chemical compound of coffee and an alkaloid present in many foods. In addition, it is a psychotropic stimulus, rh rh a stimulus of the central nervous system. Then, it has a recreational and medical role at the same time. In contrast, juice contains a citric acid, which is very very dangerous for the stomach)

(D) non non *ja: l'aləm tta'na*. Par exemple le jus de citron possède une haute teneur en vitamine C, une vitamine considérée comme un cofacteur enzymatique nécessaire dans un certain nombre de réactions physiologique. (AA in italics)

(No no our scientist. For example, lemon juice has a high content of vitamin C, a vitamin considered as an enzyme cofactor required in a number of physiological reactions).

(C) Raison de plus, la vitamine C est très importante car elle est requise dans la synthèse du collagène et des globules rouges et contribue au système immunitaire.

(Moreover, vitamin C is very important because it is required in the synthesis of collagen and red blood cells and helps the immune system)

- Topic 3: Sport

(C) ja bən ʕammi ʃha:l jaʒri:w taħhasbəm mraikkbi:n ətturbo baʃʃah ba:jna jaddərbu bəzzaf baʃ jawwaʃlu ha:kda

(Oh my God! They run very quickly as if they had a turbo. Sure they train a lot to reach such a level)

## ➤ Topic 4: Anatomy

(R) madamək əʒbattənnə ʕə llə ʕdam zidunna ʃwijja maʕluma:t ʕli:h

(C) l'os est un élément crucial dans la construction de l'organisme humaine, une partie essentielle de l'appareil locomoteur qui confère aux vertèbres la faculté de se mouvoir.

(The bone is a crucial element in the construction of the human body, an essential part of the musculoskeletal apparatus, which gives vertebrae the ability to move)

(F) On les classifie généralement par rapport à la longueur : les os longs comme le tibia et le fémur ; les os courts comme les carpes et les torses; et aussi les os plats c'est le cas du scapula.

(They are usually classified in relation to the length: long bones, as the tibia and femur; short bones, like carps and tarsi; and also flat bones, such as scapula)

During the whole interview, which lasted 57 minutes, there was no change in the ecological environment or in the participants, but only a wide range of topics could be covered. Table 3.1 indicates three switches to French. The code of discourse changes as the topic discussed changes. French is used to talk about scientific subjects that are related to the students' field of interest (biochemistry, anatomy, and enzymology), whereas AA is devoted to discuss all other topics. The interesting point is that the topic about the economic crisis, which is introduced to informants on purpose, is dealt with in Arabic (a mixture of SA and AA). Though it is a topic that can be discussed in scientific terms, students maintain Arabic throughout their discussion. In this situation, code choice is constrained by the type of the topic at hand rather than any change in the physical setting or the participants taking share in the conversation. This is the same finding Blom and Gumperz arrived at in their 1972 paper, referring to such type of language behaviour as 'metaphorical switching'.

Another experiment was conducted in a formal context, the amphitheatre, during a session of chemistry with second year students. This is particularly to see whether ‘metaphorical switching’ is a phenomenon that characterizes only informal contexts, or it extends to cover even formal settings. Because it was a lecture hall with a large number of students, we could attend the lecture without being noticed as outsiders. The experiment relied completely on our observations supported by data recording. In just the same way that instruction of other subjects is exclusively in French, the module of chemistry is no exception. It was a teacher-centred lecture with the teacher explaining concepts and theories in a chemical French register and students, when there was ambiguity, requesting for clarifications in French too. Although the lesson was conducted in French, what was noticed is that the teacher, while dictating the lesson, made a pause and talked briefly about a football match he had watched a day before addressing his students in AA this way:

əlʔabna mlih lba:rəh̄ h̄sabt əlCôte d'Ivoire ɣa:dja takunna ssaʔa ləwlad ɣarʒunna  
 ɣarʒa ʒdida.

(We perfectly played yesterday. I thought that Côte d'Ivoire would defeat us, but the boys did something new)

Then, students showed a great deal of enthusiasm toward the topic commenting on the match and praising players of their national team, and all that was in AA (see appendix B). Though there was no apparent change in the setting, both the teacher and his students switched codes when the topic changed. This occurred in a formal context where only French is expected to be used.

The idea that code choice can be motivated by the topics discussed is again confirmed through these two experiments. In contrast to ‘situational’ switching, which coincides with changes in the social context, ‘metaphorical’ switching is topic-related.

### 3.3.1.2. Data Interpretation

The data gathered from the two experiments may be discussed in terms of the reasons beyond code switching. This is due to the fact that metaphorical switching is not always predictable but open to the individual speaker's decision, i.e. being bilingual makes the speaker have the option to choose the language through which (s)he may want discuss a topic. Thus, in addition to the topic discussed, what motivates people to switch codes?

As far as the first group is concerned, there are three switches to French. Note that topic one and two, then three and four, are closely related to one another. In order to keep spontaneity in interaction, the interview questions (see appendix A) smoothly drive students to shift from a general topic about drinks (Topic 1) to indulge in a scientific discourse requiring biochemical explanations (Topic 2). Then, in a coherent way, participants are pushed to move from a topic about sport (Topic 3) to an anatomy subject bridged by an interview question that necessitates anatomical explanation. In this instance, topical changes are used as *stimuli* to elicit predictable changes in the code of discourse. The use of AA symbolizes the setting (informal) and also the close relationship between the participants, as it is their shared mother tongue. Table 3.1 indicates that Arabic is used to talk about purely personal topics and also shared knowledge and views. Though students show an overt preference for the dialect, they adopt French for certain purposes. Switching to French echoes two important facts. First, students have the desire and tendency to be identified with intellectuals. Thus, they show their belonging to a scientific department via adopting French which is tightly associated with this site. Secondly, though the topic about the economic crisis is regarded as a good subject for the *élite*, informants prefer Arabic to cope with it. Their Switch to French is only to discuss subject matters that have to do with biology in general and with things they dealt with during their university education in particular. Students are familiar with biochemistry, anatomy, and enzymology, and most of the knowledge they have about the respective fields is in French. Thus, they have a natural, maybe even subconscious, tendency to switch to the language characteristic of such type of topics. This can be explained as a strategy to fill in a



linguistic gap, as most advanced learners feel ill at ease to talk about scientific subjects in Arabic due to the difficulty they face in finding Arabic equivalents to French scientific terminology. As rational actors, they switch codes and avoid translating that may be, if not impossible, effort-demanding and time consuming.

This is not the case with the second session when the teacher and even the students switch from French to AA. The football match could be discussed in either code, and the teacher could talk about the event with no recourse to Arabic. However, the linguistic choice adds a special flavour and a particular social value that support students to react with great enthusiasm. Using French would perhaps create no such response. The switching of codes illustrated in the teacher-students interaction for metaphorical switching echoes Goffman's (1981) notions of *front stage* and *back stage*. While French is associated with front stage behaviour, the shared mother tongue (AA) symbolizes in-group solidarity and creates islands of back stage within the lecture hall.

Metaphorical switching is thus determined by attitudes toward the codes concerned and the associations allocated to these codes. The 'almost one-to-one-relationship' between language choice and situational parameters in the case of situational switching (B & G, 1972) serves as the normative point of reference for the interpretation of metaphorical switching in the semantic model. Although, in this latter case, the situation remains unchanged, the speaker behaves as if those parameters that prescribe the use of the other language were relevant, and thereby alludes to these parameters. Metaphorical switching thus invokes the meaning potentials of both languages (Auer, 1984).

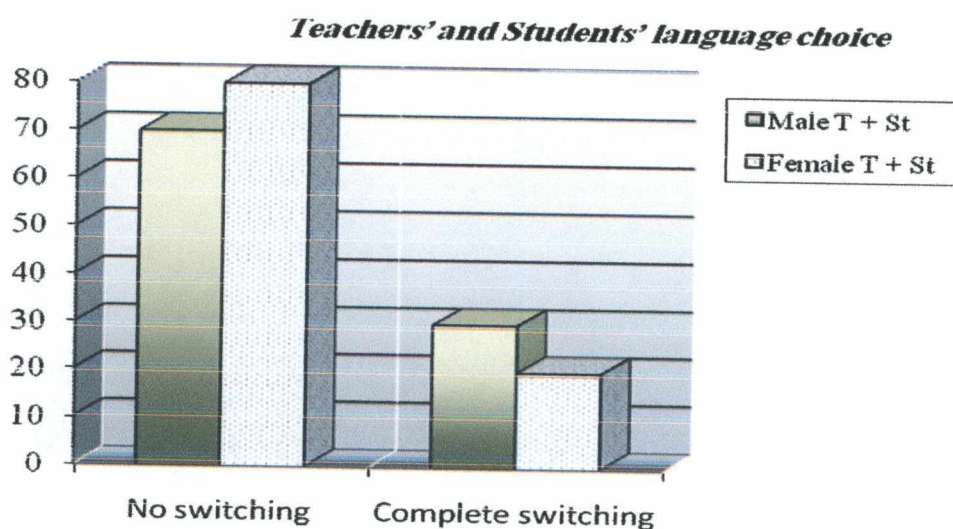
### 3.3.2. Participants and Setting as Code Determinants

This subsection seeks to describe the shift of language practice and show the social forces that motivate students (and teachers alike) to select among the available codes, namely AA and French. In other words, the objective is to see how external factors are reflected in code choice. The data for the study derived from audio-taped verbal interactions *in* and *outside* classrooms but always within the environment of the

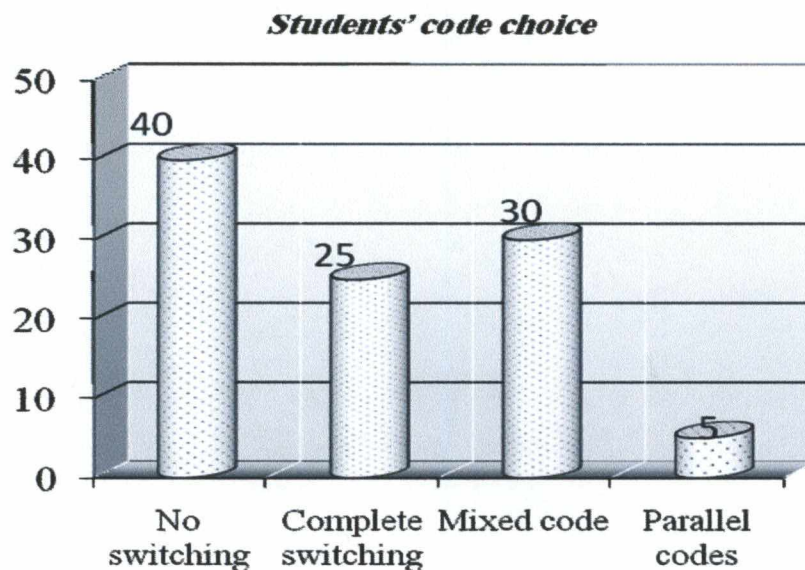
Department of Biology. The two settings are selected on the basis of our personal perception of both contexts, considering the classroom as *the* only formal setting, whereas outside the classroom is a semi-formal context at best. The data was collected over the period from December 2009 to March 2010, and the study was divided into two parts carried out simultaneously.

The first part was conducted with 4<sup>th</sup> year students of Microbiology during formal lectures in biostatistics and enzymology, two modules presented by two different teachers: a male teacher for biostatistics (marked as TB); a female for enzymology (referred to as TE). Ten recordings were devoted to each module. The second part, on the other hand, was carried out in the department yard. To ensure a fair comparison, twenty recordings were undertaken with the same participants, that is 4<sup>th</sup> year Microbiology students. Six recordings involved students-teachers interactions, while the fourteen others involved only student-student conversations. The number of students in each recording session varied from five to eight, but some students were always present. The duration of each conversation also varied from six to seventeen minutes.

The data obtained from classroom verbal interactions show two main patterns of language choice presented in bar chart 3.1, whereas those gathered from conversations outside classrooms reveal four types of language use shown in bar chart 3.2.



**Fig. 3.1 Teachers' and Students' language choice**



**Fig. 3.2 Students' code choice**

### 3.3.2.1 Data Analysis

From bar chart 3.1, the 'no switching' cases represent 70% in biostatistics lectures and 80% during enzymology sessions. Here, teacher-students and even student-student interaction is exclusively in French with no interference of Arabic<sup>57</sup>, and this occurs during a period of 1:30 minutes for each lecture (see appendices C and D). The second pattern, 'complete switching', occurs three times (30%) in biostatistics lectures and two times (20%) during enzymology ones. In such cases, switching is always from AA to French. Both teachers initiate interaction in AA for the first two or three sentences (greeting, talking about the weather, etc), then students' responses come in AA too (see appendices E and F). It is noteworthy to mention that the use of AA is only for a short time and before the lecture actually begins as some of the data show (French in italics):

<sup>57</sup>The analysis tends to ignore single word switches that may occur and considers only higher level constituents (phrases, clauses, etc).

1. TB: ssalamu ʔlikum (the commonplace Islamic greeting)

Students: wa ʔalajkum ssala:m

TB: wa:ʃ rakum b χi:r (How are you doing ok?)

Students: raħmət rabbi ja ʃi:χ. waʃ əjχaʃna. (It's ok sir)

TB: nabyu:kum γi:r mla:h ja sidi. *Alors, la dernière fois, on a parlé de la muqueuse...*

(I am happy to hear that. So, last time we talked about mucosa...)

2. TE: ʃbaħ lχi:r (Good morning)

Students: ʃbaħ lχi:r *madame*<sup>58</sup> (Good morning madam.)

TE: əlʒəww ʃbaħ mlih lju:m (the weather is fine today)

Students: ʔih bæʃʃaħ. ʃabhat əmʃamma (Yes. It's sunny)

TE: *Bon, aujourd'hui normalement en va essayer de...*

(Today, we will normally try to...)

Bar chat 3.2, however, exposes four types of language behaviour:

1) No switching: out of 14 recordings between students, 'no switching' occurred eight times. The speech exchange is exclusively in AA with the exception of the occurrence of some words that can be accounted for as borrowing if we consider the criterion of frequency of use proposed by Myers-Scotton (1993b).

2) Mixed code: Here again, interactions involved only students. The whole conversation is mixed with elements from AA and French. This type occurred six times in the recorded data. Concerning this pattern, the data analysis reveals interesting findings. In many cases, CS occurs not only within one speaking turn, but also at the onset of a turn. The current speaker's language choice affects that of the next

<sup>58</sup> The French item 'madame' can be considered as a borrowing, because it is largely used by Algerian speakers to address a married woman (see CS versus B in chapter one).

speaker's. For instance, when a speaker switches to AA, the next speaker will pick up the same code, and then when moving to French, the following speaker is likely to use French. The following table gives a summary comparing the occurrences of CS at the onset (the boundary) of a turn and within a turn (see appendices G and H for examples):

Switching at the onset of a turn		Switching within a turn	
AA to French	French to AA	AA to French	French to AA
48 (30%)	40 (25%)	40 (25%)	32 (20%)
Total: 88 (55%)		Total: 72 (45%)	

**Table 3.2: Switching at the onset of a turn and within a turn (total number of occurrences: 160)**

Table 3.2 indicates that CS occurs slightly more often at the onset of a turn than within a turn. The 55% occurrences show that students are more likely to finish a turn in one language without switching to the other. The speaker switches code only when the other participant(s) uses a different language. This, in a way, reflects the speaker's readiness to use any code available in his/her repertoire. Again, when CS occurs within a turn, it is more often from Arabic to French instead of the other way round (this is to be discussed under the functions CS serves).

**3) Complete switching:** In this pattern, the conversations occurred between students and teachers (three times with the enzymology teacher, and two times with the biostatistics lecturer). In all interactions, switching is from AA to French. Students always initiate talk with one or two sentences in AA then adopt French to ask teachers about pedagogic and administrative affairs. Teachers respond in AA as well, and then switch to French for the remaining conversation. AA is generally used to open conversation, particularly for greeting (see appendix I)

4) Parallel codes: The term 'parallel codes' is used to refer to the simultaneous use of different codes by participants within one interaction. Such a pattern occurred one time out of the six recorded conversations between students and teachers. Here, students made use of AA, whereas the teacher maintained French for the whole conversation. The interaction lasted for six minutes, and there was a mutual understanding on the part of all participants with no noticeable communication breakdowns. The conversation was about a football match, as the following excerpt shows:

*Students:* ssala:m fʃi:χ kira:k laba:s fʃwijja (Hello sir. How are you?)

*TB:* Oh ça va, ça va, très bien merci. (Oh good good, thank you)

*Students:* ra:k tba:n əmraʃʃəq ja fʃi:χ ba:jna tʃərraʒt lba:rəh

(You look happy sir. Sure, you watched [the match] yesterday!)

*TB:* Evidement. Je ne peux pas rater l'occasion. (Sure. I can't miss the event)

*Students:* əjwa ʔaʒbək əlmatch fʃwijja (So, did you enjoy the match?)

*TB:* Ah oui, bien sûr. On a bien joué et c'était magnifique de regarder l'événement. C'était un retour après des années ah. (Oh yes, of course. We played well and it is wonderful to see the event. It was a return after many years ah)

*Student:* bəʃʃah hatta huma əjgaʃʃru. (But they also play well)

*TB:* Oui oui bien sûr. Le temps on a reçu le premier but, j'ai dis mm c'est fini.

(Yes yes, of course. The time they scored the first goal, I said mh it's over)

*Students:* wallah ga:ʔ hʃabna ha:kdək (we all thought the same)

*TB:* Parce ce que c'est difficile de revenir contre une grande équipe comme la Côte d'Ivoire. Ils ont beaucoup de stars et ce sont les premiers candidats pour cette CAN.

(Because that is difficult to go against a great team like Côte d'Ivoire. They have a lot of stars and are prime candidates for this CAN)

The whole interaction, which involved two male students and three females in addition to their biostatistics teacher, was conducted in parallel codes and neither the teacher nor the students switched to the other's code.

### 3.3.2.2. Data Interpretation

The data gathered may be interpreted in the light of the markedness model. Myers-Scotton markedness (1993a) assumes that in multilingual communities where conversational participants are competent in the community languages, speakers' choice of the language is determined by their desire to index a set of Rights and Obligations (RO set, particular social roles) entailed by the choice of that language. The theory states that in each conversational encounter, there is an unmarked (expected) language choice for each participant and that this choice indexes the appropriate RO set in that social context. Any code choice is indexical of norms of society at large, yet norms only determine the relative markedness of choices.

From the data, the interesting patterns are those of 'complete switching' and 'parallel codes'. In the complete switching cases, particularly outside classrooms, students and teachers alike switch from AA to French. Here, which code is to be regarded as the marked choice? If it is the setting (department yard) which is considered, one might argue that French is the marked choice and AA should therefore be the expected code. However, recordings indicate that students initiate talk in AA and quickly adopt French without being forced to do so, and teachers just follow them. In all other cases, students maintain AA or mix it with linguistic elements from French, but only in five interactions they completely switch to French. There is no change in the setting but only in the participants, as the five cases involved students-teachers interaction.

Using AA in other cases characterizes in-group members (students) and refers to what Gumperz (1982) calls 'we-code'. AA has a social value that signals a speaker's identification with other fellow members. Such value can only be understood by contrast with the meanings which students assign to French. When students come to interact with teachers, they automatically switch to French as they consider them out of their social group, though they all share the same mother tongue (AA) and the same ethnic belonging (all are Arab-Algerians). By switching to French, students signal their understanding of the current situation and particularly their relevant role within the context. Selecting French clearly marks their RO sets. Code choice here is

constrained by the type of social relationship, and students, though they show an overt preference for AA outside classrooms, tolerate the use of French as it echoes meanings of officiality. Selecting a code is part of the speakers' communicative competence, and each participant knows what code to use with whom and under what circumstances.

In the five conversations between students and teachers, though the topics discussed (administrative and pedagogic affairs) may motivate students to code switch, it is the difference in status that makes them adopt French. 'Participants' make an important component in Hymes' (1972) *ethnography of speaking*, with communicative competence as its core matter. Extensive observation reveals that interactions between students and teachers in the site under investigation come, for the most part, in French whether it is in or outside the classroom. Thus, in the parlance of the markedness model, one can confidently claim that French is the most unmarked choice for such transactions. Using Arabic to initiate talk is also expected, since greetings usually, but not always, come in AA.

The other important pattern is the case of 'parallel codes', and this can make our discussion more complicated. What is interesting is that all participants have control over French and AA: the teacher is able to use AA for this type of discourse, and students are keen on employing French to conduct a six-minute conversation, but neither participants switch code and the communication act is successfully carried out. In such a case, what code is out of place?

For the students, this interaction bears some closeness to the teacher, and they feel a kind of flexibility and freedom to use any code. Their AA choice is made on the basis that a topic about football is very casual, hence AA is perceived as more acceptable, relaxing, and expressive. The teacher, on the other hand, keeps talking French as he knows it is by no means a linguistic barrier for his students. For him, French is the natural medium through which an interaction with students should be handled. Observations, as it is indicated in the aforementioned cases of 'complete switching', denote that French is the unmarked choice on the part of teachers. Thus, the use of Arabic with teachers is in fact a marked choice. It is important to note that students employed French in the two other conversations with the same teacher, and



this affirms that French is normally expected on their part. In this case, however, students decide to reject the normative model, creating then a new RO set. Employing Arabic reflects students' desire to establish a particular social relationship with their teacher, as Arabic decreases distance and indicates solidarity.

The teacher's use of French can also be discussed under what Myers-Scotton (1993a) calls the *exploratory choice maxim*, which occurs when an expected choice in accordance with community norms is not clear from situational factors. He employs French to make his students aware they are being treated as intellectual people, and reminds them they are in an official social context where French has a special status. Also, he chooses a different language to establish the favoured social balance and to keep the necessary distance between him and the students (note that, unlike in the two other conversations, even his greeting came in French and he did not accommodate his language according to the addressees' choice).

As far as the 'no switching' cases *in* and *outside* classrooms are concerned, both the use of French during lectures on the part of teachers and students, and the use of AA among students in the department yard are classified as unmarked choices. In either site, language choice conveys no surprises, for it reflects predictable interpersonal relationships. French must be used to deliver lectures, whereas AA constitutes the natural medium of spontaneous, casual conversations. Teachers and students alike intuitively know the unmarked and the marked linguistic options that index each RO set and the social benefits and costs, respectively, of indexing these RO sets. They know that using, for instance, AA to conduct lectures is a break of norms, and the linguistic code would therefore be out of place. Thus, they keep each code apart from the other, as the *situation* determines the linguistic selection (In the semantic model, this is referred to as *situational switching*).

Concerning the pattern 'mixed codes', one might, at first sight, find it quite difficult to state whether it is an unmarked or a marked choice. However, it can be argued that such linguistic behaviour is expected (thus unmarked) among speakers

who are bilingual in the same languages. This is made further if we consider that a casual conversation among students generally includes scientific concepts that make it a must to have recourse to French.

To recapitulate, one ought to know that students and teachers involved in the recorded conversations have the same repertoire and their linguistic competence includes control of, at least, both AA and French rules. They vary in the way they use these rules, however. Expressed attitudes toward the *setting* of the verbal encounter represent an interesting factor that provides an explanation beyond code selection. For the students, only the classroom is regarded as a formal context, and thus French is the unmarked choice in such a case. Any other place outside the classroom environment is considered informal or semi-formal at best, and thus French is not systematically the expected code. Sheer observation reveals that even at the department administration students tend to make use of AA or a mixture of Arabic and French. But whenever they come to converse with their teachers, they usually adopt French taking account of the addressee's status.

For the teachers, however, the department as a whole is a formal setting and French is the basic instrument of communication in the department. Though they may alternate between AA and French or mix them in natural conversations, they have a strong tendency to maintain French in and outside classrooms, particularly when they converse with students.

Thus, the 'ecological environment' and the 'participants' involved in the linguistic transaction determine code choice and provide a general framework, at least partially, for the interpretation of CS. With its macro-sociolinguistic orientation, CS bears some similarities to diglossia in that the social situation largely dictates the code choice. Switching assumes a direct relationship between the social context and the suitable code. Bilinguals intuitively have a sense of markedness vis-à-vis available codes in any interaction, and "code choices fall along a continuum as more or less unmarked" in the sense that "there is often a dominant unmarked choice, especially within a relatively conventionalized interaction type" (Myers-Scotton, 1993a:82). Each

code is associated with a particular social situation and with a specific group of participants, and bilinguals know these associations because they are equipped with a *markedness metric*, which is “part of the innate cognitive faculty of all humans” (ibid: 80).

However, a speaker might choose to employ a marked, unexpected code for a variety of reasons, such as showing solidarity or distance (as our data show), social or ethnic difference, anger, eloquence, etc. Thus, one may argue that though external factors (participants, setting, and topic) at work in the community operate largely to affect code selection, the bilingual speaker is an active actor who may decide either to follow or reject societal norms.

If these three factors act as code determinants, what conversational goals students achieve when they alternate between the two languages in their linguistic repertoire? This is to be investigated in the next subsection.

### 3.3.3. Functions of Code Switching

Contrary to the assumption that CS is evidence of deficient language knowledge in bilingual speakers, a number of researchers (Gumperz, 1982; Heller, 1988; Li & Milroy, 1995; etc) demonstrate that CS is an additional resource to achieve particular interactional ends with other conversants. Different researchers have identified a number of CS functions, such as quoting, tags, humour, message qualification, parenthetical comments, etc. From the data analysed, it is the pattern of ‘mixed code’ which is considered as being the most relevant to account for the different possible functions of CS. Discussion and analysis will therefore concern this pattern in particular<sup>59</sup>. A total of 160 switched utterances have allowed us to identify the following functional tasks of CS characterized in the pie chart below. However, one must note that each and every switch produced *will not always* perform a specific

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<sup>59</sup> The patterns of ‘complete switching’ and ‘parallel codes’ will also be dealt with under the function of accommodation.

function. As Zentella (1997:99) suggests, “pinpointing the purpose of each code switch is a task as fraught with difficulty as imputing the reasons for a monolingual’s choice of one synonym over another, and no complete accounting may ever be possible”.

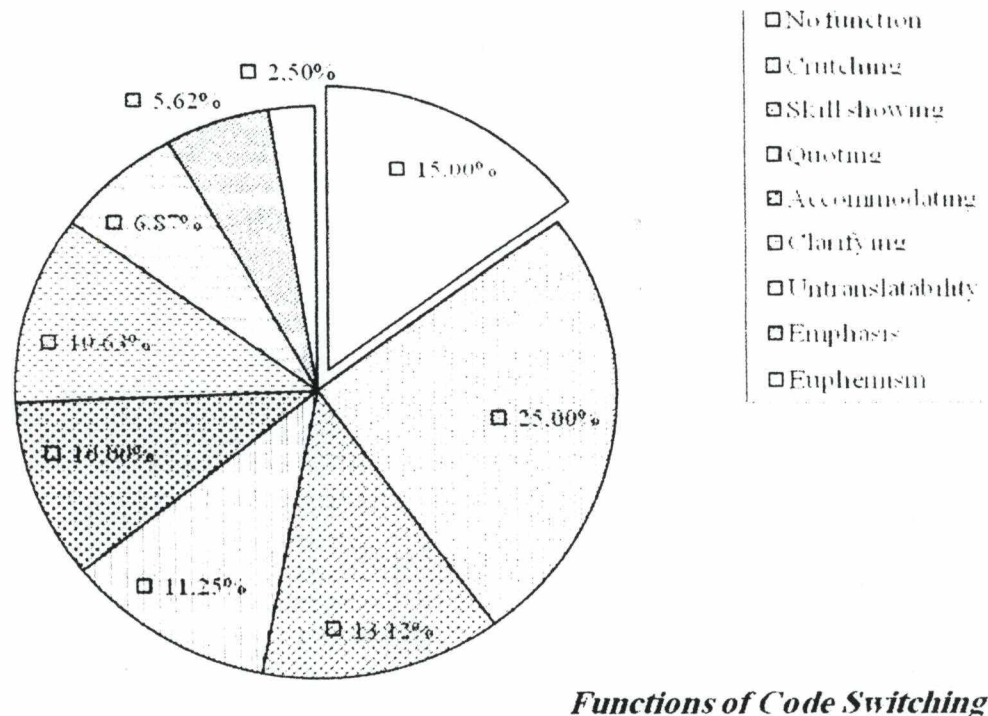


Fig. 3.3: Different functions of CS

### 3.3.3.1. Code Switching for Crutching

Crutching is a term to describe a function code switching fulfils, and it was first introduced into the literature by Zentella (1997) in her study of bilingual Spanish children in New York City and their switching strategies. This function forms the highest rate as compared to other functions in our data (amounts to 25%). Many examples were identified due to the so-called *lexical need*, where switching occurred to compensate for linguistic gaps. However, this type is arguably the most ill-defined of all categories since the issue of a real need is a very relative one. In a broad sense, each and every lexical switch fulfils a need; although under no circumstances should this be interpreted as lack of language proficiency, but rather as the lack of an exact equivalent in the other language. Other explanations found in the literature include a *momentary* gap in the lexicon of the individual, a matter of language choice due to the

higher frequency of exposure of an item in a specific language. Although there are a large number of instances for this function, only three prominent examples, by different students, are provided and discussed below (French in Italics):

(1). hadi ba:jna la:zəm nnaṭiʒa tbajjən ʃha:l ka:jən *les plaques sanguines* fə ddam əttaʔah

(This is obvious. The result must show how many blood plates are in his blood)

(2). hadi xa:ʃʃa(h) b *les mycoplasmes*.

(It is specific to mycoplasma)

(3). *L'analyse de l'échantillon* dərna:h *ça fait déjà une heuer. Un bon résultat*

(We did the sample analysis already an hour ago. A good result)

In example (1), it is evident that the base language is Arabic but the student finds herself at a loss for words causing her to revert to habitual language (French, the language of habitual scientific discourse). Though Arabic is her native tongue, the student has to think hard before the words come to mind. In order to keep the smooth flow of speech, the student replaces the Arabic term [əʃʃafa:ʔih əddamawijja(h)] by its French counterpart 'plaques sanguines'. This is, of course, not due to the incompetence in Arabic, because *all* the students know such Arabic terminology (they know it before they reach the university level, because Algerian middle and secondary school curricula include scientific subjects in which blood and other parts of the human body are generally surveyed). In this case, switching to French is a consequence of the high frequency of use of this term in the current situation especially as the student is specialized in microbiology, and talking about blood is very recurrent in her daily verbal behaviour. The speaker could have come up with the Arabic term with no recourse to French, but such attempt would probably introduce a pause or a kind of hesitation. As a rational calculator, the speaker will, of course, choose to code switch rather than *translate*. It can therefore be concluded that the reason for her shift was nothing more than a *momentary* loss of words.

However, this is not the case with example (2), when switching occurred as a result of an absence of the Arabic equivalents in the linguistic repertoire of the speaker. This latter was unable to call the appropriate Arabic term<sup>60</sup>. It is a fact that a huge number of French terms are used on a daily basis, and (at least most) students are not aware of their Arabic counterparts. This is because many concepts, organs, materials, etc, are related to students' speciality and have never previously dealt with these during their pre-university education. These terms are introduced to students in a French scientific register, and they store the new concepts in the language they first receive them. Thus, 'mycoplasme' in example (2) has a lexical gap-filling function.

As far as example (3) is concerned, it implies that switching may be bidirectional: (1) and (2) expose switching from Arabic to French, whereas (3) shows the opposite. Because the student has access to two languages, he could easily insert an Arabic verb in a stretch with French as its base language. The verb [dərna:h] corresponds to the French sentence 'on l'a fait' (we did it). The student could have employed only French in addressing the message, but he uses CS as a communication strategy perhaps to avoid a whole French sentence that can be substituted by a single Arabic item.

All in all, the occurrence of these switches could be seen as a mechanism by the students to avoid gaps and breakdowns in communication. CS is a useful solution and part of bilinguals' *strategic competence*, a competence they tend to rely on so as to compensate for failure because of the difficulty or inability to retrieve the necessary linguistic structures.

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<sup>60</sup> When the speaker was asked later to provide us with the Arabic equivalent of 'mycoplasme', he confirmed that he does not know such word in Arabic.

### 3.3.3.2. Code Switching for Language Skill Showing

Sometimes people deliberately make their words and verbal expressions attractive and charming through adopting a poetic language, mostly to display their linguistic abilities in using one language or the other, or both. Code switching can fulfil this function in some situations, as the following conversation demonstrates (French in italics):

E: ma bqa:t la tarbijja(h) la haġma əlmuġtama<sup>9</sup> walla ʃʔi:b ʔla ʃga:r

(No education no respect exist. Society has become a challenge for the younger)

F: *Oui! jgu:llək "on choisit pas sa famille mais on choisit ses amis."*

(Yes! it is said that "we don't choose one's family but we choose one's friends)

E: *C'est vrai ! En français on dit "Les enfants sont ce qu'on en fait."*

(Right! As they say in French "children are what we make of them.")

F: hadi ma<sup>9</sup>rufa ħatta ʔanna jgu:lu "əlʔinsa:nu bnu bi:ʔatih(i)."

(This is known even to us. They say "the human being is the son of his environment")

While speaker E, using Arabic, is criticizing society and complaining about the current social life and its impacts on children, speaker F intervenes and recalls a beautiful French proverb that portrays the topic under discussion. Then, E herself switches to French for another proverb that gives a special tone and a distinctive flavour to the conversation. At last, F uses another saying from Arabic. The intention of employing code switching here is easy to see; to show their linguistic skillful management of the two varieties.

The data also reveals that speakers are more likely to switch at the onset of a turn rather than within a turn (see table 3.2), i.e. they finish one sentence in one language before moving to the other language. This indicates that these speakers are ready to adopt one language and maintain using it through a conversation. They therefore display their bilingual competence through CS.

In addition to showing language competence, switching occurs sometimes for fashion. French has obtained a 'vogue' status and mixing French with Arabic is considered to be elegant and has some foreign flavour for some people. There are many words and expressions which are regarded fashionable and speakers show overt preference to make use of such expressions, as the following example demonstrates:

(4) ma ʔandi:ʃ *cheval de troie* baʃ naqdər nħallək ha:d əlmuʃkəl

(I don't have Trojan horse to help you solve this problem)

The expression 'cheval de troie' bears some prestige and is used in a fashionable way to express the speaker's readiness to provide help to his interlocutor. The speaker displays social status when he switches to French to pick up such prestigious expressions. The expression 'Bon appétit' also appears to be copious in the speech of students.

### 3.3.3.3. Code Switching for Quoting

Conley and O'Barr (1990) found that "linguistic variation in any setting is not random, but socially patterned" (in David 2003:8). Our data reveals that a portion (11.25%) of CS from AA to French or vice versa results from quoting. Quoting can cause the language user to shift from one language to another so as to cite the speech of another person. This function is part of the six functions proposed by Gumperz (1982). The following example is a good case in point:

ga:lili ha:kda bəlharf lwa:həd : "je m'en fous d'elle", ga:lha bla ma jaħʃəm

(This is exactly what he said: "I don't care about her". He said it without being ashamed)

The student here speaks mostly in Arabic and switches to French only to report the exact words another person said. Then why would the speaker like to take this trouble and shift to French since it is clear she could use Arabic for the whole report? Myers-Scotton and Bolonyai (2001:22) write: "And, as a rational actor, speakers collect, pay attention to and take account of all these sources of available evidence in calculating the possible outcomes of their decisions regarding how to speak". Therefore, judging from her prior knowledge, the student knows that when one



describes something, it is more efficient and expressive if (s)he can cite the language originally used by other speakers. Switching in this case allowed the speaker to achieve three goals at least. She could: (i) describe the incident accurately and vividly; (ii) ensure authenticity by replicating the language used by the original speaker; (iii) express her dissatisfaction with the person she is reporting. As a result, shifting to French is the optimal choice after her (subconscious) calculation according to the prior knowledge.

Although quoting is not in the original language of the speaker in all cases, the data shows that switching to quote is quite rampant among students. This extends to include even the use of proverbs and idiomatic expressions either in Arabic or in French. Quoting the same words, phrases, sentences, etc, is a good way to reproduce the original event more vividly and clearly, and it is energy-saving to quote directly than to translate. The speakers calculate the cost benefit formula when they decide which code to use.

#### 3.3.3.4. Code Switching for Clarification

Clarification happens when the speaker resolves any ambiguity and prevents misunderstanding or incomplete understanding. In a conversation, bilinguals are expected to use the appropriate language along the accurate style, but vocabulary selection should also be intelligible to allow the interlocutor get the meaning across. In some situations, speakers need to clarify some messages to make themselves clear, and CS can fully fulfil this function. By creating contrast through the juxtaposition of two codes, usually interlocutors' attention is successfully gained.

In our data, switching to clarify occurred 17 times (10,625%). The following example is representative of such a function:

C: rahum jahhadru had lijja:m 'la l*Ebola*.

(These days, [they] are talking about the Ebola).

F: ?asəm ha:d laħbu:ba tani (What's that ?)

C: *l'Ebolat est un virus reponsable de la fièvre hémorragique africaine, un virus de la famille des filoviridés.* fhamti

(Ebola is a virus responsible for the African hemorrhagic fever, a filoviridae virus. Does u see?)

F: ?ijji:h. (Yes)

In this excerpt, C uses Arabic to talk about a fact he has recently heard about regarding the spread of a virus in a particular region. However, the term 'Ebola' does not seem to make sense to F who is looking for validation and clarification. C then immediately switches to French to provide his interlocutor with a piece of information that made her know a virus she ignored before. Note that C concludes his explanation by [fhamti] -a tag question- to verify the listener's understanding of the current clarification, as C wants his statement to be correctly interpreted.

In other examples, CS is also used to translate and the reason from the translation is also to clarify the information. A noticeable pattern among participants is that whenever a situation calls them to provide an explanation, they automatically switch toward the appropriate language to seek the support of the listener.

### 3.3.3.5. Code Switching for Accommodation

One means of expressing social approval is through accommodation. Accommodation in this sense is the act of modifying one's speech in some way to make it more intelligible or appropriate to the addressee (Giles and Coupland, 1991). In bilingual encounters, accommodation is used to refer to the state where an interlocutor adopts the same linguistic choice of the addresser. Table 3.2 shows a higher percentage in favour of switching at the onset of a turn rather than within a turn in conversations between students. The data reveals that, in many cases, when a speaker uses AA, the addressee is likely to use AA too. Then when the former switches to French, the latter is also likely to follow the same language choice.

Consider the following excerpt taken from a conversation between two students (French in italics):

B: rani əmdəgdəg manʔi:ɡʃ nahdər .

(I am very tired. I can't talk)

D: məski:n had ləwlijjəd əlxadma li: bəzza:f ʔajjatu

(Poor little boy! The hard work has made him exhausted)

B: ədḍahki ḍḍahki wa:h j'ai besoin d'un repos.

(Go on laughing! yes, I need a rest)

D: *Un repos! Mais pourquoi? Que ce que t'as fait?*

(A rest! But why? What have you done?)

B: *Ecoute! Pour préparer cet exposé, j'ai fait une nuit blanche.*

(Listen! I spent a whole night to prepare this work)

D: *Maintenant je vois que t'es un étudiant sérieux.*

(Now, I see that you are a serious student)

B: waʔlah ḥsabti rana llaʔbu walla kifa:h

(Why? do you think we are playing or what?)

D: əlla lla ma qultʃ hakdə makkaʃ lli jaḍhak mʔa:k

(No no, I did not say this. Isn't it possible to joke with you?)

B starts the conversation in Arabic and D just follows his language choice. Then B, who is quite tired and barely holds the conversation, diverges in speech when he switches to French. However, the next response of the interlocutor converges and accommodates to the language choice of B. Arabic is evidently the language both participants are most comfortable in, given the fact that it is their shared mother tongue and the dominant language they speak most of the time. The excerpt above indicates

one important verity: D's readiness to accommodate and modify her speech according to the choices of B.

From the data analysis, it appears that accommodation is one of the main functions CS serves. Overall, the data shows that both the students and the teachers take turns to accommodate to one another. Accommodation is clear in a number of points. For instance, in the five cases of 'complete switching' obtained from students-teachers interactions outside the classroom (see figure 3.2), teachers accommodate their students when they use Arabic at the beginning of the conversations. Their language choice is similar to that of their students. In doing so, teachers show flexible relationship and make the opposite part feel at ease. By choosing to use Arabic, teachers try to associate with the conversants and establish *solidarity*. Their language change occurs only when the students have first alternated to French. In this case, teachers are only following code choices of the students (though they are the determinants of this choice as the analysis of the data shows).

In sum, accommodation is worthy of consideration as the speaker seeks to set up by linguistic means a relationship of solidarity with an addressee. CS is sometimes to be interpreted as an act of *convergence* with an interlocutor, and as such it may be a form of accommodation. By switching languages, the speaker creates a friendly and co-operative atmosphere, where communication can be more productive. In general, when speakers desire each other's approval, they attempt to adapt to each other's speech in order to narrow the social distance between them.

However, this is in stark contrast with the pattern of 'parallel codes' identified early in subsection 3.3.2, when students used one code (Arabic) and the teacher spoke a completely different code (French). None of the participants sought to accommodate the other's language choice though mutual understanding was prevalent. Here, the teacher, rather than seeking convergence, enforces distance and *divergence*.

### 3.3.3.6. Code Switching for Untranslatability

According to Barnstone (1993), untranslatability is a property of a text, or of any utterance, in one language for which no equivalent text or utterance can be found in another language. In other words, a text is considered untranslatable when there is no one-to-one equivalence between the word, expression or phrase in the source language and another word, expression or phrase in the target language. In our data, a total of 11 (6,875%) switching cases occurred to serve this function. Discussion of the instances will be under two headings:

1. Cultural differences: Some concepts and words are attached to a particular culture, hence they are only found in the language associated with that culture. Thus, in order to express one's self effectively, the speaker has little option but to switch languages, making the switch almost obligatory (*ibid*), and this is exemplified in the following instance:

(5) *Les traditions où les gens jouent əlbandi:r et les femmes əjzayərtu constituent le charme de la fête traditionnelle.*

(The traditions where people play *əlbandi:r* and women *əjzayərtu* constitute the charm of the traditional celebration)

Both the word [əlbandi:r] (a traditional drum used in folk music) and the verb [əjzayərtu] are related to Arabic, or say Algerian culture, hence associated with the Arabic language. The speaker is urged to switch to Arabic to pick up the two words which take no share in the culture of the language of discourse, then immediately goes back to French to conduct the rest of the conversation. It is clear that the two terms are not in the French linguistic repertoire, and thus adopting the native items is the best and the most expressive solution, since the interlocutors are also Arabophone.

2. Honorifics: Switching on the part of the speaker can be caused by the use of honorific words, and these are terms/titles that precede one's name. The following example shows the case in point:

(6) *Parmi les gens qui ont contribué à l'indépendance culturelle de l'Algérie c'est əʃʃajχ Ibn Badis avec son orientation islamique.*

(Among the people who have contributed to the cultural independence of Algeria is sheikh Ibn Badis with his Islamic orientation)

The speaker injects an Arabic word ([əʃʃajχ], 'sheikh') in a predominantly French sentence to express an attitude of respect toward 'Ibn Badis' (an Algerian scholar and revolutionary man). [əʃʃajχ]<sup>61</sup> is an approving term, and it is the most recognisable word in this context as compared to any other French word.

Other noticeable switches coincide with the insertion of some widely used expressions, most notably [nʃa: llah] (which appears very frequently in the speech of people to mean 'God willing') and [ʃalla lla:hu ʔalajhi wa salləm] (used typically when the name of the prophet 'Mohammed' is mentioned). Other instances expose switching from Arabic to French, specifically when dealing with cultural aspects different from the local one (e.g. the French *bûche de Noël*, 'Yule log').

### 3.3.3.7. Code Switching for Emphasizing

Again, it was Zentella (1997) who first identified this function of CS. During a conversation, sometimes the speakers want to emphasize a fact or stress a particular idea and do so by addressing the point in a different language. Our data reveals that switching codes to emphasize occurred 9 (5,625%) times, and the following instance exemplifies such a function:

E: *C'est une maladie infectieuse.* (It is an infectious disease)

F: *Non. C'est organique.* (No. It is organic)

E: *Oui oui, mais c'est la cause d'une infection.* (Yes yes, but it's caused by an infection)

<sup>61</sup> In classical Arabic, the title 'sheikh' is reserved to religious scholars or leaders of tribes. In addition to the original use, AA speakers sometimes use the title as an ordinary word to address any person they don't know his name or who is distant and it is realized as [əʃʃi:χ]. They also use it to address male teachers.

F: Pef ?alla maraḍ ʔoḍwi: ʔoḍwi: *c'est la conséquence d'un déséquilibre fonctionnelle de l'organisme ce n'est pas une cause virale.*

(Pef! No organic organic disease. It's the consequence of a functional imbalance of the organism but not a viral cause)

Student F is trying to emphasize the point that the disease they are talking about is classified as 'organic' rather than 'viral'. In doing so, she switches from French to Arabic and used the word 'ʔoḍwi:' (organic) to stress the difference between the two types of disease, and this is confirmed through her repetition of the Arabic term, which is in fact just a translation of the French word 'organique'. In this situation, the emphasizing function is used to demonstrate disagreement with the other conversant.

### 3.3.3.8. Code Switching for Euphemism

There are some words which are culturally unacceptable in certain situations in every society. Bilinguals have the advantage of avoiding these words by switching to another language in which these items bear no, or at least less, vulgarity. The following example shows how code switching provides the necessary support to the speaker in order to act in an appropriate way and express the same meaning:

(7) makan la ḥubb la walu əlḥubb tta: ʔ lju:m *c'est de la merde* ənnsa dʒihum  
ra:ʒəl (pause) *putain* waʃ ngu:l

(There is no love. Today, love is shit. Women, when you respect them (pause)  
bitch what to say!)

The speaker has just broken up with his girl friend, and he is expressing his opinion about love and girls. He is upset and he perhaps wants to say a lot. But saying dirty words in Arabic is a real social gaffe. Therefore, he switches to French, which made him abreact his angry feeling successfully. The addressees in this conversation included boys and girls. Though the speaker used two taboo words ('merde' and 'putain'), he created no offensive reaction among his interlocutors because the two French words are *less loaded* compared to their Arabic equivalents. Using the Arabic

terms would neither be appropriate nor acceptable. The speaker used CS to fulfil a euphemism function. Such example shows that bilinguals are rational actors, and when they switch, they are quite purposive.

Such a function, that is euphemism, can also be discussed in situations when the speakers perform CS in an effective way to save faces through softening the tone of the message conveyed. A word, expression, or sentence may bear a tough tone in one language, but when translated it may appear in a soft tone, and this successfully helps navigate in social interaction.

In our data, these are the major functions CS serves. However, it is admittedly limited in several ways that might be addressed in future research. One important limitation relates to informants, as the pattern of 'mixed codes' is inspired by conversations between 4<sup>th</sup> year Microbiology students. If informants from first year, for instance, were included, other/additional functions would probably be identified. Therefore, the informants and also the number of CS utterances (160 cases) limit the ability to generalize the investigation findings.

### 3.4. Part Two: Structural Considerations of AA-French Switching

By the early 1980s, research on language alternation has developed to include the linguistic aspects of CS, rather than just accounting for its sociolinguistic nature and the pragmatic functions it serves. This part of the investigation constitutes a brief structural consideration of AA-French switching and tries to provide answers to the third research question. In doing so, the analysis will typically concern the pattern of 'mixed codes', more precisely 'switching within a turn' identified early in table 3.2.

Switching at the onset of a turn includes two grammatical types: intersentential and extrasentential switching (see subsection 2.4.3 for examples). Both types are regarded as less challenging, since switched utterances *follow* the grammar of one language or the other.



The combination of languages within a turn (intrasentential) has proved most intriguing to linguists, for it takes the greatest syntactic risk. Intrasentential switching is now known to be grammatically constrained. Thus, the (morpho)syntactic boundaries at which bilinguals tend to switch intrasententially deserve to be considered. The data analysis will be considered in the light of two constraints proposed by Poplack (1980), the 'free morpheme' and the 'equivalence of structures' constraints, in addition to the 'MLF' model put forward by Myers-Scotton (1993b).

### 3.4.1. AA-French Switching and the Free Morpheme Constraint

The 'free morpheme' constraint predicts that a switch will not occur between a lexical stem and a bound morpheme; as Poplack (1980:585) puts it, "Codes may be switched after any constituent provided that constituent is not a bound morpheme". The only exceptions are when a stem has been phonologically integrated into the language of the bound morpheme. Accordingly, only free morphemes can be switched within sentences which are otherwise in another language. Thus, the following examples are permissible:

- (8) On a trouvé *əlfɑ:r* que t'as perdu la dernière fois.  
(We have found the mouse you lost last time)
- (9) taqdər ddi:r kul wa:ħəd fī *flacon*.  
([You] can put each one in a flacon.)

While (8) involves the insertion of an Arabic word in a French sentence, (9) shows the opposite. Both [əlfɑ:r] ('mouse') in (8) and 'flacon' in (9) are permitted to be incorporated in the two sentences, for they are *free* morphemes. This constraint seems to apply perfectly to a great number of mixed sentences. However, in other data sets, counter examples are not hard to find. Consider the following instances:

- (10) Tu peux analyser-*hum* la façon que tu veux.  
(You can analyse them the way you want)

(11) *jabyi j-poser la recherche...*

([He] wants put down the research...)

The lexical items 'analyser-*hum*' and 'j-poser' in (10) and (11) respectively consist of morphemes from both the ML and the EL. The French verb stem 'analyser' (in its infinitival form) is inflected with the Arabic suffix 'hum'. Such intraword switching is copiously obtained in our data, such as in 'neutralisi:h' (neutralize it), 'pasteurisa:whum' ([they] pasteurized them), 'netoyeha' (clean it), etc. Then, in (11), the prefix /j/ (the 3<sup>rd</sup> person masculine singular marker used in the present tense in Arabic) is added to the French verb 'poser'. Here, the switch also occurred across internal morpheme boundaries involving an inflectional morpheme from Arabic and a root from French (in our data, inflections always come from Arabic). All such examples represent counter evidence to the free morpheme constraint, making it workable at some points and invalid at others.

### 3.4.2. AA-French Switching Within the Equivalence Constraint

The 'equivalence of structures' constraint advanced by Poplack is one of the most influential constraints that has attracted much scholarly attention. According to Poplack (1980:586):

code-switches will tend to occur at points in discourse where juxtaposition of L1 and L2 elements does not violate a syntactic rule of either language, i.e. at points around which the surface structures of the two languages map onto each other.

Thus, surface structures common to both languages are favoured for switches. This constraint is illustrated below. The lines indicate permissible switch points, and the arrows indicate the surface relationships of constituents in the two languages. Switches occur at the lines:

Arabic: ?ana	ʃəft	ha:d	əʃʃari:t	mʕa	wa:həd	ʃəhbi
↓	↓	↓	↓	↓	↓	↓
French: j'	ai vu	ce	documentaire	avec	un	ami

(I saw this documentary with a Friend of mine)

Poplack and her associates (1981) argue that an independent CS grammar, incorporating rules from the two monolingual grammars but distinct from either, produces CS utterances. This suggests that the rules used to build switched utterances may be drawn at times from one language and at times from the other. For them, the output of such grammar is controlled primarily by the equivalence constraint, which ensures that switching occurs only between elements that are normally ordered in the same way by the monolingual grammar. On the other hand, switching is forbidden where there is a mismatch in constituency between the two languages.

Our data yield various instances of switches at different syntactic environments in Arabic or French (French in italics). Sometimes the switching involves larger constituents (e.g. verb phrase (VP), noun phrase (NP), etc) and sometimes smaller constituents (e.g. verbs, adjectives, etc), and nouns are the most often highly switched utterances. Within noun boundary, switches occurred mainly between determiner and noun as in (12), and noun and adjective like in (13):

(12) ha:d *la partie* əmʕammra bə ssawa:ʔil  
(This part is full of liquids)

(13) fəwtu jjama:t *difficiles* mnin bəddu  
([They] passed through hard days when they started)

Within sentence boundary, switches were found between subject and verb (14), verb and object (15), verb and adverb (16), verb and prepositional object (17).

(14) *Les cours* jbəddu bakri bə ttni:n.  
(Lectures start early on Monday)

(15) waʒʒət *les procédures nécessaires*.  
([I] prepared the necessary procedures)

(16) tamʃi *partout* nna:s taʕʕarfək  
(Anywhere you go people know you)

(17) kut *à la bibliothèque centrale* mʕa ʕha:bi  
([I] was in the central library with my friends)

There are also cases of switches where an Arabic prefix is followed by a French verb. For instance, in (18), the auxiliary [ya:di] (the periphrastic future in AA) and the /n/ (the 1<sup>st</sup> person singular marker used in the present tense in Arabic) are used with the French verb 'visiter', as shown below:

(18) *ya:di nvisiter ʒaddati.* ([I] will visit my grandmother)

The findings reveal a great deal of instances where the grammar of the mixed sentences aligns with those of the monolingual grammars of either language. For instance, example (17) mentioned above and repeated here as (19) is representative of such cases:

(19) *kut à la bibliothèque centrale*      *m<sup>ʕ</sup>a ʃha:bi*      (mixed sentence)  
 --- *fə lmaktaba*      *əlmakazijja* -----      (the Arabic sentence)  
*J'etais*----- *avec mes amis*      (the French sentence)

Note that the surface structures of both Arabic and French coincide, and the morphemes order is respected in either language. Thus, the switch ‘à la bibliothèque centrale’ is permissible, since the equivalence of structures holds (even the Arabic switch [*fə lmaktaba əlmakazijja*] inserted in the French sentence is possible)

On the other hand, a number of switching cases occurred even though the surface structures of the two languages are not equivalent. Consider the following example (French in italics):

(20) *jaklu les deux en même temps* *mən plat wa:həd.*  
 (jaklu      *bzu:ʒ*      *fī: wa:həd*      *waqt mən ʃhan wa:həd\**) (Arabic sentence)  
 (Mangent *les deux en même temps du plat même \**) (French sentence)  
 (The two eat at the same time from the same plate)

In this example, there exists a clash between Arabic and French word order within the VP ‘*jaklu les deux*’ and the NP ‘*mən plat wa:həd*’. Constituents generated by a rule from one language (Arabic) which is not shared by the other (French) as it will be explained below. Worthwhile mentioning examples of non-equivalent structures of Arabic and French where CS occurred are the following:

- Switching between subject and main verb: In Arabic the required ordering of constituents in declarative sentences is mainly VSO (verb-subject-object). However, in French declarative sentences, the required order is SVO (subject-verb-object) where the subject must precede the verb. The VPs in (14) (*Les cours jbəddu*) and in (20) (*jaklu les deux*) violate this grammatical rule of Arabic and French respectively.
- Switching between an adjective and a noun: In Arabic adjectives must follow the nouns they modify. While this is true for most French adjectives, there are some others which must precede their nouns. The equivalence constraint would predict that a switch is only possible where an adjective follows a noun, since this is the only order common to both languages. However, the data shows some instances which contradict this claim as the following example shows (the Arabic adjective in bold characters):

(21) da:rtəna *une tache* **kbira** hna

(It caused a big spot around here)

The utterances '*une tache kbira*' is the equivalent of the French 'une grande tache', where the adjective 'grande' precedes its noun ('tache').

- Another difference between French and Arabic structures is the use of a definite article before an adjective. Arabic requires that an adjective within a defined noun phrase to be accompanied by a definite article. For example, in AA, we have /əʒʒbəl əlʔa:li/, literally 'the mountain the high'. In French, however, the adjective is not preceded by a definite article.
- The difference of number of determiners in noun phrases between the two languages: In French, a noun is only preceded by a single definite or indefinite determiner. While this is true in Arabic, there are cases where a noun may contain a sequence of two determiners as the demonstrative /ha:d/, and that must be followed by a definite article. In the data, there are instances of

switches between Arabic determiners and French nouns in an Arabic surface structure as in examples (12) 'ha:d *la partie*', literally 'this the part'.

These violations of the syntactic rules and structures of one language or the other provide evidence to refute universal validity Poplack and her associates assign to the two aforementioned constraints. The major issue with the 'equivalence of structures' constraint, as well as other constraints addressed earlier by different linguistics, is that they attempt only to identify sites at which switching is permitted or blocked, rather than explaining which constituents can be switched and why (Treffers-Daller, 1994).

Unlike other scholars, Myers-Scotton approaches CS from the standpoint of the language production process. In her view, CS can be accounted for only by examining "how language is accessed and retrieved before it takes its final form" (1993b:45), through considering CS under a production-based model termed the Matrix Language Frame model (MLF model).

### 3.4.3. AA-French Switching Within the MLF Model

The MLF model is built on the notion that one of the codes taking part in CS, referred to as the matrix language (ML), sets the grammatical frame of mixed constituents, and this frame consists of morpheme order and system morphemes. The other language involved, from which elements are incorporated into the ML frame, is the Embedded Language (EL). Myers-Scotton (1993b) stresses the notion of asymmetry when arguing that the ML and the EL within a single mixed sentence do not participate equally. Strictly speaking, it is the projection of complementizer (CP), roughly equivalent to a clause, that is the relevant unit of analysis for this model. In other words, the MLF model is concerned with intrasentential, rather than intersentential, switching. The mixture may appear in two forms, one involving lone morpheme EL switches, as in (22), and the other involving EL islands (multiword), as in (23) (French in italics):

(22) *Je veux savoir* ʃku:n *le responsable*

(I want know who is the responsible)

- (23) fəwwatna mʕa:hum *de bons moments* lba:rəh  
 ([We] spent good times with them yesterday)

The theoretical claims of the MLF model are organized as a set of interrelated hypotheses, with the ML hypothesis followed by the Blocking Hypothesis constructing the core conception of the model (the data analysis will only be in the light of these two hypotheses). The ML sets the morphosyntactic frame for ML+EL constituents. Thus, CS involves a single grammar rather than interacting grammars. But how to identify the ML in the first place? Myers-Scotton (ibid) defines the ML as “the language of more morphemes in interaction types including intra-sentential CS” (p.68). This is true if we consider the following example from our data: /Kunna ga:ʕ *din ensemble*/ (we were sitting together). Here, Arabic is the ML (two items), while French is the EL (one item, in italics). However, this criterion does not seem to apply to the instance below:

- (24) hallalna zu:ʒ tta:ʕ *les échantillons la dernière fois*.  
 (Last time, we analysed two samples)

In (24), the number of French morphemes (in italics) exceeds that of Arabic morphemes, yet the latter language begins the sentence and contains the sentence verb. Here, one might argue that the syntactic core of the sentence is Arabic, and assign the ML to that language. In fact, identification of the ML is problematic. However, speakers and hearers are generally able to decide which language is the ML.

The ML hypothesis focuses most of its attention to constraints operating on two types of single-morpheme occurring switches: those involving ‘system’ morphemes and those containing ‘content’ morphemes. It has, however, less to say about EL larger constituents. Analysis below will therefore focus only on EL single switches in the light of:

### 3.4.3.1. The System Morpheme Principle

Such a principle predicts that EL system morphemes cannot *generally* be inserted into the ML frame, unless they appear in EL islands. It simply stipulates that all syntactically relevant system morphemes in a CS utterance will belong to the ML. System morphemes differ from content morphemes in terms of three features: [+/-quantification], [+/-thematic-role assigner], and [+/- thematic-role receiver] (Jake & Myers-Scotton, 1992). System morphemes are characterized with [+quantification], such as items which express quantification over individuals (e.g. determiners, possessive adjectives) or quantification over events (e.g. tense morphemes). Items that are [-quantification] are usually content morphemes. These are also either thematic-role assigners (e.g. verbs and some prepositions) or thematic-role receivers (e.g. adjectives). System morphemes neither assign nor receive thematic-roles.

Evidence that system morphemes in mixed CPs must come from the ML is not hard to find, as some of the data demonstrate:

(25) ha:d əlmarra ɣa:di nahdər mʕa:h *sérieusement*.

(This time, I will talk to him seriously)

(26) kut ɣabbartu bælli ra:k *envoyer-tu* lba:rəh

(I told him that you have sent it yesterday)

(27) ha:d *la partie* əmʕammra bə ssawaʔil

(This part is full of liquids)

It is clear that the ML in the three examples is Arabic. Concerning (25), note that the determiner /ha:d/, the verb tense marker /n/ in /nahdər/, and the preposition /mʕa:h/ (inflected with /h/), as *system* morphemes, all come from Arabic. The EL item (in italics) here is a French content morpheme- an adverb integrated into the ML frame. Again, in (26), while the content morpheme 'envoyer' comes from French, its object pronoun [tu] comes from Arabic. However, in example (12), which is repeated here as (27), though Arabic is the ML of the whole mixed CP, the definite article 'la', as system morpheme, comes from French. But this cannot be accounted for as a violation of the system morpheme principle, since the latter operates on single-morpheme switches. This is not the case with the switch 'la partie' which constitutes



an EL island. In fact, our data reveals no instances that falsify the principle under discussion, with the exception of a few examples that will be discussed under the Blocking Hypothesis.

### 3.4.3.2. The Morpheme Order Principle

It states that EL content items, when appearing in ML+EL constituents, must obey the morpheme order of the ML, and this is clear in the following instance:

jaxxadmu	fi	<i>groupe</i>	wa:həd	(mixed CP, French in italics)
[ils]travaillent	dans	groupe	même *	(the French equivalent of the CP)
([they] work	in	group	[the] same*)	(English literal translation)

This example shows a French item, 'groupe', inserted in a predominantly Arabic sentence. In the NP /fi *groupe* wa:həd/, the EL morpheme follows Arabic rules violating thus French syntactic restrictions. The same violation applies to the NP (/mən *plat* wa:həd/) in example (20). Evidence demonstrates that the morpheme order principle holds categorically when a lone other-language item occurs in the context of the ML. Whenever there is a clash between morpheme order of the ML and the EL in the mixed CP, the ML order prevails. Such fact constitutes counter evidence to Poplack's (1980) constraint of 'the equivalence of structures'.

### 3.4.3.3. The Blocking Hypothesis

This hypothesis provides support to the 'system morpheme principle' and operates on instances in which a syntactic category is a 'system' morpheme in one language and a 'content' morpheme in another. It also predicts that EL content morphemes will occur in mixed CPs subject to the condition that such morphemes must meet certain congruency with their ML counterparts (congruency in regard to subcategorisation related to thematic-role assignment). For open-class items, such as nouns and adjectives, it would seem that congruence in semantics and categorical status is usually sufficient for a switch to occur (Myers-Scotton, 1993b). However, sometimes EL *system* morphemes are also permitted to be incorporated into the ML frame because they are triggered by congruence as well. For instance, subordinating

conjunction introducing clauses of quantity can be switched in AA-French, as it is indicated below:

*Tu dois ajouter l'alcool hatta tu atteins le niveau B.*

(You should add alcohol until you reach level B)

In this sentence, the Arabic complimentizer /hatta/ necessarily introduces a finite clause. It is thus a *content* morpheme, since it participates in the thematic-role grid. /hatta/ is congruent in meaning, categorical status, and subcategorization with its respective French counterpart 'jusqu' à ce que' (Tu dois ajouter l'alcool jusqu' à ce que tu atteigne le niveau B). Hence the former can substitute the latter. However, the following mixed sentence is not permissible as the switch is ungrammatical:

*Il a travaillé beaucoup hatta atteindre son but\*.*

(He worked hard until he reached his goal)

Here, the switch /hatta/ does not assign the thematic-role to the sentence. Therefore, the switch is blocked because of the mismatch in subcategorization with its French counterpart.

In sum, the analysis of the mixed CPs reveals no counter evidence to the MLF model. No instances have been found to falsify the theoretical claim of Myers-Scotton's model.

### 3.5. Conclusion

In a community where all members have access to two codes, speakers will sometimes prefer one over another. Language choice is for the most part patterned and predictable, and in order to determine the social significance of any one utterance, we need to consider some contextual clues by which bilinguals arrive at correct interpretation of social meaning. It is evident that the topic discussed, the participants involved, alongside the ecological surrounding, are all strong social triggers that dictate code selection.

Far from being considered as an aberrant form of language use, alternating between the available codes in the repertoire is a conversational strategy and speakers, as rational actors, achieve communicative goals via code switching. They calculate the cost benefit formula when they decide which code to use.

Again, mixing elements from two different linguistic systems is not a haphazard behaviour. Poplack's 'free morpheme' and 'equivalence of structure' constraints are considered to be among the major proposals to account for grammatical restrictions on switched utterances. However, both constraints fit some language pairs more than others and the basis for this is the countless counter-evidence instances in the literature. This investigation phase has also revealed a number of counter-examples from AA-French mixed sentences. This is not the case with Myers-Scotton's MLF model which holds in most cases, as we have seen in our data.

## **General Conclusion**

## General Conclusion

The question "Why should speakers who are bilingual in the same languages favour one language over another in certain situation when just one language could do?" is of paramount importance. Empirical studies, including this research work, reveal that code choice is constrained by a number of factors that motivate people to switch codes. The topic discussed, the participants involved, alongside the physical setting of the social encounter stand out as strong triggers that operate to influence bilinguals' language of discourse. Speakers, as rational actors, know which code to use with whom, under what circumstances, and for what type of transactions. They intuitively have a sense of markedness, and they are able to identify whether a code is unmarked or marked, that is whether it is expected or out of place. Their linguistic choice seeks to achieve optimality. But, though external factors act as code determinants, bilingual speakers may choose to reject the norms of society at large when they use a marked, unexpected code, and this is to achieve certain ends such as enforcing distance, showing disapproval or displaying social status.

Bilingual speakers use code switching as a conversational strategy to enhance communication. Their manipulation of the two codes serves them well to attend interactional objectives through different strategies. Our research work demonstrates that at certain points, code switching serves as an efficient mechanism to compensate for linguistic gaps in one language or the other. At others, however, CS is performed with the aim of showing skillful management and manipulation of both languages and making the expressions aesthetic. CS is also used for clarification, by which speakers can avoid confusion and express themselves clearly; for accommodation, when they seek convergence and approval in social encounters; for quoting, by which they can resolve what happened vividly and at the same time guarantee authenticity; for emphasis, when they stress a point or a fact; for euphemism to allow speakers employ words and phrases that are culturally unacceptable but still can save their faces; and it

is also used to provide support when some culturally-oriented words and phrases that do not exist in certain languages are confronted (untranslatability). It should be noted at the outset that these are only some functions CS serves. The analysis of different speech communities and varied data sets will *de jure* or *de facto* reveal other/additional functions. We may conclude then that CS is a useful sociolinguistic tool to be seen in terms of the benefit and functions it fulfils. It is definitely a valuable communication strategy that helps successfully navigate in social interactions.

When occurring in a single conversation, CS appears in two broad patterns- one involving alternation of structures from two languages, the other insertion of elements from one language into the grammatical frame of the other. Prototypical examples of the former are alternations between entire sentences/clauses. Instance of the latter include cases in which lone morphemes or phrases of language A are inserted into the structure of language B. This latter pattern has received most linguists' attention. Far from being considered as a rustic way of speaking, deficient form of language use, or random linguistic behaviour, CS is perfectly rule-governed. The basis for this is the empirical observation that bilingual speakers tend to switch intrasententially at certain (morpho)syntactic boundaries and not at others. Thus, embedding linguistic elements from one language into sentences that are otherwise in another language is controlled by certain grammatical restrictions in much the same way that monolingual utterances are. Though many linguists have proposed different sets of structural restrictions that operate on mixed sentences, Poplack (1980) and Myers-Scotton (1993b) remain the most influential figures to account for CS from a syntactic standpoint. Poplack's 'free morpheme' and 'equivalence of structures' constraints seem to apply perfectly to a great number of instances in our Algerian Arabic-French corpus analysis. However, they remain largely language-specific as they have basically been inspired by Spanish-English switching. Different studies on different language pairs, such as Berk-Seligson's (1986) study on Hebrew-Spanish, Bokamba's (1988) work on Linguala-French, Panditt's (1990) analysis of English-Hindi corpus, in addition to

some other works even on Spanish-English switching, reveal counter evidence to Poplack's suggestions. Algerian Arabic-French switching also provides interesting counter examples, confirming thus the non-universality of such constraints.

The dominant model to account for mixed sentences is Myers-Scotton's MLF model. In this approach, CS utterances are seen as generated by a single grammar- that of the ML. The notion of congruence between ML and EL elements is central in this approach, as inserting utterances is highly sensitive to the subcategorization requirements of the ML constituents. As long as such ML subcategorization holds, single EL morphemes that match their ML counterparts can be freely inserted into the ML frame. *Contra* other models and proposals, the MLF model has been less challenged. Our AA-French intrasentential switching analysis also reveals no counter evidences that falsify the claims of such a model.

It should be mentioned that the findings in this research work are admittedly limited in several ways that might be addressed in future research. One important limitation relates to informants, as the data analysis more or less focuses on instances revealed by conversations between 4<sup>th</sup> year Microbiology students. The number of CS utterances also limits the ability to generalize the investigation findings.

# **Bibliography**



## Bibliography

- Al-Batal, M. (1995). Issues in the teaching of the productive skills in Arabic. In M. Al-Batal (ed.), *The teaching of Arabic as a foreign language: Issues and directions* (1995: 115-33). Provo, Utah: American Association of Teachers of Arabic.
- Auer, P. (1984). *Bilingual Conversation*. Amsterdam: John Benjamins.
- Backus, A. M. (1996). *Two in one: Bilingual speech of Turkish immigrants in The Netherlands*. Tilburg, the Netherlands: Tilburg University Press.
- Barker, G. (1947). Social Functions of Language in a Mexican-American Community. *Acta Americana*, 5:185-202.
- Barnstone, W. (1993). *The Poetics of Translation: History, Theory, Practice*. New Haven and London: Yale University Press.
- Bautista, M. L. S. (1980). The Filipino Bilingual's Competence: A model Based on an Analysis of Tagalog-English Code-Switching. *Pacific Linguistics Series C-9L*. Canberra: Australian National University.
- Beardsmore, H. B. (1986) (2<sup>nd</sup> ed.). *Bilingualism: Basic Principles*. British Library Cataloging in Publication Data. England.
- Belazi, H. M., Rubin, E. J., & Toribio, A. J. (1994). Code switching and X-bar theory: The functional head constraint. *Linguistic Inquiry*, 25: 221-37.
- Benmoussat, S. (2003). *Mediating Language and Culture: An Investigative Analysis of the Cultural Dimension in the Algerian Newly-Designed ELT Textbooks*. Unpublished Doctorate Thesis. Tlemcen University.
- Bhatia, T. K., & Ritchie, W. C. (2004). Introduction. In T. K. Bhatia, & W. C. Ritchie (ed.), *The Handbook of Bilingualism* (2004:1-3). Blackwell Publishing.
- Blom, J. P., and Gumperz, J. J. (1972). Social Meaning in Linguistic Structures: Code-Switching in Norway. In J. J. Gumperz & D. Hymes (Eds.), *Directions in sociolinguistics: The ethnography of communication* (1972:407-34). New York: Holt, Rinehart, and Winston.

- Bloomfield, L. (1927). Literate and illiterate speech. *American Speech*, 2:432-39.
- Bloomfield, L. (1935). *Language*. London: Allen and Unwin.
- Bowers, J. (1968). Language problems and literacy. In J. Fishman, C. Ferguson, & J. Das Gupta (eds), *Language Problems and Developing Nations* (1968). New York: John Wilers and Son.
- Brann, C. M. B. (1994). The National Language Question: Concepts and Terminology. *Logos*, 14: 125-34. University of Namibia, Windhoek
- Callahan, L. (2004). *Spanish/English Codeswitching in a Written Corpus*. John Benjamins.
- Chambers, J. K. & Trudgill, P. (1998) (2<sup>nd</sup>ed). *Dialectology*. Cambridge Univ. Press
- Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press.
- Clyne, M. G. (1987b). History of research on language contact. In H. U. Ammon, N. Dittmar, & K. J. Mattheier (eds.), *Sociolinguistics-Soziolinguistik*, 1:452-9. Berlin: Walter de Gruyter.
- Crystal, D. (1997). *English as a Global Language*. Cambridge: Cambridge University Press.
- Davesne, A. (1933). *La langue française, langue de civilisation en AOF*. Saint-Louis. 16
- David, M. K. (2003). Role and functions of code-switching in Malaysian courtrooms. *Multilingua*, 22: 5-20.
- Dendane, Z. (2007). *Sociolinguistic Variation and Attitudes Towards Language Behaviour in an Algerian Context: The Case of Tlemcen Arabic*. Unpublished Doctorate Thesis. Oran University.
- Eastman, C. M. (1992). Codeswitching as an urban language contact phenomenon. *Journal of Multilingual and Multicultural Development*, 13:1-17.
- Edwards, j. (1994). Bilingualism and Multilingualism. In M. J. Ball (ed), *Clinical Sociolinguistics* (2005:36-48). Blackwell Publishing.

- Ennaji, M. (2005). *Multilingualism, Cultural Identity, And Education In Morocco*. University of Fés, Morocco.
- Ferguson, C. A. (1959). Diglossia. In D.Hymes (ed.), *Language in Culture and Society* (1964: 429-39). New York: Harper & Row.
- Fishman, j. A. (1967). Bilingualism with and without diglossia; diglossia with and without bilingualism. *Journal of Social Issues*, 32:29-38.
- Fishman, J. A., & Greenfield, L. (1970). Situational measures of normative language views in relation to person, place and topic among Puerto Rican bilinguals. *Anthropos*, 65:602-18.
- Fishman, J. A. (1972). Domains and the relationships between micro-and macro-sociolinguistics. In J. J. Gumperz & D. Hymes (eds.), *Directions in sociolinguistics: The ethnography of communication* (1972:435-53). New York: Holt, Rinehart and Winston.
- Gardner-Chloros, P. (1995). Code-switching in community, regional and national repertoires: the myth of the discreteness of linguistic systems. In L. Milroy & P. Muysken (eds.), *One Speaker, Two Languages: Cross Disciplinary Perspectives on Code Switching* (1995:68-89). Cambridge: Cambridge Univ. Press.
- Green, T. M. (2003) (3<sup>rd</sup>ed.). *The Greek and Latin Roots of English*. Rowman & Littlefield Publishers, INC.
- Giles, H., & Coupland, N. (1991). *Language, Contexts and Consequences*. Milton Keynes: Open University Press.
- Grice, H. P. (1975). Logic and Conversation. In P. Cole and J. L. Morgan (eds.), *Syntax and Semantics* (pp.41-55). New York: Academic Press.
- Grosjean, F. (1982). *Life with two languages: An introduction to bilingualism*. Cambridge, MA: Harvard University Press.
- Gumperz, J. J. (1982). *Discourse strategies*. Cambridge: Cambridge University Press.
- Gumperz, J. J., & Wilson, R. (1971). Convergence and Creolization: a Case from the Indo-Aryan/ Dravidian Border in India. In D. Hymes (1971a:151-67).

- Hamers, J. F., & Blanc, M. H. A. (2000) (2<sup>nd</sup>ed.). *Bilinguality and Bilingualism*. Cambridge: Cambridge Univ. Press.
- Haugen, E. (1950a). Problems of bilingualism. *Lingua*, 2:271-90.
- Haugen, E. (1953). *The Norwegian language in America: A study of bilingual behavior*. Philadelphia: University of Pennsylvania Press.
- Haugen, E. (1966). Dialect, Language, Nation. *American Anthropologist*, 68: 922-35.
- Haugen, E. (1989). The Rise and Fall of an Immigrant Language: Norwegian in America. In Dorian (1989: 61-73).
- Heller, M. (1988a). *Codeswitching: Anthropological and Sociolinguistic Perspectives*. Berlin: Mouton de Gruyter.
- Heller, M. (1988b). Strategic Ambiguity: Code-switching in the Management of Conflict. In M. Heller (ed.), *Codeswitching: Anthropological and Sociolinguistic Perspectives* (1988b:77-96). Berlin: Mouton de Gruyter.
- Herbert, R. K. (2001). Talking in Johannesburg: the negotiation of identity in conversation. In R. Jacobson (ed.), *Trends in Linguistics: Codeswitching Worldwide II* (2001:223-49). Berlin: Mouton de Gruyter.
- Hoffmann, C. (1991). *An Introduction to Bilingualism*. Longman London.
- Hudson, R. A. (1996) (2<sup>nd</sup>ed.). *Sociolinguistics*. Cambridge: Cambridge Univ. Press.
- Hymes, D. (1962). The ethnography of speaking. In T. Gladwin and W. C. Sturtevant (eds.), *Anthropology and Human Behavior*, (pp.15-53). Washington, D. C: Anthropological Society of Washington.
- Joshi, A. (1985). Processing of sentences with intrasentential code switching. In D.R. Dowty, L. Kattunen, & A. Zwicky (eds.), *Natural language parsing: Psychological, computational and theoretical perspectives* (pp.190-205). Cambridge: Cambridge University Press.
- Keller, R. E. (1982). Diglossia in German-Speaking Switzerland. In W. Haas (ed.), *Standard languages, Spoken and Written*, (pp.70-93). Manchester: Manchester University Press.

- Labov, W. (1971). The notion of 'system' in Creole languages. In D. Hymes (Ed.), *Pidginization and creolization of languages* (pp.447-472). Cambridge: Cambridge University Press.
- Lambert, W. E. (1967). A Social Psychology of Bilingualism. In C. B. Paulston & G. R. Tucker (ed.), *Sociolinguistics: The Essential Readings* (2003: 305-21).
- Le Page, R. B., & Tabouret-Keller, A. (1985). *Acts of identity: Creole-based approaches to ethnicity and language*. Cambridge: Cambridge University Press.
- Lustick, I. (1985). *State-Building: Failure in British Ireland and French Algeria*. Institute of International Studies. University of California, Berkeley. N° 63.
- McClure, E. (2000). Oral and Written Assyrian-English Codeswitching. In R. Jacobson (ed.), *Trends in Linguistics: Codeswitching Worldwide II* (2001: 157-92). Berlin: Mouton de Gruyter.
- Mclaughlin, B. (1984) (2<sup>nd</sup> ed.). *Second-Language Acquisition in Childhood, Vol 1 Preschool Children*. Hillsdale, London.
- Meeuwis, M., & Blommaert, J. (1994). The markedness model and the absence of society: Remarks on codeswitching. *Multilingua*, 13: 387-423.
- Muller, N, & Ball, M, J . (2005). Code-Switching and Diglossia. In M. J. Ball (ed), *Clinical Sociolinguistics* (2005: 49-62)). Blackwell Publishing.
- Muysken, P. (2000). *Bilingual Speech: A Typology of Code-Mixing*. Cambridge: Cambridge University Press.
- Myers-Scotton, C. (1992). Comparing codeswitching and borrowing. *Journal of Multilingual and Multicultural Development*, 13: 19-39.
- Myers-Scotton, C. (1993a). *Social motivations for codeswitching: Evidence from Africa*. Oxford: Clarendon Press.
- Myers-Scotton, C. (1993b). *Duelling languages: Grammatical structure in codeswitching*. Oxford: Clarendon Press.
- Myers-Scotton, C. (1997). Code-switching. In F. Coulmas (ed), *The Handbook of Sociolinguistics* (2003: 217-37). Oxford: Blackwell.
- Myers-Scotton, C. and Jake, J. L. (2000). Testing a Model of Morpheme Classification with Language Contact Data. *International Journal of Bilingualism* 4/1: 1-8

- Myers-Scotton, C., & Bolonyai, A. (2001). Calculating Speakers: Codeswitching in a Rational Choice Model. *Language in Society*, 30: 1-28.
- Myers-Scotton, C. and Jake, J. L. (2001). Explaining Aspects of Codeswitching and Their Implications. In J. Nicole (ed.), *One mind, Two Languages: Bilingual Language Processing*.
- Myers-Scotton, C. (2001a). The Matrix Language Frame Model: Developments and Responses. In R. Jacobson (ed.), *Trends in Linguistics: Codeswitching Worldwide II* (2001: 23-58). Berlin: Mouton de Gruyter.
- Myers-Scotton, C. (2002). *Contact Linguistics: Bilingual Encounters and Grammatical Outcomes*. Oxford University Press.
- Palmer, J. (2007). Arabic Diglossia: Teaching Only The Standard Variety Is A Disservice To Students. *Arizona Working Papers in SLAT—Vol. 14*
- Pan, Y. (1997). *You are my friend: code-switching in Chinese service encounters*. Paper presented at the Annual Meeting of American Association for Applied Linguistics. March 8-11. Orlando, Florida. USA.
- Pandit, I. (1990). Grammaticality in Code-Switching. In R. Jacobson (ed.), *Codeswitching as a Worldwide Phenomenon* (pp.33-69). New York: Peter Lang.
- Pfaff, C. (1979). Constraints on language-mixing: Intrasentential code-switching and borrowing in Spanish/English. *Language*, 55: 291-318.
- Poplack, S. (1980). Sometimes I'll start a sentence in English y termino en español: Toward a typology of code-switching. *Linguistics*, 18: 581-618.
- Poplack, S., Wheeler, S., & Westwood, A. (1987). Distinguishing language contact phenomena: Evidence from Finnish-English bilingualism. In P. Lilius & M. Saari (Eds.), *The Nordic languages and modern linguistics*, 6: 22-56. Helsinki: University of Helsinki Press.
- Poplack, S., Sankoff, D., and Miller, C. (1988). The Social Correlates and Linguistic Processes of Lexical Borrowing and Assimilation. *Linguistics*, 26:47-104.
- Poplack, S. (1988b). Language Status and Language Accommodation along a Linguistic Border. In P. Lowenberg (ed.), *Language Spread and Language Policy* (pp.90-118). Washington, DC: Georgetown University Press.

- Poplack, S., & Meechan, M. (1995). Patterns of language mixture: nominal structure in Wolof-French and Fongbe- French bilingual discourse. In L. Milroy & P. Muysken (eds.), *One Speaker, Two Languages: Cross Disciplinary Perspectives on Code Switching* (1995:199-232). Cambridge: Cambridge University Press.
- Romaine, S. (1995) (2<sup>nd</sup> ed.). *Bilingualism*. Oxford: Blackwell.
- Sankoff, D., & Poplack, S. (1981). A formal grammar for code-switching. *Papers in Linguistics*, 14: 3-45.
- Sapir, E. (1929). The Status of Linguistics as a Science. *Language* 5(4): 207-214.
- Sebba, M., & Wootton, T. (1998). We, they and identity: Sequential versus identity-related explanation in code-switching. In P. Auer (ed.), *Code-Switching in Conversation: Language, interaction and identity* (1998: 262-89). Routledge, London.
- Stewart, W. (1968). The Functional Distribution of Creole and French in Haiti. In O'Brien (ed.), *Georgetown University Round Table Selected Papers on Linguistics* (1961-65: 460-70). Washington, DC: Georgetown University Press.
- Taleb Ibrahim, Kh. (1997). L'arabisation, lieu de conflits multiples. *Réflexions 1: Elites et questions identitaires*. (1997:39-63).
- Trudgill, P. (1974). *Sociolinguistics: An Introduction*. Penguin Books.
- Trudgill, P. (1992). *Introducing Language and Society*. Penguin Books.
- Valdés Fallis, G. (1976). Social interaction and Code-switching patterns: a case study of Spanish/English alternation. In J. Amastae & L. Elias-Olivares (eds.), *Spanish in the United States* (1982: 209-29). Cambridge University Press.
- Versteegh, K. (2004). *The Arabic Language*. Edinburgh: Edinburgh University Press.
- Younes, M. A. (1995). An integrated curriculum for elementary Arabic. In M. Al-Batal (Ed.), *The teaching of Arabic as a foreign language: Issues and directions* (1995: 233-255). Provo, Utah: American Association of Teachers of Arabic.
- Wardhaugh, R. (2006) (5<sup>th</sup> ed.). *An Introduction to Sociolinguistics*. Blackwell Publishing.
- Weinreich, U. (1953). *Languages in Contact*. The Hague: Mouton.

- Weinreich, U., Labov, W., & Herzog, M. (1968). Empirical foundations for a theory of language change. In W. Lehmann (Ed.), *Directions in historical linguistics* (pp. 97-195). Austin: University of Texas Press.
- Winford, D. (2003). *An Introduction to Contact Linguistic*. Blackwell.
- Zentella, A. C. (1997). *Growing Up Bilingual*. New York: Blackwell Publishers.

## Webography

- Diebold, J. R. & Richard, A. (1961). *Linguistic Society of America*. Yale University. In <http://www.jstor.org/pss/411253>. Retrieved on 13/02/2010.
- Freeman, A. (1996). Perspectives on Arabic Diglossia. In [http://innerbrat.org/Andyf/Articles/Diglossia/digl\\_96.htm](http://innerbrat.org/Andyf/Articles/Diglossia/digl_96.htm). Retrieved on 11/12/2009.
- Schiffman, H. F. (2004). *Diglossia as a Sociolinguistic Situation*. In <http://ccat.sas.upenn.edu/~haroldfs/messeas/diglossia/handbuk.html>. Retrieved on 05/03/2010.



# Appendices

## The Interview

### Appendix A- Semi structured interview

Topic as code determinant: Six friends + the interviewer (R) conversing in the cafeteria of the Department of Biology, Tlemcen University.

NB: this part provides excerpts from the whole interview which lasted for 57 minutes.

French utterances are not transcribed. They are in italics. Borrowed items (that expose integration into AA grammar or tend to be recurrent in the speech of individuals) are in bold characters

- Topic one: Chit-chat at the beginning of the encounter

R: waf taffarbu əʒʒmaʕa

A: ja xuja rani bayi nafɾəb wa:həd əlpress baf ərrijjah rasi **kima** jgu:lu qhi:wa əw ga:ru  
xi:r mən ʃulta:n fi da:ru

D: wəlli ma: jakmi:ʃ jaddi qahwa əwsi ?ana baʕda nafɾəb wahəd əjus nbarrəd bih laʕtaf.

C: əjja zibəna ga: ? əjus xalli yi:r əʃʃi:χ jaɟrəb press

A: **invitetuni** ntum nafɾəb wa:ʃ nhabb

R: əjwa ʕa lʔaqəll ʕtinna baʕd əlmaʕlumat ʕa əlqahwa walla **əlcaféine** baf tqanna ʕ na

- Topic two: Scientific discourse about the effects of coffee on the human body:

A: La caféine c'est quoi? C'est un composé chimique du café et aussi un alcaloïde présent dans plusieurs aliments. En plus, c'est un stimulant psychotrope, hm hm stimulant du système nerveux central. Aussi, il a un rôle récréatif et médical en même temps. Par contre le jus contient un acide citrique très très dangereux pour l'estomac.

D: Non non *ja: lʕaləm ttaʕna*. Par exemple le jus de citron possède une haute teneur en vitamine C, une vitamine considérée comme un cofacteur enzymatique nécessaire dans un certain nombre de réactions physiologique. (AA in italics)

E: C'est vrais que la caféine aide à réduire la fatigue physique et restaure la vigilance quand une faiblesse inhabituelle se produit, mais le jus avec sa composition chimique est aussi très important. En plus de la vitamine C, il contient aussi le glucose.

R : əjja ɣalluh jafrəb waf jabyi bark əjrijjah rasu kima qal huwwa

- Topic three: Conversation about Sport

A: tferraztu lba:rəh 'la lmulaxxaʃ tta:' ?al'a:b əlqiwa:

F: Ila ?ana bə'da nakrəh had lahwajəʒ

A: əntijja thabbi ɣi:r əlmusalsala:t tturkijja bajna fi:k

F: əlmusalsala:t tturkijja **kima** qult 'la l?aqaall traffah ʃwijja 'ənnafs

B: ' lah **əssport** ma jraffahʃ 'ənnafs

F: ma qultʃ hakda beʃʃah kul wa:həd waf jhəbb

R: ?ana nhabb natferraz 'lihum **surtout** əʒʒri

C: ʃuft haduk tta' **cent metres** ja bən 'ammi ʃha:l jaʒri:w tahhasbəm mrakkbi:n **ətturbo** baʃʃah ba:jna jaddərbu bəzzaf baʃ jawwaʃlu ha:kda

B: 'lah ha:səb ɣi :r rwaħ walli **athlète** jaddarbu bəzzaf əw jaklu mlih tanni bah jakkəsbu hadik əl'aqala:t 'qamhum tanni ɣʃi:n bəzzaf

- Topic four : Anatomy

R: madamək əʒbattənna 'ə llə 'qam zidunna ʃwijja ma'fluma:t 'li:h

C: waf rak bayi ta'raf 'li:h

R: 'lli taqqadru tmadduhənna madduh

C: L'os est un élément crucial dans la construction de l'organisme humaine, une partie essentielle de l'appareil locomoteur qui confère aux vertèbres la faculté de se mouvoir.

F: On les classifie généralement par rapport a la longueur : les os longs comme le tibia et le fémur ; les os courts comme les carpes et les torses; et aussi les os plats c'est le cas du scapula.

R: waf hijja *scapula*

E: Scapula ! C'est l'os qui forme la partie postérieure de l'épaule. Scapula est le terme scientifique de l'omoplate.

- Topic five : Love

A: əjja χχutti χalluna mən had əlhadra darwək waf rana natqahwu walla naqru əhhadrinna 'ə lhubb əzzwa:ʒ layla **mais** maʒi laqraja

R: bəddinna tta 'ə lhubb ja sidi

E: rak 'ʕitu əlfurʂa baʒ jahdər 'əl **sujet** lli jhabbu

A: 'lah ʒku:n ma jabyi:ʒ jahdər 'ə lhubb gulili

C: nad'am ʂ:ahbi ?ana əlhubbu ihsa:sun ʒami:l ʒiddən 'ʒabtək hakda

- Topic six: Music

R: ma nasma'ʒ əlmusiqə bəzzaf wə nti ʒkun tasma'

D: ?ana ja'ʒəbni ʒʒa'bi wə ʒwijja ʒarqi

A: ntuma labna:t hada:k ma ja'ʒəbkum əʒʒarqi wə zid əlguddam

D: əlju:m rak ʒi:r tantaqəd ma za:l mahdərʒ haʒa twafəqna fiha

R: 'andha ʂʂah ja χuja wə l'anisa waf tasma'

F: lli ʒa hadak huwwa bəʂʂah nhəbb əl'andalusi ktar

B: 'la balək sma't bəlli əlmusiqə tsa:' əd 'la ba'ʒ əl'ifra:za:t əl'udwijjah

R: ntum taqraw 'la had əlmaʒakil waf taqqadru taħkiw 'lihum

B: hada **module** tta' **l'enzyme**

- Topic seven: Enzymology

R: waf huwwa **l'enzyme** bəʒdabt

E: Premièrement, toutes les enzymes sont des protéines

F: Les protéines enzymatiques sont des catalyseurs, c'est-à-dire qu'en agissant à des concentrations très petites, elles augmentent la vitesse des réactions chimiques, sans en modifier le résultat.

A: Et a la fin de la réaction la structure de l'enzyme se retrouve inchangée.

C: Les protéines enzymatiques sont synthétisées par des êtres vivants. Cette synthèse est déterminée génétiquement :

D: C'est-à-dire que sa conservation dans le génome est favorisée par le besoin qu'éprouve cet être vivant de faire cette réaction.

- Topic 8: Economic Crisis

R: əlʔa:lam gaʔ rah jʔani mən had lʔazma

A: L'Algérie əlla ja χuja əlhamdu llaħ ma ʔanna:ʃ əw ma jχuʃna:ʃ

B: wə hna ʔlah tahdər ʔlina kaʃ wahəd jasmaʔ bina

R: ʔana wallah ma nafhəm mlih f əlʔiqtiʃa:d

D: ʃkun jafhəm fih

R: win əlmufkil **exactement**

D: əlmufkil f əlʔamwa:l wə nniða:m əlmaʃrifi:

E: mufkil f əlbunu:k wə lquru:ɖ əwsi wa li hada bəzzaf tta:ʔ əlbunu:k ʔaʃlasat

B: thi:r ja dinək hatta əʃʃarika:t əlʔimla:qa nɖarrət GMC tta:ʔ əlmarikan əw ra:hət fiha

## Recordings

### Appendix B

Topic as Code Determinant: Recording linguistic data during a session of chemistry with second year.

NB: Because of the length of each recording session that lasted from 6 to 1:30, only some relevant tokens will be provided in the different appendices.

The teacher dictates the lesson (French is not transcribed)

Les Acides Aminés :

Ce terme définit une famille de composés dans lesquels on retrouve une fonction amine et une fonction acide carboxylique. La fonction amine peut être primaire, secondaire, ou tertiaire et la position relative des deux fonctions peut être  $\alpha$ ,  $\beta$ ,  $\omega$ . Ce point de vue général doit prendre en considération deux éléments:

- L'interactivité des deux fonctions. Il est inutile d'étudier ce qui a déjà été vu, si les fonctions réagissent indépendamment.

**Teacher:** əlʰabna mliħ lba:rəħ ħsabt əl*Côte d'Ivoire* ɣa:dja takunna ssaʰa ləwlad ɣarʒunna  
ɣarʒa ʒdida.

**Student G:** ʰaʒbuk əʃfiɣ

**Teacher:** əjwa lwa:həd jahdər ʃʃaraħa lʰabna ɣajə

**Student H:** zaʰma ɣir humə əjmarku wə ħna raddu

**Teacher:** hara bərk jkammlu mliħ Alors, le deuxième point c'est:

- L'importance biologique d'un nombre restreint d'acides, tous  $\alpha$ -aminés, qui sont les constituants de la matière vivante.

L'acide halogéné réagit via la fonction R-X sur l'ammoniac. Mais nous avons vu que cette réaction conduit généralement à des mélanges d'amines primaires, secondaires et tertiaires.

## • Appendix C

Participants and Setting as Code Determinants : The pattern of 'no switching' during a biostatistics lecture

**TB:** Evènements:

**Génotypes** - On considère le croisement de deux animaux de génotypes Aa et on suppose que l'allèle a est récessif. On désigne par [A] et [a] les phénotypes correspondants. Quelles sont les probabilités d'obtenir dans la F1 un individu [A], un individu [a]? Quelle est la probabilité qu'un individu [A] de la F1 soit Aa ? On croise deux individus [A] et [a] de la F1. Quelle est la probabilité qu'un de leurs descendants soit [a] ?

**Temps d'attente** - Dans un groupe de 10 souris, deux d'entre elles sont atteintes d'une certaine maladie (non contagieuse). On les identifie en testant les souris l'une après l'autre. Le but est de trouver les deux souris malades. Calculer la probabilité pour que le test :  
soit terminé au bout de deux tirages  
nécessite plus de trois tirages.

**Anniversaire** - Quelle est la probabilité que deux étudiants au moins dans votre groupe de TD aient même date anniversaire?

**Student L:** Quel que soit l'âge Monsieur ?

**TB:** Oui, quel que soit.

## Appendix D

Participants and Setting as Code Determinants : The pattern of 'no switching' during a session of enzymology.

**TE:** Nous prenons ici l'exemple d'un enzyme dont le mécanisme est parfaitement connu. La fonction de cet enzyme est de former un acide carboxylique à partir d'une fonction amide. Dans le site fonctionnel de l'enzyme, les trois acides aminés qui activent la réaction sont la sérine 195, l'histidine 57 et l'acide aspartique 102. Le substrat

**Student B:** C'est-à-dire l'amide ?

**TE:** Exactement, l'amide arrive dans le site réactionnel de l'enzyme où il va venir se stabiliser par liaisons hydrogènes. La fonction alcool de la sérine va alors estérifier l'amide. Une molécule d'eau va ensuite hydrolyser l'ester formé entre l'amide initial et la serine de l'enzyme. Un acide carboxylique est libéré.



## Appendix E

Participants and Setting as Code Determinants: The pattern of 'complete switching' during a lecture of biostatistics.

**TB**: ssalamu ʔlikum

**Students**: wa ʔalajkum ssala:m

**TB**: wa:ʃ rakum bχi:r

**Students**: rahmət rabbi ja ʃi:χ waʃ əjχaʃna

**TB**: nabyu:kum γi:r mla:h ja sidi. Alors, la dernière fois, on a parlé de la muqueuse et on a mentionné qu'elle comporte un épithélium de revêtement et un tissu conjonctif sous-jacent portant le nom de chorion. Le chorion contient du tissu lymphoïde diffus et des follicules lymphoïdes. Il peut renfermer dans certaines localisations des glandes. Il est riche en vaisseaux ayant un rôle nutritif pour ces glandes ou bien un rôle de récupération des nutriments liés à la fonction d'absorption. On a parlé de de de de

**Student D** : La musculaire-muqueuse, La sous-muqueuse, et La musculouse

**TB** : Très bien.

## Appendix F

Participants and Setting as Code Determinants: The pattern of 'complete switching' during a session of enzymology.

**TE**: şbah lxi:r

**Students**: şbah lxi:r *madame*

**TE**: əlʒəww şbah mlɪh lju:m

**Sudents**: ?ih bəşşah şabhat əmʃammsa

**TE**: Bon, aujourd'hui normalement en va essayer de parler d'une découverte du rôle d'un enzyme sur les cellules lors de dommages cardiaques. A l'aide d'un nouveau modèle mathématique des cellules cardiaques, les investigateurs ont montré que l'activation d'un enzyme critique, la calmoduline kinase II, perturbe l'activité électrique des cellules cardiaques. Les chercheurs ont développé un grand intérêt pour la calmoduline kinase II comme régulateur critique de la réponse cardiaque aux dommages. Selon le Dr Thomas Hund, un professeur associé en médecine interne à l'université de l'Iowa, en ciblant cette activité enzymatique, il pourrait être possible d'empêcher ou de traiter la maladie cardiaque et les troubles électriques du rythme cardiaque.

## Appendix G

Participants and Setting as Code Determinants: The pattern of 'mixed code' during a session student-student interactions outside the classroom: The case of switching at the onset of a turn (French in italics).

*Excerpt from Conversation 1:*

B: kirakum ja laʕrəb

C: qul baʕda ʕbəh əlxɪ:r fə llawwəl

B: rani əmdəgdəg manʕi:gʃ nahdər

D: məski:n had ləwlijjəd əlxadma lli bəzza:f ʕajjatu

B: əɖɖahki ɖɖahki wa:h j'ai besoin d'un repos.

D: *Un repos! Mais pourquoi? Que ce que t'as fait?*

B: *Ecoute! Pour préparer cet exposé, j'ai fait une nuit blanche.*

D: *Maintenant je vois que t'es un étudiant sérieux.*

B: waʕlah hsabti rana llaʕbu walla kifa:h

D: əlla lla ma qultʃ hakdə makkaʃ lli jaɖhak mʕa:k

B: *Alors c'est quoi?*

D: *Rien mon bébé.*

*Excerpt from Conversation 2:*

L: əmʃitu mʕahum əlmarrə tta:lja, n'est ce pas?

M: *Non, ma ruħna:ʃ*

L: wə ʕla:ʃ *pourquoi pas*

N: *Parce que.*

L: *Parce que quoi?*

M: huma məkka:ʃ ʕi:nhum jaʕʕarɖuna

L: *Je vois maintenant la cause. bəʕʕah? ana kunt qutəlku*

N: maʕliʃ ɣallihə ləlmarrə ʒʒa:jjə

## Appendix H

Participants and Setting as Code Determinants: The pattern of 'mixed code' during a session student-student interactions outside the classroom: The case of switching within a turn (French in italics).

*Excerpt from Conversation 3*

H: ha:d *la partie* əmʕammra bə ssawa:ʔil

I: taqdər ddi:r kul wa:həd fi *flacon*

H: fi mizək *c'est possible*

J: ʔi:h *possible*. ʕlah wirrah *le problème*

H: hsabt bəlli kul taʔribəh ʕaʕha *les outils* ttaʕha

I: *l'important* huwwa *la façon* lli taʕdəm biha əw kifah ddi:r *l'analyse*

H: *je vous remercie* ja ʕahbi ʕla *le conseil*.

## Appendix I

Participants and Setting as Code Determinants: The pattern of 'complete switching' during a students-TE interaction outside the classroom.

**Students**: ssalam *madame*

**TE**: wa ʕljkum ssala:m

**Students**: waʃ raki *madame* laba:s

**TE**: ʔa:jə əlhmdu llah

**Student C**: əlhmdu llah rana habbin bark nsəqsu:k ʕəl cour tta:ʕ əlmarra lli fa:tət

**TE** : ʔijjih tfaɖlu

**Students**: jzid faɖlək

**Student C**: Premièrement, concernant l'étude !

**TE**: Les auteurs, dans cette étude, ont analysé les tissus blessés du cœur endommagé d'animaux chez lesquels une artère coronaire avait été bloquée

**Student F** : Que ce qu'ils ont trouvé ?

**TE**: Une augmentation dramatique des taux de CaM kinase oxydée dans les régions spécifiques où potentiellement une activité électrique mortelle survient.

**Student B**: Et comment ont ils fait?

**TE**: En utilisant le modèle mathématique de la cellule cardiaque, ils ont pu prévoir, par simulation sur ordinateur, les effets de la kinase oxydée sur l'activité électrique cardiaque. Lors d'une maladie cardiaque l'oxydation est trop active ainsi que la CaM kinase.

## ملخص باللغة العربية

فحوى هذه الأطروحة ظاهرة سوسيو لغوية – التبديل اللغوي – تميز الأفراد المتمكنين من أكثر من لغة واحدة. تقدم الأطروحة وصفا تفصيليا حول دراسة ميدانية على التصرف اللغوي لطلبة و أساتذة علم الأحياء بجامعة تلمسان.  
كلمات مفتاحية :

التبديل اللغوي ، ازدواجية اللغة ، العرق ، التوضيح ، المهارة التواصلية ، علم الاحياء .

### Résumé :

Le présent travail de recherche s'articule autour d'un phénomène sociolinguistique – l'alternance codique – qui caractérise les individus qui maîtrisent plus d'une langue. Notre recherche essaye donc de fournir un compte rendu détaillé d'un travail de terrain sur le comportement linguistique des étudiants et des enseignants au département de biologie, Université de Tlemcen.

### Mots clés :

Alternance codique, bilinguisme, ethnicité, compétence communicative, biologie.

### Summary :

The core of the present research work is a sociolinguistic phenomenon – code switching – that characterizes speakers who have command of more than one language. It attempts to provide a detailed account of a field work on the linguistic behaviour of students and teachers at the Department of Biology, Tlemcen University.

### Key-words:

Code switching, bilingualism, ethnicity, clarification, communicative competence, biology.