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Section of English

***A Study of Grammatical Constraints of Code-switching
among Algerian Arabic and French bilinguals.***

***A Dissertation Submitted in Partial Fulfillment of the Requirements
for Master's Degree in Linguistics***

Presented by:

Miss. Souha Fatima Zohra MEHIZEL

Miss. Zohra BOURICHA

supervised by:

Dr. Ahmed MEHDAOUI

Examination Panel:

- | | |
|---|----------------------|
| - President: Dr. Tobida Mustafa (M.C.B) | University of Tiaret |
| - Supervisor: Dr. Ahmed MEHDAOUI (M.A.A) | University of Tiaret |
| - Examiner: Dr. Naima SAHLI (M.C.B) | University of Tiaret |

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Dedications

To my father who drew me, no words can describe the pain of graduating without running to your arms.

I promise that I will be the strong and successful girl that you have always wanted me to be.

To my mother who colored me, thank you for being there to hold my hand when everyone was against me, I promise to pay back all your debts

To my sister, who was always there to fight for me

And to my brother, who gave me piggy back rides

To my cats, who comforted me when no human could

To all the people who were there for me, my aunts and my uncles, especially Benhaouar and Nouredine,

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To all my friends who were there for me through hardship and special thanks to Chalk world family.

To every person who was ever nice to me, may the Lord bless you

and to every person who hurt me, thanks to you I am who I am today because of you.

Special thanks to everyone who contributed in making my favorite K-drama, I have learned so much thanks to your amazing work!

Lastly, myself,

I congratulate myself for paving the way for myself to a new dream, and to standing up right after life knocks me down

고생 했다!

Dedication

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To the apple of my eye, the one who never stops helping, motivating and guiding me to the right path I love you mom! you are my life

I would like to dedicate this work to my brother Bachir and Mohamed BALACHE

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Abstract

This dissertation attempts to scrutinize the grammatical constraints of code-switching in Algerian Arabic/French bilinguals' speech. Three types of grammatical constraints were addressed, the equivalence constraint, the free morpheme constraint and the closed-class constraint. Data were obtained through both qualitative and quantitative approaches. Initially, 60 students of Ibn Khaldoun University Linguistics Class were invited to complete a questionnaire. Then only four participants were selected from the sample to sit for an informal interview based on the topic of this dissertation and their own reflections on their language use. The results indicated that although the participants agreed with the constraints, their answers all gave particularly high levels of acceptability to the sentences violating these three constraints, suggesting that these constraints are not particularly strong in code-switching between Algerian Arabic and French.

Keywords: Code-Switching, Algerian Arabic, Grammatical Constraints, Bilingualism, Acceptability.

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Symbols and Abbreviations

Key to Phonemic transcription

ء	ʔ	ق	q
ب	b	ك	k
ت	t s	ل	l
ث	θ	م	m
ج	ʒ, ʒ̣	ن	N
ح	ħ	هـ	h
خ	χ	و	w
د	d	ي	J
ذ	ð		
ر	r		
ز	z		
ش	ʃ		
س	s		
ص	s ^ʕ		
ض	ɟ ^ʕ		
ط	t ^ʕ		
ظ	ð ^ʕ		
ع	ʕ		
غ	ɣ		
ف	f		

Symbols and abbreviations	Significance
[]	Narrow phonetic transcription
//	Broad Phonological transcription
EL	Embedded Language
ML	Matrix Language

General Introduction

General Introduction

As it has become well known, one of the various linguistic phenomena that exist in multilingual speech communities is code-switching, which has gained the attention of many renowned scholars (Mayers-Scotton 1995, Weinrich 1953, Gumperz 1982), who addressed it through various approaches, creating a periphery field of study. During the 1980s, the morpho-syntactic side of code-switching grew significantly. Scholars attempted to create various structural models and constraints to code-switching, suggesting that it is, as most other areas in language, is governed by a set of rules.

In the line of the same issue, we are interested in investigating the existence of grammatical constraints in the informal speech community of Tiaret. In other words, what motivates us to carry out such a study is, as members and participants in the Tiaret speech community, to explore, in some way, the sociocultural heritage of this latter since there is a great lack of academic as well scientific research in Algeria. Therefore, this the bulk of this study seeks to achieve the following objectives:

- ❖ To sufficiently examine and describe the patterns of code-switching occurrences between Algerian Arabic and French, specifically three grammatical constraints, namely, the equivalence constraint, the free morpheme constraint and the closed-class constraint.

In the light of all that has been stated, in this dissertation we will basically attempt to answer the following research questions:

1. How strongly the grammatical constraints apply in the Tiaret speech community.
2. Does Algerian Arabic-French bilinguals' perception of their own speech correlate with their actual speech performance?

Indeed, under the problematic of the present study, a hypothesis can be generated in the light of the possible interpretations and suggestions related to the aim of this research work and that may partly answer the questions above. It is then hypothesized that the different code-switching occurrences may be due to:

- ❖ The previously mentioned grammatical constraints, accordingly the equivalence constraint, the free morpheme constraint and the closed-class constraint apply to the Tiaret speech community.
- ❖ The Algerian Arabic-French bilinguals' perception does not correlate with their speech performance.

This hypothesis is built on the basis that the sentences that violate the grammatical constraints of code-switching will be perceived as unacceptable. While the sentences that follow those constraints are deemed acceptable. This procedure is done by collecting acceptability judgements from participants of the Tiaret speech community. They will be invited to answer a questionnaire and evaluate the acceptability of 60 sentences adhering to and violating the addressed constraints in this study. Furthermore, a small group of individuals, accordingly four participants, will be invited to perform an interview for qualitative purposes.

Aligning with what has been stated, the current dissertation is divided into three basic chapters. The first deals with a literature review, where some prominent research works conducted on code-switching are laid out and classified in three approaches, the structural, where we discuss the morphosyntactic features of codes-switching, such as its type, the universality of its constraints and a thorough look on the targeted constraints. The sociolinguistic, where some motivations and attitudes are listed and explained. Lastly, the psycholinguistic approach where code-switching is addressed as a cognitive process. The second chapter, the methodology of the research, deals with the way data will be analysed to achieve the objectives set in this work. It begins by describing and comparing the qualitative and quantitative methods. Then it proceeds to the research tool. Accordingly, the questionnaire that contains an acceptability test, and an informal interview. Lastly, the third and final chapter is dedicated to putting forward the obtained data, its interpretation and the generation of new findings in the light of what we have collected.

Chapter 1: Theoretical Framework

1.1 Introduction

The existing literature on code-switching is so diverse that it is almost impossible to cover every aspect in one research work. Due to the controversy it has caused, numerous scholars have provided multiple theories and assumptions that have overlapped or contrasted with one another over time.

This chapter, first, partially clears the terminological confusion in bilingualism then code-switching. Many issues and furry discussions among scholars have arisen, groups agreeing upon an aspect and another refuting it. Second, we address the structural approach to code-switching, where we explore its types, the inter-sentential and the intra-sentential. Then, moving to the key part of our research, the grammatical constraints of code-switching, where three of the most prominent ones will be addressed: the ones of whom Poplack (1980) has put forward, the free-morpheme constraint and the equivalence constraint and the closed-class constraints. Then, the universality of these constraints will be questioned to see whether there are constraints applicable to at least a group of languages of different language families or/and to prove that it is only possible to apply these constraints on languages of similar grammatical structures. Furthermore, in the socio-linguistic approach, motivations for code-switching will be introduced in addition to the attitudes that people have towards this linguistic phenomenon. Moreover, some of the psycholinguistic aspects of code-switching will also be mentioned. We will explore the primary assumptions and the frameworks that psycholinguists undertake during their study on code-switching.

1.2 Bilingualism

Bilingualism has been a scope of interest of many scholars (Fishman (1971), Gumperz (1982) and Jakobson (1997) who have contributed to this concept in several manners. Due to the large amount of research work that has been done upon it and the growing interest, defining “bilingualism” and “bilingual”, adequately, can be immensely complex. Scholars have failed to arrive at an accurate definition of the terms. Bilingualism is a relative term that may be perceived differently from one person to another. For instance, Weinreich (1953) defines it as “two or more languages are said to be in contact if they are used alternatively by the same persons” (Weinreich, 1953, p. 1). Hamers and Blanc (2000, p. 1) add that “*languages in contact, that is bilingualism at the societal level and bilingualuality, its counterpart at the individual level, is an integral part of*

human behaviour". Grosjean (1982) on his part, also defines the term and refers to the degree of bilingualism. In the preface of his book *Life with Two Languages* (1982) as follows:

Contrary to general belief, bilinguals are rarely equally fluent in their languages, some speak one language better than another, others use one of their languages in specific situations and others still can read and write one of the languages they speak.

D'Acierno (1990) on the other hand, provides one characteristic of bilingualism, as he explains: First, sub-coordinate bilingualism. It is the case when a language overshadows the other. That is, the bilingual individual bears more knowledge of one language over the other. Second, it is when a speaker acquires two languages in a different context, which are, later, stored away in a different system in the speaker's mind. This case refers to coordinate bilingualism. Third, it is compound bilingualism, which refers to the case when an individual acquires two languages at the same time.

In brief, taking into consideration the most reliable definition for this research and the definitions above, bilingualism is the contact between two languages that may be differently integrated into bilinguals' minds, giving each language different linguistic competencies.

1.3 Code-Switching

In linguistics, code-switching was a fringe field of investigation, until it made a sharp ascent in the last twenty years. Almost all credit for this emergence goes to Carol Myers-Scotton, who is acknowledged in almost every book on code-switching for her commitment to making this latter an omnipresent field of study with its own right. Myers (1995, p. 47) writes that code-switching was "*considered part of the performance of the imperfect bilingual, motivated by inability to maintain a conversation in the language on the floor at the moment*".

In fact, defining code-switching may be as difficult as defining bilingualism due to the fact that it has been studied variously in different linguistic branches. Scholars have failed to arrive at an agreement upon the definition of code-switching (Milroy and Myusken, 1995). Terms such as code-mixing and borrowing may overlap with the definition of code-switching due to the similarities found in some points and aspects (Romaine (1995). Each scholar seems to recognize a

self-directed definition, based on the approach that they have relied upon during their research work.

According to previous literature, the first definition of code-switching dates back to 1953, when Weinreich (1953) revealed insights into bilingual individuals. He suggests that they possess two separate linguistic varieties, which (ideally) they employ on separate occasions. Yet, scholars such as Myers-Scotton, adopts a pragmatic approach to code-switching and defines it as “*the use of two or more languages in the same conversation, usually within the same conversational turn, or even within the same sentence of that turn.*” (1993a).

Kesraoui (2017) considers a daily Algerian Arabic-French code-switching, from some natural recorded conversations of Tlemcenian speakers:

(1) A: Bonjour ça va? ‘Good morning, how are you?’

B: **ça va** lħamdllæ:h ‘It’s alright, thanks God’

A: ʔana fhæd lwaʔts **des hauts et des bas** lmaʃakil ma jħalliwakʃ **tranquille**; ‘Nowadays, too many problems that do not keep you quiet’

B: Ijwa **c’est ça la vie**; ‘Well, this is life’

A: **J’en ai marre, Je n’en peux plus, c’est plus fort**, ana krahts əllah ʔaləb; ‘I’m fed up, I’m exhausted, It’s too much.’ (Kesraoui, 2017, p. 92)

In a similar vein, Hoffman (1991, p.110) states the phenomenon in the following words, “*the alternate use of two languages or linguistic varieties within the same utterance or during the same conversation*”. Whereas, Gumperz (1982) describes it as the juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or subsystems. Thus, code-switching implies alternation of linguistic varieties within or beyond a sentence.

Some scholars describe code-switching as a deficiency in linguistic competence because bilingual individuals shift back and forth from one language to another (Trask 2005). Correspondingly, Grosjean (1982) says that code-switching is an outcome of a “lack of formal knowledge”. Supporting this view, Echevarria (1997), taking English/Spanish code-switching as a reference, explains that it is a result of a deficit in either language.

In a contrast to this claim, other sociolinguists go against and argue that code-switching is not a deficiency but rather consider an individual who code-switch as a linguistically competent speaker as he/she is able to use the languages at his/ her disposal. Zentella (1981) supports this view and composes that code-switching refers to “The ability of bilinguals to alternate between the languages in their linguistic repertoire is generally referred to as code-switching” (p. 109). She also says that it is most likely bound to happen in informal contexts that include individuals that share close relationships rather than formal interactions. Additionally, scholars like Rubin (1968), Sankoff (1972) and Fishman (1972) say that code-switching refers to the bilingual individual’s ability to select his/her speech from the two languages and that this selection is influenced by a number of non-linguistic variables, such as topic, setting, channel, tone and so on. Others like, Valdés-Fallis (1978) describes it as a stylistic process that is based on the speaker’s style in each language he/she uses. In other words, it is based on one’s personal linguistic preferences. By way of exemplification, Bouamrane (1988) provides an example of the Algerian speech community, where code-switching happens between the Algerian Arabic and French as follows:

(2) *Hot Hot eyya ça suffit befweya voilà eg3od eywa gutlak j'ai pris les trucs...*

« put it down! put it down! come on! It is enough! Careful! That’s it. Well I was telling you, I took the things...” (Bouamrane, 1988, p. 6).

1.4.1 The Structural Approach to Code-Switching

The structural approach is principally concerned with morphosyntactic patterns of code-switching grammar. In this part of the investigation, we will be addressing the types of code-switching, respectively the inter-sentential and the intra-sentential code-switching. Then, three grammatical constraints will be addressed, the equivalence constraint, the free morpheme constraint and the closed-class constraints. Lastly, we will provide a brief discussion of the universality of those constraints.

1.4.2 Types of Code-Switching

Scholars did not face only terminological confusion, but also classifying the different types of code-switching. Many scholars, including Blom and Gumperz (1972), have classified it into two types. The first type is metaphorical code-switching. In this type, code-switching may vary according to the discourse function, or conversational acts such as requests and orders. By

discourse function, Gumperz (1964) suggests that it refers to the functional ability to exclude or include the hearer in the conversation by using unfamiliar/familiar terms. The second type is the situational category, under which code-switching is affected by the situation in which the speech occurs, the participants and the topic.

Another suggestion made by Poplack (1980) and Lepski (1985) classifies code-switching into two types: inter-sentential and intra-sentential.

1.4.2.1 Inter-sentential Code-Switching

According to Poplack (1980), this type is more complex than the intra-sentential type because it requires a certain degree of bilingualism; one must be fluent enough in each language in order not to violate the grammatical rules of each language. The speech of a bilingual individual is divided into sentences; one sentence is uttered in one language while the other sentence is uttered in another. Bouamrane (1988), in the Algerian context, illustrates some examples in which code-switching occurs between the main clause and a subordinate clause:

(3) Elle a dit *belli ma* *ʕandhaʕ lwaqt*.

She said that has no time.

(4) Rani *ʕaref* qu'est ce qui s'est passe.

I know what happened (Bouamrane 1988, p. 13).

(5) Ma *mʕaʕ* parceque *ça ne l'intéresses pas*.

He did not go because it does not interest him.

(6) Je vais partir *baʕ nawsal bekri*.

I am going in order to arrive early (Bouamrane 1988, p. 14).

1.4.2.2 Intra-sentential

This type implies that code-switching happens within the sentence itself. It happens, when a speaker fails to remember certain terms in his/her mother tongue but succeeds to remember them in the other language (Lepski, 1985, p.5-6). Thus, the concept implies using the language that provides the morpho-syntactical frame of the sentence that contains code-switching, which is referred to as “the matrix language” (ML) while integrating lexical proportions from the other language “the embedded language” (EL), (Coulmas, 1998).

Bouamrane (1988) describes this process of inserting parenthetical clause, after which the speaker returns to the original language in use. He supports his statement through the following examples:

(7) Les petites villages yaεjbuni .

small villages please me (I like small villages). (Bouamrane 1988, p. 13)

(8) Je ne vous le dis pas yaϕni de façon populiste.

I am not saying this to you I mean in a populist way. (Bouamrane 1988, p. 15)

(9) Il croyait belli j'étais un étudiant.

He thought that I was a student. (Bouamrane, 1988, p. 16)

(10) Lukan quelqu'un vient me chercher.

If someone comes to look for me. (Bouamrane, 1988, p. 17)

1.4.3 Grammatical constraints of Code-switching

As previously mentioned, code-switching is a rule-governed process. It is not random but rather complies with certain structural aspects. Throughout the history of code-switching studies, scholars have structurally analysed it in order to find the constraints that a speaker must take into consideration while code-switching. For instance, Poplack (1980) brought forward two constraints: the equivalence constraint and the free-morpheme constraint, and Joshi (1982) introduced the closed-class constraint.

1.4.3.1 The Equivalence Constraint

It is also known as Structural-integrity constraint; it was introduced by Poplack in 1980. The term denotes that code-switching occurs at points in a discourse where the juxtaposition of L1 and L2 elements does not disregard a syntactic rule of either language (Poplack 1980). In other words, each grammar of employed languages must be equally respected and not violated. Lipski (1977) hypothesizes: “*the two languages superficial structures must be identical in that portion of a structure involving code-switching which falls after a switch.*” (p. 271). Bouamrane (1988) and Kesraoui (2017) put forward examples of the Algerian speech community, where the switch respects both Arabic and French surface structure:

(11) had **le recteur**

‘This (that) principal’.

(12) dak **l’appartement**.

‘That (the) appartmrent’.

(13) yabqa confronter ces idées

‘He keeps opposing these ideas’.

(14) **Je pense que** ħfad lcour lbarəħ

‘I think that he learned the lecture yesterday’.

(15) Mæt_s flən mskin **il est jeune** allah jarħmυ

‘Mr x died, poor man, he is young, may Godbless him.’ (Kesraoui, 2017, p. 97)

This is a part of the goal of our study– to discover whether violating the grammar of Algerian Arabic or French while code-switching would be deemed acceptable or not by born bilinguals of Algerian Arabic and French.

1.4.3.2 The Free-Morpheme Constraint

It was first founded by Scotton during her research in Nairobi in 1988. This was later discussed, with much more details, in her book “*Dueling Languages: Grammatical Structure in Code Switching*” which was published in 1993. Clyne (2000) says that this constraint restricts code-switching from occurring in the case when it is put between a bound morpheme and a lexical form unless the latter has been phonologically integrated into the language of the bound morpheme.

Within the Algerian context, Kesraoui (2017, p.41) provides one of the many examples where French verb stems inflected with Algerian Arabic inflections in the following speech:

(16) n**rediziw**lu **le memoir** t_saʕυ

We will write to him his draft.

(17) n-**rekuper**-ih

I will get it back.

1.4.3.3 The Closed-Class Constraint

The closed-class constraint denotes that closed-class words cannot be switched between languages and that bilingual individual would perceive it as ungrammatical. Joshi (1983) restricts closed class items like quantifiers, prepositions, determiners, possessives from being switched between languages. Bellow follows an example of the Algerian context:

(18) On mange **wella** on mange pas.

‘We eat or we do not eat (are we going to eat or not)’. (Bouamrane, 1988, p. 15)

Joshi (1983) received severe criticism because of the present constraint. Literature provides many violations of the constraints including, the switch of single prepositions and single conjunctions as mentioned below:

(19) ndɔg **mais** manakɔlf (switching of a single conjunction)

I will taste but I will not eat. (AA/French CS, Bouamrane 1986, p. 121)

(20) ya:lji:n ʃwiʒa **mais** mla:h

Expensive little but good (switching of a conjunction)

They are a little bit expensive but good. (Mendas, 2013, p.80)

(21) Ma-na-ɛraf-hɔm-ʃ bein tsamma yi **à travers** hada Ziad.

(switching of a preposition)

I don't know them well just through Ziad. (Mendas, 2013, p.81)

1.4.4 The Existence of General Code-switching Constraints

In his book, *The Bilingual Reader*, Clyne (2000) dedicates a chapter to find out to what extent code-switching constraints are universal. He claims that there is a common “*agreement in the theoretical studies that there are general constraints on code-switching (between any pair of languages)*” (Clyne, 2000, p. 244). He puts many works in question including, Woolford (1983), Klavans (1983) and Joshi (1985). Due to the variation of the structural nature of languages, the syntactic nature of bilinguals' speech is also put into question. Clyne (2000) states:

Some of the difficulties in the discussion on code-switching constraints are due to the unclear division of code switching and borrowing/ interference/ transference in the literature under consideration. Another problem is the use of the term ‘ungrammatical’ for nothing more than a tendency. Clyne (2000, p. 264)

Clyne (2000) further adds that linguists had a difficult time agreeing upon many aspects of code-switching, and the universality of its constraints was not an exception. Due to the fact that the majority of theories come from the Spanish/English context, many scholars believe that constraints that are applicable to this pair of languages are universal or are worthy of considering them as a reference to other languages (ibid, 2000).

For example, Sankoff and Poplack (1981) have stated that both free-morpheme constraint and the equivalence constraints are universal and applicable to all languages. Equally, Bentahila and Davies (1983) supported the universality of the free-morpheme constraint based on their data collected on Arabic–French bilinguals collected in Morocco. However, soon after, Nartley (1982) stated that different linguistic constraints might apply in different socio-cultural environments. Therefore, he provided a solid argument to support his view of excluding the fact that the two previously mentioned constraints are universal.

However, some scholars have found that it is almost impossible to find code-switching constraints that apply to a broad range of languages especially the ones that belong to different language families. Klavans (1983), for instance, claims that conflicts in code-switching between differently structured languages cannot be explained in terms of constraints. Others found that constraints might be applicable for languages with compatible grammars. For instance, Woolford (1983) believes that the compatibility of grammars is very necessary for code-switching to happen; this latter is not possible unless the two grammatical systems overlap. In his generative model of bilingual code-switching, he describes how two monolingual grammars co-operate to generate code-switching. Muysken (2000) also states that there are no universal constraints on code-switching, but rather specific ones that are followed in different bilingual communities.

To sum up, the grammatical constraints of code-switching are relative. It is possible to find several language contacts where the same constraints are followed. However, this cannot prove the universality of such structural patterns. Pfaff (1979) argues the grammaticality judgments on hypothetical switched sentences may be affected by the social stigma that has always been attached

to code-switching. That is to say, this linguistic phenomenon is affected linguistically, psychologically and socially.

1.4.4 Morphological and Phonological Integration

Poplack (1981) believes that code-switching and borrowing are two different phenomena and that borrowing should be excluded from code-switching studies as she does not recognize single morphemes as code-switching. According to Poplack (1988), if the lexical item is not integrated at all, or is morphologically or phonologically integrated, it is considered a form of code-switching. However, if the lexical item has been integrated into every aspect, it is considered borrowing.

By contrast, other scholars (Myers-Scotton 1993, Boumans 1998, Gardner-Cholors 2008) believe that the distinction between borrowing and code-switching is not crucial in the morphological studies of bilingual speech and that the Poplack and her associate's (1981) distinction brought a wider confusion. Thus, Myers-Scotton (1993) rejects the theory of morpho-syntactical integration as a distinction between borrowing and code-switching through her statement of logical argument as follows:

Code-switching forms is that several different patterns of integration occur, not just one. this survey has pointed out four patterns: (a) not all B forms show complete morphological integration; (b) most code-switching forms in ML+ZL constituents regularly show near-complete morphological integration; (c) when there is incomplete morphological integration, it may characterize both B and code-switching forms in contrast to indigenous forms; and (d) both forms show syntactic integration (p. 191).

Moreover, Boumans (1998) argues for the use of morphological integration in distinguishing code-switching and borrowing. Supporting this stand, he clarifies that due to the vast differences among languages, morphological processes are not equally productive, and that, not all languages are characterized by being productive. He also believes that the highest degree of phonological integration happens with the oldest foreign lexemes. The reason, he says, that these latter are recognized in the early stages of bilingualism or language contact, in which the speaker is not fully aware or familiar with the foreign languages. To illustrate Mendas (2013) provides a short list of old lexemes VS. New lexemes from the Algerian context as follows:

(20) kɔfɪɫa (adapted from *couverture*: blanket) VS. *couvre-lit* (bedspread).

(21) məʃwara (adapted from *mouchoir*: handkerchief) VS. *papier-mouchoir* (tissue).

(22) vista (adapted from *vest*: jacket) VS. *manteau* (coat). (Mendas, 2013, p. 44, 45)

Mendas (2013) has come to find that morphological integration almost targets French verbs only and that French nouns show only a few morphological integrations. Supporting these results, she provides the following example:

(23) *Les blouses li ka:n-ɔ kj-zib-ɔ-hɔmdgɔl-l des robes.*

They used to bring blouses that look like dresses. (Mendas, 2013, p. 40)

In this example, the speaker chooses the Arabic languages as the matrix language and embeds in it the French nouns “*blouse*” and “*robes*” with their suffix (s), and with their articles (les, des) that indicate the plural form.

Boumans (1998), concerning morphological and phonological integrations, also, addresses the morpho-phonological integration that is resumed by time. He says that this type of integration is most likely to occur in the case in which, the influence of the suppressed culture decreases or vanishes over time. As he clarifies, “this is only true when the impact on the culturally dominant donor language and culture increases over time and the bilingual population gains more access to that language” (Boumans 1998, p. 56).

1.5 The Sociolinguistic Approach to Code-Switching

In addition to the structural approach, another one was conducted on the sociolinguistic phenomenon of code-switching focusing on the relation between linguistic variation and social structures particularly. This perspective may contribute to broaden the scope of the interpretation of code-switching.

1.6.1 Attitudes towards Code-switching

Code-switching is viewed differently among individuals. It may be regarded as a negative, positive or neutral linguistic phenomenon. For example, Gumperz (1972) who maintains a positive attitude towards code-switching, considers code-switching as a dynamic linguistic choice that is

used to fulfil specific linguistic and social functions within a community. He also claims that it is not a language deficiency but rather the extensive knowledge of both languages describing the process as a “communicative strategy”. Kesraoui (2017), in her research on code-switching in the Tlemcen speech community, summarizes some positive attitudes that speakers as follows: some people switch French to avoid the use of the glottal stop, which is considered feminine to them, some think that it denotes a privileged background, accordingly, wealthy families, education, etc.

By contrast, Coulmas (2005), who holds a negative attitude towards code-switching, assumes that it is merely a sign of lack of knowledge or the inability to speak two different languages properly. Nevertheless, even if people adopt a negative attitude towards code-switching, they still use it for lexical needs as proven in Bentahila and Davies (1983), during their research in Morocco. They found that Moroccan people, who hold a negative attitude towards code-switching, still use it for different purposes such as resolving a hesitation or, making a fresh start when the thread of discourse had been lost.

Moreover, as far as the neutral attitude is concerned, Kesraoui (2017) also provides insights into it, she claims that perspectives directly affect the manner in which individuals talk and the reasons that make them choose a particular code. Thus, it is fundamental to consider speakers' mentalities towards the reality of switching starting with one language then onto the next. She also suggests some neutral attitudes towards code-switching which she got from her respondents during her research in Tlemcen speech community, as follows, people accept code-switching as a habitual phenomenon and as a part of their language, they are fine with it as long as it does not hinder their communication with other, they also think that it is merely a way of adapting to the society, etc.

1.6.2 Motivations for code-switching

Numerous scholars (Trudgill 2000, Nicol 2001, Abdel Tawwab 2014) have pointed out that code-switching is a rule-governed process used by bilinguals to serve certain tasks. In this context, Trudgill (2000) explains that “The same speaker uses various linguistic varieties in different situations and for different purposes”(p .81). in other words, while code-switching, the speaker takes multiple aspects into consideration, including socio-political and psycholinguistic possibilities and consequences of mapping intentions onto language (Nicol, 2001).

In this vein, Abdel Tawwab (2014) provided a list of sociolinguistic code-switching motivations for code-switching, to be a part of social contact and convey both social and linguistic meanings, and other ones which were discussed by other scholars as well.

To begin with, distinguishing one's identity, social class and education, due to the fact that language and social identity are related, bilingual individuals tend to select the appropriate code according to the identity of the listener or to show one's identity (Myers-Scotton, Ury, 1977). Shabt (2007) argues that one code-switches to sound elitist or classy, in order to be distinguished among a group of individuals. Similarly, Auer (2002) clarifies that code-switching confers a hidden prestige that is made explicitly by attitudes. This phenomenon is very common and is looked upon as something prestigious and a sign of education and competence in more than one language (Suleiman, 1999). Kesraoui (2017) points out that one of the motivations of code-switching is to appeal to both literate and illiterate individuals. She provides an example from the Algerian context:

(23) *ħna li kæjən hæðæk ħuwa* mais maintenant il faut que la personne soit diplomate

we are naïve, now the one has to be diplomat. (Kesraoui, 2017, p.21)

(24) *Ça depend du jour ħija wənnhar*

It depends on the day (Kesraoui, 2017, p.22)

Then, emotional expression, Crystal (1987) contemplates possible motivations for code-switching related to emotional states, like the desire to exhibit his attitudes towards a person, the inability to express one's thoughts in the mother tongue due to a psychological state and to show his/her integrity in his/her own language. Kesraoui (2017), in her research of the Algerian context illustrates how speakers may use code-switching to show power over the less, she displays a situation in which code-switching is used to express anger and frustration as follows:

(25) *rani ɾil nsaɾaf fik et ben mince alors !*

I'm tolerant with you... Damn it!

Also, in order to convey a meaning adequately and to communicate effectively. Sometimes the speaker may think that a language is more effective than the other one. (Kesraoui, 2017). To illustrate:

(26) Hædik ʕla dwæm taʕmal **l'avocat des pauvres.**

She always stands up for somebody.

Moreover, to express solidarity. Martin-Jones (1995) says that a bilingual invariably expresses solidarity with the learners who has the same language background when s/he code-switches. In the same conception, Holmes (2001) also explains “A speaker may...switch to another language as a signal of group membership and shared ethnicity within an addressee.” (Holmes 2001, p, 35)

Furthermore, Fishman (1965) highlights that group membership may have an impact on the language choice, which can be associated with the linguistic selections that speakers make, based on the participants of the conversation. To illustrate:

(27) Smaʕts ʔæssəm ʔæletʕ la commissariat!

Have you heard what she said? The police station (Kesraoui 2017, P, 23).

Kesraoui (2017) indicates that this example is a remark made by a woman who wished to show her master of the French language when she noticed the misuse of the French article “la” in another person’s speech.

Furthermore, linguistic necessity may be a driving force but preserving identity might be the strongest motivation for code-switching. Bilinguals tend to code-switch in order to indicate their culture that might differ from the one dominating the environment in which they live. Gardner (2008) clarifies in this regard, that code-switching is used to assert a bilingual identity that cannot be misunderstood.

Equally, the topic was also set out to be a reason for code-switching by Abdel Tawwab (2014). Holmes (2000) clarifies that code-switching may occur when people discuss certain topics within a speech event to discuss a certain topic, for various purposes, such as, to be discrete or polite. Fishman (1965) describes this concept as “the implicature of topical regulation” (p. 92), he believes it is very useful to handle some topics. In such a manner, Leung (2006) sets taboo words

as an example. He explains the case when the speaker code switches to avoid using his/her native language to express taboo words.

1.6 Psycholinguistic aspects of code-switching

It has been claimed that Code-switching in itself is perhaps not a linguistic phenomenon. Vogt (1954) suggest that it is rather a psychological one and its causes are obviously extra-linguistic. Thus, it is insightful to make a connection with psycholinguistic research. This field of study differs widely in terms of research goals, theoretical and methodological aspects from the other approaches existing in this work. Scholars in this approach focus mainly on the monolingual speaker where they trace down languages from the moment the utterance was heard until the stage in which the recipient replies with another utterance. They display language as a neural network. Its production undergoes a process based on the discourse situation. Accordingly, the speaker's conceptualization of the message, the selection of the words and sentence structure associated with this message, and finally the brain retrieves the phonological forms to turn these words and sentence structure into a phonetic pattern that can be articulated (Hymes, Chang, & Griffin 1999, Goldrick, 2007).

Clyne (1980) introduces a notion which he believes is a central one in code-switching, namely, triggering. He also argues that bilinguals are "psycholinguistically motivated". He explains further that triggering occurs at the encounter of words existing in the intersection of two language systems. These words compel bilingual individuals to use terms of the other languages in order to keep the conversation going. He also states that code-switching is internally conditioned. In other words, it is caused by psychological factors.

Weinreich (1953), on his part, classifies three types of bilingualism according to the manner in which bilinguals store the knowledge related to languages in their brain:

1. Coordinate bilingual: the languages are stored in different systems because they were acquired in diverse contexts.

2. Compound bilingual: It happens when two languages are acquired at the same time, and within the same context. In this case, the bilingual individual conceptualizes a single image of a word in the brain, but it possesses two labels of each language stored in the brain.

3. Subordinate bilingual: the speaker relies on the first language that he/she acquired to interpret the second language.

Recently, the focus was redirected to the system separation of languages. Questions and curiosity were raised upon the ability of bilingual speakers of storing two distinct linguistic competencies of different languages in their minds. In the same vein, Dussias (2003) hypothesizes that processing different linguistic systems of languages may cause strain on bilinguals' brains. The cognitive pressure that operates sentence processing could take a longer time to produce speech.

Other issues were also raised, like, the ability of bilinguals of maintaining the systems of the languages they use separately. It was hypothesized that there is a language switch that allows them to exclude the language when not needed or used. This assumption was later refused for the lack of experimental evidence that proves the existence of any neurolinguistics code-switching or psycholinguistic switch, but rather, the ability to move to the monolingual mode, in which the speaker is able to activate and deactivate a language (Paradis, 1980).

1.7 Conclusion

After going through the theories and concepts above, we have come to find that code-switching is a periphery field of study. First, defining bilingualism and code-switching itself was not an easy task. Scholars found themselves agreeing and disagreeing on its definition and they could not bring themselves to find adequate definitions for these linguistic phenomena. Then, the study moved to addressing the structural aspects of code-switching, addressing the types of code-switching the inter-sentential and intra-sentential code-switching.

Moreover, the most common and talked about grammatical constraints were also addressed. To begin with, Poplack's (1980) theories, the equivalence constraint and the free-morpheme constraint. Lastly, the last constraint is introduced the closed-class constraint.

Then, the universality of code-switching constraints was questioned and verified by addressing and comparing some basic theories. Furthermore, we referred to the socio-linguistic approach, where we discussed some attitudes and motivational factors to code-switching. lastly, some code-switching psycholinguistic aspects were referred and to and discussed in the light of previous notions and claims regarding this topic.

Chapter 2: Data Collection Methods and Procedures.

2.1 Introduction

Chapter two will lay out the methodology behind this study. Initially, we will start off by presenting Acceptability Judgments and why this particular method is adopted. Second, we will address the first tool of investigation in this research work, the questionnaire. where we explain how we structured it in a way that is convenient not only for us as researchers but also for the participants that were invited to complete it. Third, a considerable amount of information concerning interviews and how will they be carried out. Fourth, small details concerning the participants of the research will be addressed providing their age, gender and origins. We will also put forward detailed information about the four participants that will be invited to complete the questionnaire and sit for an interview. In a later section, we provided the aims and methodology of the present study. The questionnaire incorporates both quantitative and qualitative method, the Likert scale will provide us with numerical data, while the interview will provide the qualitative aspects of the data. After this, there will be a section where further details will be dedicated to the benefits of combining the methods.

2.2 The aim of the study

The present investigation aims at measuring Algerian Arabic and French bilinguals' perception of their own speech while code-switching. Code-switching is governed by a set of rules that must be taken into account if the speaker is using such a linguistic phenomenon. In this study, we looked into three different code-switching grammatical constraints: the equivalence constraint, the free-morpheme constraint and the closed-class constraint in the Algerian context. We aimed at shedding light on the extent to which these constraints control code-switching between Algerian Arabic and French. For example, the equivalence constraint entails that if either grammar of the two languages involved in code-switching is violated, code-switching would be deemed unacceptable. Put differently, we aim at discovering whether such an example of code-switching would be deemed acceptable or not by born bilinguals of Algerian Arabic- French.

By contemplating code-switching, one expects to acquire some knowledge into grammar and how different grammar associate and interweave with each other. The dissertation pointed at the motives for code-switching and the attitudes that individuals have towards these linguistic phenomena due to the fact that these two factors influence the use of code-switching. In return, this

can prompt a more thorough understanding of the way Algerian Arabic and French interact with each other.

2.3.1 Methodology of the research

This section will lay out the methodology behind this study, beginning with an account of qualitative and quantitative methods. Then, another section will be dedicated to the Acceptability Judgments and why this particular method was chosen. In addition, a considerable amount of details concerning the participants will also be addressed. The last section will be discussing the use of a questionnaire and the interviews, and then finally a section suggesting the expected outcome of the investigation.

2.3.2 Qualitative method

Strauss and Corbin (1990) define the qualitative method as any research process that does not involve any means of statistical procedures or other means of quantification when producing findings. Chamber (1994) argues that qualitative research tends to employ more contextual strategies and elicits more subjective and interpretive data. It also promotes a significant additional commitment to respect local knowledge and facilitate local ownership and control of data generation and analysis.

The key asset of employing qualitative methods is they force the researcher to dig into the intricacy of the problem rather than extracting it away. Hence, informative and more substantial results are acquired. Consequently, through these consistent results, the researcher will be able to respond to questions that involve socio-cultural variables that are hard to quantify (Shull, Singer, & Sjøberg, 2008), in this case questions concerning the socio-linguistic and psycholinguistics aspects of code-switching.

However, the qualitative methodologies suffer from setbacks. Heyink and Tymstra (1993) say that employing qualitative research leads to entering the periphery of science in which, one has to work with 'soft' data which makes it challenging to prevent vagueness in the description of one's findings. However, the present approach can convey a deeper understanding of the topic because, it is a process-oriented observation, as it adopts a naturalistic approach that seeks to interpret phenomena in context-specific settings (Patton, 2002). In fact, the Algerian Arabic-French

bilinguals' perception cannot be highlighted through statistics and graphs since these perceptions are extremely subjective.

2.3.3 Quantitative method

Schütze and Sprouse (2014) suggest that the quantitative method focuses more on “[investigating] phenomena by collecting numerical data and analyzing those data statistically” (p. 116). Thus, quantitative research typically involves the collection of data so that information can be quantified and subjected to statistical treatment to support or refute alternative knowledge claims (Leedy and Omrod, 2001).

Rasinger (2013) argues against the reliability of the quantitative method that denotes that once the method builds up, identical results are expected to arrive each time. He also adds:

“people change, the environment changes, and even if people are identical, they are unlikely to respond to the same test in exactly the same way again – be it because they have the experience of having completed the test before or because they quite simply have had a bad day” (Rasinger, 2013, p. 28).

However, these claims cannot deny the contribution that the quantitative approach has to offer. It possesses a group of advantages to research including, making predictions, randomly selecting larger samples, testing hypotheses and variables, statistically report the findings by setting their correlations and significance.

Guy (1993) says that identifying and explaining a linguistic phenomenon remains the ultimate goal of any quantitative study rather than merely delivering numbers. In this manner, we provide our findings by employing a quantitative type of research to attempt to test whether code-switching grammatical constraints are applicable to Algerian Arabic-French bilinguals and whether they are aware of them during their everyday conversations.

2.3.4 Qualitative vs. Quantitative investigation

Glassford (1987), Pickette and Burrill (1994) argue that the quantitative and qualitative share common grounds. Postholm and Jacobsen (2011) explain the data-collection should be considered complementary, as methods of ‘fulfilling’ or ‘completing’ one another. More significant chances of this success would be through the combination of the two methods as they

both orderly follow a systematic plan and format. With this recognition that qualitative and quantitative when combined, at various ratios, and in different sequences, methods and data endure far more efficient analysis.

Since it has been proven that there is not one single best way of collecting data. A combination of two or more data collection methods will generate the finest results. The questionnaire in this investigation, although traditionally a quantitative method of collecting data, incorporates qualitative aspects (open-ended questions). Therefore, one can assume the results will be reliable. The questionnaire collects numerical data about the three grammatical constraints in question as well as to acquire the desired qualitative data from both open-open ended questions and the interview.

2.4 Participants

sixty informants were selected randomly from the MA2 English language class of Ibn Khaldoun Universit, targeting students of the age of 20 to 26 and over. The participants are mostly coordinate or compound bilinguals as they have all grown up hearing French and Algerian Arabic in their speech community. Also, all of the participants who have taken part in this investigation have similar language backgrounds since most of them have been born and raised in Tiaret.

Among the 60 participants taking part in the investigation are 14 men and 46 women. All of them will be asked to complete the questionnaire. However, only four, two men and two women will be invited for an informal interview with the researcher. In table 2.1 below, information about the interviewees are provided. For anonymity purposes, names were exchanged with numbers.

Subject	Gender	Age	origins	Academic background
01	Female	25	Mehdia, Tiaret	Linguistics branch
02	Male	25	Frenda, Tiaret	Didactics branch
03	Female	23	Dahmouni, Tiaret	Linguistics branch
04	Male	25	Sougueur, Tiaret	Linguistics branch

Table 2. 1 The interviewees' personal information

These participants were selected for various reasons. First, the accessibility, in case of data loss, we could contact them at any time. Second, all of them live in an environment where French is spoken. Third, the participants are familiar with the researchers, which will and thanks to their acquaintances' presence, help reduce the observer's paradox. Third, both genders are taken into consideration, in order to avoid any disparities or inconsistencies.

2.5 Research Instruments

This part of the dissertation will be discussing the methods in which data have been collected. First, before describing the way that the questionnaire and the interview has been discussed, the Acceptability Judgement test will be highlighted. Further details will have provided on how these tests will serve to prove the hypothesis of the present study right or wrong.

2.5.1 Acceptability Judgments

To decide the strength of code-switching grammatical constraints in the speech community of Tiaret, it is imagined that the most suitable means of data-collection method was through collecting judgments from bilinguals of Algerian Arabic-French.

Since grammar is a cognitive build-up, it is not ajar to cognizant awareness. Speakers cannot have any impressions about the status of a sentence with respect to that grammar; rather, in Chomsky's (1965) terms, one should say their responses concerning acceptability, that is, the degree to which the sentence sounds "good" or "bad" to them. These tests include explicitly asking speakers to report their spontaneous reaction to a string of words - deciding if a "string of words is a possible utterance of their language" (Schütze and Sprouse, 2014, p. 2).

These tests were proven to be very effective in investigating grammatical systems. They are a sort of behavioural response that requires an explanation that is most likely to be cognitive. Consequently, it tends to be received as proof of producing interference about the cognitive systems that give rise to them, which syntacticians assume incorporates the grammatical system of the human language faculty.

The benefits of an acceptance test are numerous. Initially, the acceptability test is not a time-demanding process. Once the questionnaire has been created, it is merely a case of inviting participants to complete it. Moreover, it is a practical method of gathering data. The test is relatively

at a reasonable cost. Data can be recovered from just a few participants (or many, it is an adaptable method). Also, providing the identical conditions each time, acceptability judgment can be carried out almost anywhere, hence, the use of a research facility is unnecessary. In addition, there are no requirements for the specific hardware as the test can be adjusted for any area of research that demands it. Another reason for using an acceptability test is that it possesses more advantages than methods such as using spontaneous data.

The present investigation typically depends on collecting qualitative data from a significant number of participants, whose perception is the key premise of their acceptability judgment. However, it must be noted that measuring perceptions is practically impossible. In this manner, we were obliged to utilize indirect methods to measure what we could have collected from the participants. These methods are typically achieved through scales. In this investigation, participants will be provided with acceptability judgments on a Likert scale.

The Likert scale instructs the participants to state explicitly (in this case by numbering) their judgment of the acceptability of particular strings of words. Through this research tool, we will be inviting participants to determine whether or not sentences containing code-switching between Algerian Arabic and French are acceptable through a numerical scale, with the endpoints defined as acceptable or unacceptable, and asked to rate each sentence along the scale.

2.5.2 Questionnaire

The questionnaire aims at measuring subjects' perception of code-switching constraints. Thus, the combination of both closed-ended and open-ended questions provides the researcher with a more profound understanding of the collected data.

Open-ended questions aim at clearing the subjects' confusion in settling on choices about the acceptability of the sentences. All in all, the "why" questions supply the present study with more qualitative data in order to successfully analyze the participants' perception. However, close-ended questions, such as yes-no questions, require a straightforward answer, with no substantial need to expand. Accordingly, the answers that we will obtain through the close-ended questions comprise quantitative data. While, answers to open-ended questions comprise qualitative survey results.

The questionnaire of this study accommodates two sections. The first one is dedicated to the first biographical profile of the participants. The second is dedicated to code-switching sentences between Algerian Arabic and French. It must be noted that participants are unaware that their linguistic behaviour or perception is being measured in order to prevent any psychological or sociological bias and attitudes. Consequently, the respondents' real choice of language for the completion of the questionnaire indicates clear language preferences and, thus, provides initial language behaviour data.

The questionnaire is administered to 60 respondents who belong to MA English students of Ibn Khaldoun University, males and females. Each participant is aged between 20 and/or 26 and over, with varying occupations and language experience.

For qualitative analysis, the questionnaire was first piloted to examine its reliability. Consideration was likewise paid to the density of the questionnaire and its appearance to ensure the respondents' willingness to invest time and effort into the questionnaire. Four people from different age, gender and who were a part of the main sample were selected to sit for the interview. This pilot study has proceeded in order to highlight any ambiguity of inquiries that leads to possible changes and tweaks, such as including more instructions, omitting others, and modifying few concepts.

As Codó (2008) asserts, the translation of the questionnaire into various languages spoken in the multilingual setting under investigation establishes a critical step in the research design as it may prompt higher levels of participation. However, given the fact that the participants are English language students, we were not obliged to translate the content of the questionnaire as they were able to derive meaning from the instructions included in the survey.

The questionnaire begins with two questions that broadly covers the informants' personal information such as gender, age, place of birth and finally the context and to which extent the Algerian Arabic and French are used. The answers to the questions are related to the diverse uses of code-switching and how different social categories of people practice this linguistic phenomenon.

The questionnaire includes the use of a Likert scale, in which five choices were given, judging the acceptability of the sentences in which code-switching grammatical constraints were

both adhered to and violated. The respondents should be free in answering since a third choice is to be stated for any neutral opinion between the other two groups of extremes (very unacceptable, unacceptable) and (acceptable and very unacceptable). The total number of sentences is 60, each of which contains a code-switching occurrence. These sentences were divided into three sections. Each section is devoted to one grammatical constraint. Each section comprises two types of sentences, ones that adhere to the grammatical constraints and one that violates or defies the grammatical constraints.

2.5.3 Interview

Interviews are very well-acknowledged to be effective in obtaining reliable data in sociolinguistic topics. It attempts at eliciting linguistic data in investigations dealing with language use, and in sociolinguistic enquiries in different speech contexts. This method is utilized to gather as much information as we can collect on relevant code-switching occurrences and that cannot be obtained through other methods. Therefore, we include the semi-structured interview as a method of research to obtain more qualitative data related to bilinguals' own experiences and reflections on how they make use of code-switching.

In the present part of the research work, four participants were informally interviewed after they had completed the questionnaire. These interviews were, in essence, conversations with the participants, among who are two females and two males, of different ages. The sample size is limited to only 4 subjects for qualitative objectives only and due to the time constraint of the present investigation.

The process of interviewing the subjects took place in two parts. Initially, we provoked a discussion about the participants' own reflections on their language backgrounds such as age, period of speaking French and attitudes towards it. Postholm and Jacobsen (2011) assert that the success of an interview depends on how well it sheds light on the hypothesis, topic or investigation. Accordingly, the second part was dedicated to open-ended questions related to the factors that may affect the phenomenon of code-switching such as the motivations and attitudes towards it. The informants were requested to narrate stories describing their social issues and interests in numerous subjects.

Similarly, as with any research work, the present investigation accepts certain limitations that should be taken into account. The first obstacle that we could think of is the observer's paradox. Subjects may be intimidated by the presence of a stranger interviewer which results in obtaining unreliable information concerning their personal observation of language use. To minimize this possibility, the data collected for this study are primarily done by the researcher and a family member of the informant, the procedure called a friend of a friend. Tagliamonte (2006) explains that an intriguing part of the social network approach is the "friend of a friend", which requires the presence of individuals who occupy where it requires the presence of individuals who carry out an intermediary role in the community. This strategy requires individuals' acquaintances' presence while being interviewed by the researcher in order to provide mental support and avoid any complexities. Therefore, the interview is realised between the informant and his/her close relative or friend and the researcher so as to reach spontaneity, natural speech and to reduce anxiety.

Second, on account of time imperative, only four respondents were devoted for qualitative purposes. Second, the research manages a fairly defamed theme as the investigation on the French language might indeed be affected by the response of some informants. Consequently, the results of this study may not be completely generalizable in light of the fact that the sample was restricted to the Tiaret speech community only.

Although in our research work the interview is not a very adequate strategy to gather spontaneous data concerning syntactic functions of code-switching, we include it to obtain more information about code-switching.

2.6 Conclusion

In this chapter, the process behind collecting data was explained in details. Then, both the qualitative and quantitative methods' pros and cons were discussed to arrive at the idea of using a hybrid method to investigate the use of code-switching between Algerian Arabic and French in Tiaret speech community. This chapter involved two instruments to collect reliable data: a questionnaire and an interview. The questionnaire aimed at collecting quantitative data related to the acceptability judgments of bilinguals in Tiaret speech community. This method was employed with a random sampling. The interview took place with four selected informants in order to investigate the socio-cultural aspects related the use of code-switching. Furthermore, all data

collection was first analysed so as to select only the one related to code-switching and the ones that might be relevant to the present research work.

Chapter 3: Data Analysis and Interpretation

3.1 Introduction

This chapter seeks out to explore the evidence that supports our claims and interpretations. For the sake of answering the research questions, we aim at analyzing the data gathered by presenting the results and interpretation quantitatively and qualitatively. Initially, we uncover the results generated from the analyses of the participants' judgement of the sentences that adhered to and violates the grammatical constraints in question. Then, the study scrutinizes the answers obtained from the interview, that is the participant's motivations for code-switching and their perception of code-switching, gender and age connection. At last, the obtained results will be re-discussed and summarized in light of our findings.

3.2. Results obtained from Students' Questionnaire

This section will display the findings of the questionnaire, taking the results for each section individually.

Section 01:

Participants' Personal Information

	Category	N	%
1) Age	20-22	11	18,3
	23-25	35	58,3
	26 and over	13	21,6
2) Gender	Male	14	23,3
	Female	46	76,7
3) Origins	Arab	54	90
	Chaoui	0	0
	Kabyl	3	3
	Other origins	3	3
4) Academic Background	Linguistics' Branch	26	56,5
	Didactic's Branch	20	43,4

Table 3. 1 Informants' personal details

As displayed in the table 3.1 above, the total number of the respondents included within this research reached 60 participants. Our respondents belong to different ages and genders .76,7% of them are females and only 23,3% are males. The imbalanced number amongst the two categories in our questionnaire may possibly be due to the only reason that female applicants are more cooperative than their males' counterpart. As far as age is concerned, most participants are aged between 23-25 years old (59,3%), and only 18,6% are in 26 and over, while 20% are in the age between 20 and 23.

The participants belong to the Tiaret speech community as a whole, but come from diverse backgrounds. According to the table above, most of them are Arabs (90%). Only 5% are Kabyle, while the remaining 5% are of another origin that has not been clarified by the participants.

Section 2: Language Use and Attitudes

Question 04: In which language are you most competent?

Gender	Category	N	Total		
			Category	N	%
Male	Standard Arabic	0	Standard Arabic	0	0
	Algerian Arabic	14			
	French	0	Algerian Arabic	0	60
	Berber	0			
	Other languages	0	French	0	0
Female	Standard Arabic	0			
Female	Algerian Arabic	46	Berber	0	0
	French	0			
	Berber	0	Other	0	0
	Other languages	0			

Table 3. 2 Language competence among participants

Table 3.2, shows that all the participants admitted that they are most competent in Algerian Arabic. Although French currently dominates as a language of instruction in Algerian higher education institutions in science and technology fields (Benrabah, 2007), and the fact that the participants are all students of English, all of them preferred to choose Algerian Arabic as their most competent language.

These results were very natural and logical because of many reasons. First, Algerian Arabic is the most spoken language in informal settings (home, with friends, outside schools). Also, these results can be interpreted in a way that Algerians use Algerian Arabic to indicate that they belong to Algeria. Fasold (1984) reports that in a multilingual speech community, like the present one, the language is considered as an important marker of their identity; by using that language they affirm their belonging to one speech community or another. Thus, language becomes a significant value of ethnicity. Moreover, none of the participants chose Berber, despite the fact that some participants are of Kabyle origins. This, however, comes as no surprise since the majority of respondents are native Algerian Arabic speakers, and Tamazight has suffered decades of propaganda characterizing it as an ancient language of the past.

Question 05: Do you have a French speaking environment at home?

Gender	Category	N	Total		
			Category	N	%
Male	Yes	3	Yes	18	30
	Very little	6			
	Not at all	4	Very little	16	26,6
Female	Yes	15	Not at all	26	43,3
	Very little	10			
	Not at all	22			

Table 3. 3 The possibility of a French speaking environment at the participants' homes

Table 3.3 above shows that only 30% of the participants confirmed the existence of French environment in their homes (21,4% male and 32,6% females). 43,3% of them live in a French- free environment (47,8% males and 28,5% females). However, 26,7% claimed to exist in an environment with very little French (42,8% males and 47,8% females).

The low numbers of the participants existing in French environments may be related to the lack of education in French for the parents or older siblings. The difference in environments between genders can be attributed to the fact that females are more interested in French than males. Ellis (1994) sheds light on studies that support the claim of girls outperforming boys in language learning. Additionally, Stöckli (2004) uncovered that girls outperform boys in both German and French. Also, it has been found that girls are more motivated to learn foreign languages than boys (Dörnyei & Clément, 2001; Dörnyei et al., 2006; Holder, 2005; MacIntyre et al., 2002; Mori & Gobel, 2006). These motivational differences may stem from or convey the impression that females are foreign language subjects, while math and physics are male subjects. Additionally, Dörnyei et al. (2006) and Mori & Gobel (2006) have examined gender differences across a number of constituents of language learning motivation and found that girls generally displayed higher language learning motivation than boys. Girls had a more positive general outlook on the foreign language and its culture. They showed a more positive attitude towards the target language, the speakers, and their community.

Question 06: How often do you use French?

			Total		
Gender	frequency	N	Frequency	N	%
Male	Never	2	Never	6	10
	Sometimes	9			
	Often	3	Sometimes	35	58,3
Female	Never	6			
	Often		19	31,7	

	Sometimes	6			
	Often	19			

Table 3. 4 The participants' French use

Table 3.4, indicate that 35(58,3%) subjects reported that they were inclined to use French sometimes in their speech .19 (31,7%) others claimed that use it often while only 6(10%) claimed that they never use it. The difference in these results may be due to several reasons, such as language proficiency, language attitude and the absence of language in an individual's environment. The table also shows that female (sometimes= 56,5%, often =41,3%, never= 13%) use it French more than males (sometimes= 64,2%, often =21,4%, never= 14,2%). By contrast, 43,3% of male use French sometimes and 26,6% use it often, with only 3,3% who claimed they never use French. The observation of actual practices has shown the results were adequate with the results of the interview and the questionnaire. Kiesling (2007) explained that, in each society, there are certain practices and behaviours that males use to linguistically express their masculinity. Males tend to avoid using French than females. The male participants expressed their tendency to use less French because it shows more credibility and because, according to them, it reflects the masculinity in them.

Question 07: In what state of mind do you code-switch when you cannot think of any French word/expression which has no AA equivalent?

Gender	Category	N	Total		
			Category	N	%
Male	Consciously	4	Consciously	12	20
	Subconsciously	4			
	I do not know	6	Subconsciously	21	41,6
Female	Consciously	12			
	Subconsciously	17			
	I do not know	20			

Table 3. 5 Participants' state of mind during code-switching

In response to the question that addresses the mental case in which the participants code-switch. We aimed at obtaining the speakers' awareness of code-switching. Briefly, participants code-switch either consciously or subconsciously for certain communicative or social purposes. Table 3.5 shows that 36,6% of the sample answered they do not know. On the other hand, as expected, a considerable number of informants, that is 41,6%, assert to code-switch subconsciously due to the fact that French is widely common in the Algerian speech community. Whilst, 20% stated they code-switch consciously. Thus, this result may be interpreted according to the low proficiency of French where consciousness and awareness attain the peak to communicate effectively and avoid committing mistakes. Also, due to the fact that it has been a very long time since French has been implemented in the Algerian speech community, it is now considered as a natural part of the Algerian everyday speech. Thus, code-switching, in this case, is most likely to happen subconsciously.

Question 8: How do you consider the phenomenon of code-switching?

Table 3. 6 Participants' perception of code-switching as a linguistic phenomenon

Gender	Category	N	Total		
			Category	N	%
Male	A natural linguistic phenomenon	9	A natural linguistic phenomenon	9	5
	A proof of linguistic deficiency	0			
	A prestige	4	A proof of linguistic deficiency	7	1,6
	Other descriptions	1			
Female	A natural linguistic phenomenon	30	A prestige	12	0
	A proof of linguistic deficiency	7			
	A prestige	8	Other descriptions	2	3,3
	Other descriptions	1			

Question 9 aims at discovering the participants' attitudes towards code-switching. From table 3.6 above, the vast majority (65%) agreed to describe code-switching as a natural linguistic phenomenon. These percentages can be linked to the fact that Algeria is a multilingual speech community. French and Arabic co-exist, producing a linguistic variety, that is used subconsciously by the members of this speech community. 11,6% of the participants chose to describe it as proof of linguistic deficiency. This matches with some researchers' assumptions that suggest code-switching affects a language negatively and is viewed as a language deficiency. However, 20% of the others described it as prestige. A small minority, that is 3,3% precisely, thought different and did not choose any of the provided choices. However, no further details were given.

Question 9: How often do you code-switch between languages switch (Arabic – French or vice versa)?

Gender	Category	N	Total		
			Category	N	%
Male	Never	0	Never	0	0
	Sometimes	4			
	Rarely	2	Sometimes	20	40
	Often	6			
	Always	2			
Female	Never	0	Rare	4	6,8
	Sometimes	6	Often	17	28,8
	Rarely	2			
	Often	11	Always	18	30,5
	Always	16			

Table 3. 7 Participants' code-switching frequency

Table 3.6 shows that none of the participants have denied the occurrence of code-switching in his or her speech. This is probably due to the fact that Algerian Arabic and French has been in a

contact for a very long period of time. Consequently, creating an indigenous speech, that is commonly used among the individuals of the Algerian speech community.

Furthermore, it is clear that females code-switch more than males do. Thus, one may postulate that gender affects the frequency of code-switching.

Question 10: Why do you code-switch?

			Total		
Gender	Category	N	Category	N	%
Male	It is a habit	6	It is a habit	36	60
	You are not competent enough to use one language	4			
	Other reasons	3	You are not competent enough to use one language	10	16,6
Female	It is a habit	30	Other	3	3,3
	You are not competent enough to use one language	6			
				No answers	11

Table 3. 8 Participants' motives for code-switching

This question was dedicated to find out the reason and motives for code-switching. The results shown in table 3.8, says that there is a considerable number of participants who are not aware of these reason. Accordingly, a considerable number of participants 11 (18,3%) chose to refrain from answering this question. However, more than the half (60%) answered that code-switching is a habit. On the other hand, 16,6% believe that they code switch because they are not competent enough to use only one language. 3 participants, however, did not agree with the suggestions made. However, only one suggestion was made by a male participant. He claims: “when I don’t find the right word of the language I speak, that’s why I code switch”.

Section 03: The Grammatical constraints

The Equivalence Constraint

The Equivalence Constraint adhered to:

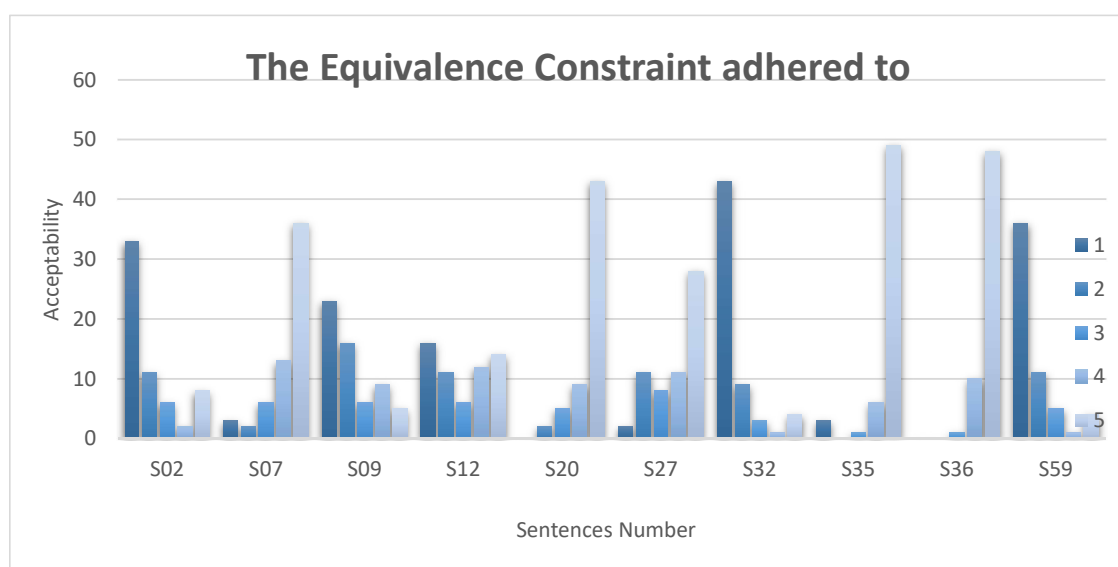


Figure 3. 1 Participants’ response to sentences adhering the equivalence constraint

From figure 3.2, one can observe that half of sentence are accepted. Among these acceptable sentence. Examining the pattern of sentence 02 and 59 (example 28, 29), that was perceived

unacceptable, the switch occurred in the boundary of the sentence in “the Arabic noun استاذ and ساعة. Moreover, sentence 35 (example 30) is patterned in a way which the switch happens in the boundary of an Arabic sentence, specifically in the French noun “coiffeur”.

28) C'est le seul استاذ

He is the only teacher.

29) A qu'elle ساعة

At what time.

(30) راه عند الكوافير

He is at the barber.

31) C'est العممة de mon fils.

She is my son's aunt.

Initially, one may hypothesize that:

a) An Arabic noun cannot be switched in the boundary of a French sentence.

Also, looking at sentence 9 (example 31), the switch occurred by placing the word “عممة” in a sentence in French, this sentence followed the previous pattern but it was deemed unacceptable. Thus, the claim a) must be revised to be:

b) It is acceptable to switch only a French noun in a sentence in Arabic, if this latter is in the boundaries of the sentence. However, the opposite is not acceptable.

Also, in sentence 32 (example 32). Both language rules are perfectly followed but it was deemed as unacceptable. This decision may have been made due the unfamiliarity of such patterns in the participants' speech especially due to the fact that almost all French verbs are integrated morphologically and phonologically in Arabic.

(32) انا مangel الطعام كل جمعة

I eat couscous every Friday.

On the light of this observation, initially, another claim may be generated as follows :

- c) French verbs must be morphologically and phonetically integrated

The Equivalence Constraint violated

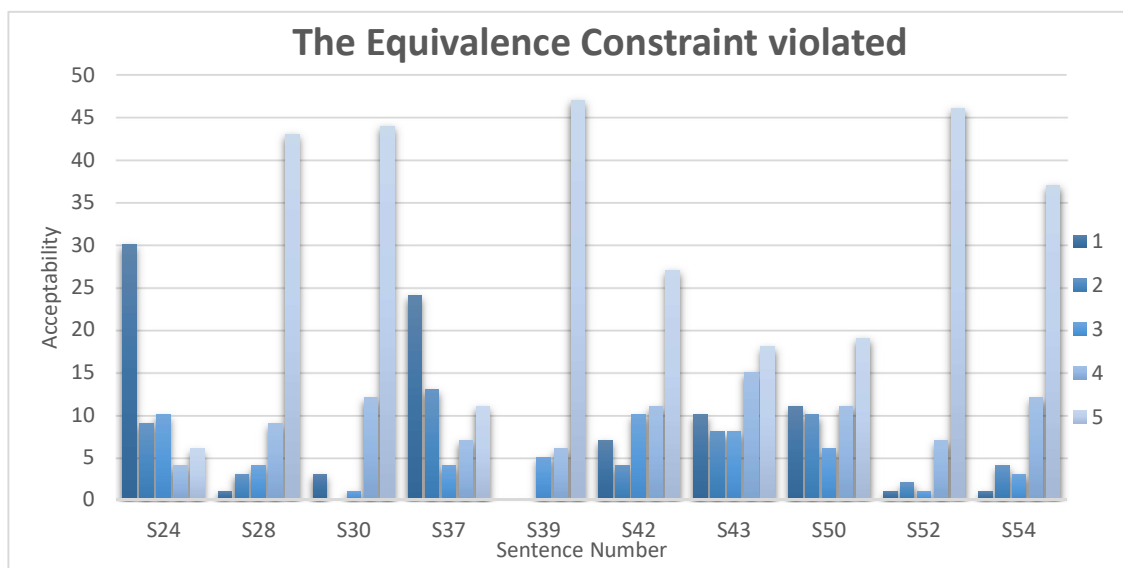


Figure 3. 2 Participants' response to sentences violating the equivalence constraint

Looking at figure 3.2, most (eight) of the sentences were deemed acceptable even though they violate the equivalence constraint. Consequently, we summarize:

- d) The equivalence constraint does not hold in the Algerian Arabic- French code-switching.

The sentence which has the highest acceptance rates was sentence 39, (respectively example 33):

le control ⵏ (33

The control has come.

This sentence adheres to Arabic grammatical rules but neglect the ones of French language. here the verb “جا” proceeds the noun phrase “le control”, which contrasts with the French grammatical rule that says that noun phrases comes before the verb.

les douleurs قتلوني لبارح (34)

the pains killed me yesterday.

شراو هاذيك la télévision الغالية يزاف (35)

They baught that really expensive Tv.

شكون الجان (le jeune) هاذاك (36)

Who is that young man.

Also, by looking at the figure above, sentences 28 and 42, respectively (example 33, and 34), among many other similar case was accepted by the respondents. The switching here, occurred in the French nouns “la television” and “les douleurs”.

Moreover, another sentence that was deemed acceptable is sentence 30(example 36). The switch occurred in the word “le jeune”, which is considered as a noun even though it is originally an adjective. This observation matches with claim a) made above.

Furthermore, in sentences, 24 and 50 (example 37, 38), the switch is the French disjunctive pronouns “moi” and “on” and the Arabic verbs “دخلت= went in” and “veut”. These sentences adhere to the French grammatical rules but violates the Arabic language ones. If we take sentence 32 example, that adheres to the equivalence constraint, into consideration and placed a French clitic pronoun before the verb “manger” (example 32) it would have been likely to be accepted.

37) Me, I went in with them yesterday.

Moi دخلت البارح معاهم

on les veut pas حنا (38)

Us we don't want them.

With that observation made, one can also postulate another claim, as follows:

- e) It is acceptable to switch between Algerian Arabic and French if the French clitic noun precedes the Arabic pronoun, in this case "حنا" and "تاء".

The Free Morpheme Constraint

The Free Morpheme Constraint adhered to

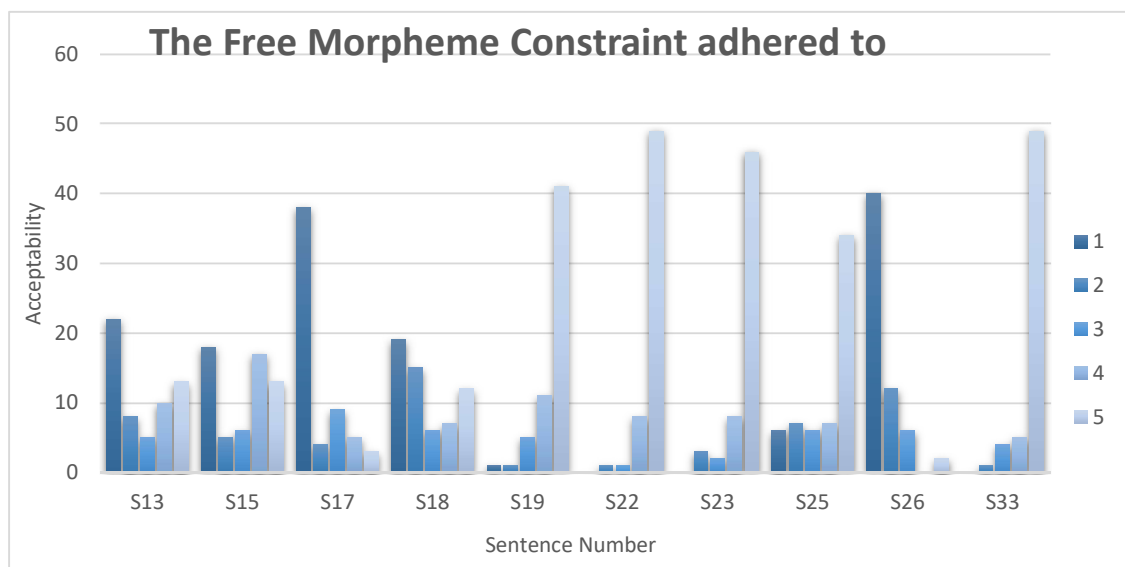


Figure 3. 3 Participants' response to sentences adhering to the free morpheme constraint

Looking at figure 3.3, half of the sentences that adhere to the free-morpheme constraint has received close acceptance rates by out participants. These sentence contain both morphologically and phonetically integrated verbs that are very common in the everyday speech of Tiaret speech community. This perhaps, have contributed in recording the high acceptance rates. To illustrate, sentence 23,19 (example 39, 40) are mentioned below.

(39) انا هاذاك السيد مانسيبورتيهش خلاص (supporter)

I don't support that person at all (I don't like him at all

(40) توشاتني (toucher) بهدرتها بزاف

(41) ليوم تارمينو (terminer) القرابة

(42) لازم تخدم باش تريسيبي (reussir)

The afore mentioned observation supports claim c). However, the other five sentence that were perceived as unacceptable by the participants go against it. These sentences are patterned in a way in which the verbs are either morphologically or phonetically integrated. The rejection rates may be interpreted for the reason that these verbs sound unnatural and rather odd to the participants. All of these verbs have Algerian Arabic equivalence that are very common in the everyday speech.

Consequently, another claim is to be generated as follows:

- f) “Not every morphologically and phonetically integrated French verb into Algerian Arabic is acceptable, there are few exception”.

The Free Morpheme Constraint violated:

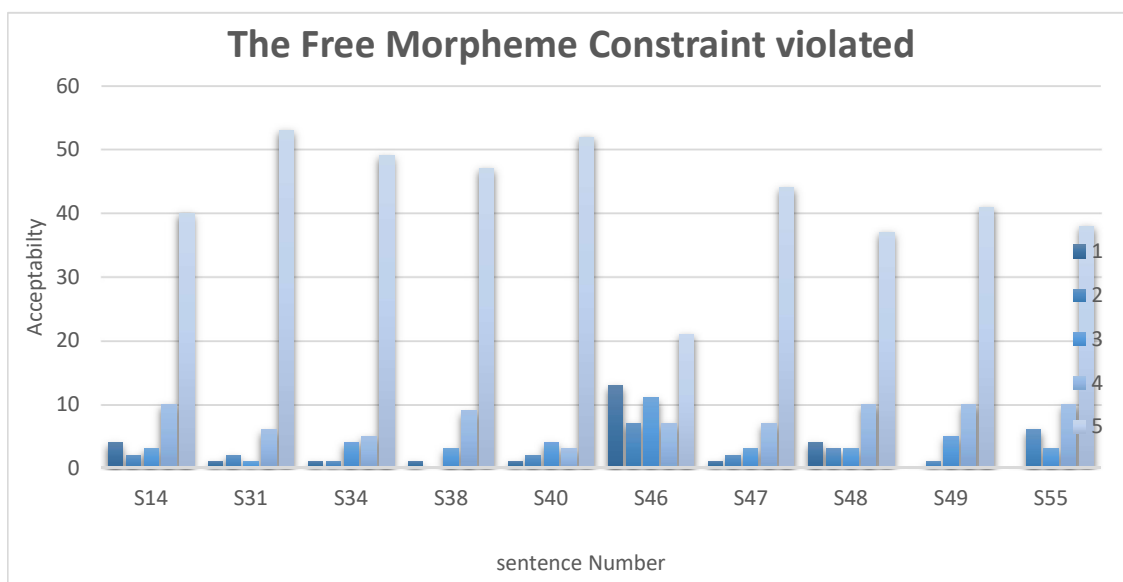


Figure 3. 4 Participants' response to sentences violating the free morpheme constraint

According to figure 3.4, all ten sentence violating this constraint were deemed acceptable. Hence, we encapsulate:

- g) The free-morpheme constraint does not hold in Algerian Arabic-French code-switching.

Examining sentence like 46, 47 and 48 (accordingly examples 43, 44, 45). The switch occurs in the French verbs “degage”, “avancez” and “quitte”. All three verbs were not integrated in any syntactic form but they were perceived acceptable.

43) قتلو quitte هاذيك الجماعة لي مش مليحة

I told him to leaves that group that is not good.

44) اياها degagez كر هتلي حياتي

Leave! I'm so sick of you.

45) Avancez للقدام ربي يحفظكم

Please step forwards.

With this observation made we may say that:

- h) claim c) is invalid.

Briefly, based on the participant's judgment and the comparison of the sentences' patterns, it is clear enough that the free morpheme constraint does not hold in the Algerian Arabic code-switching.

The closed-class constraint

The closed-class constraint adhered to

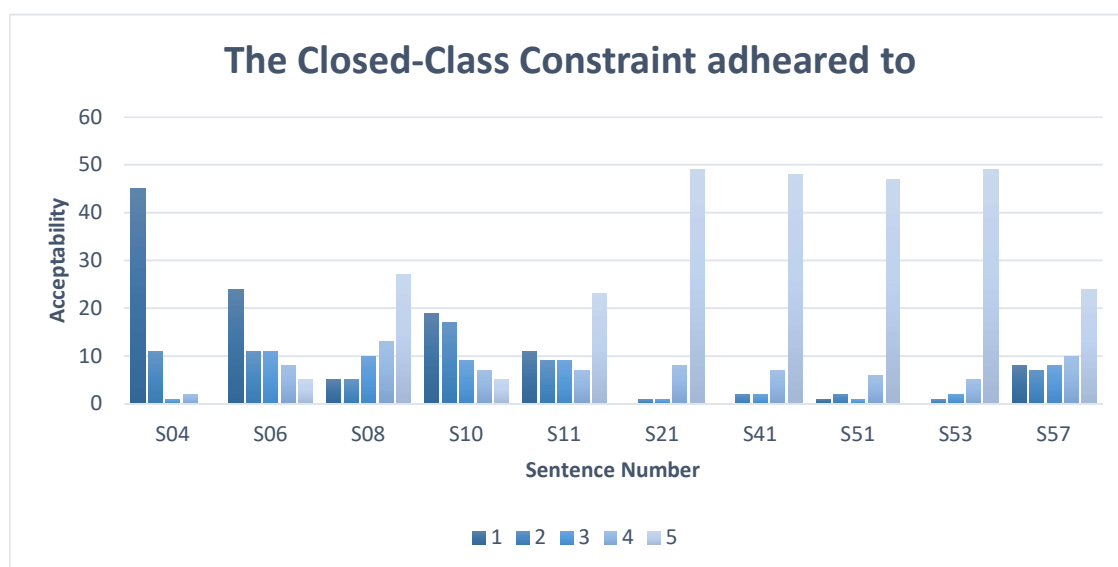


Figure 3. 5 Participants' response to sentences adhering to the Closed-Class Constraint

Looking at graph 3.5, on the whole, the sentences which adhere to the constraint were considered more acceptable than those which were violations.

Among the sentence that were, we find sentence 4 and 6 (example 46.). The switch occurred in the Arabic nouns "سروال" and "عمتها" in a sentence fully uttered in French, leaving the prepositions "le" et "chez" unswitched.

46) J'ai acheté le سروا

I bought the pants.

47) le mariage était chez عمتها

The marriage was at her aunt's.

que tu le connais pas.علا بالي (48)

I know that you do not know him.

Also, one of the sentences that were deemed acceptable even though it defies the closed-class constraint is sentence 57 (exepmle 48), the switch happens in the complementizer “que”.

Thus, we postulate:

- i) a switch between a complementizer and the clause it introduces switching is possible after the French complemtizer “que”

Based on the observation made above, and the fact that most of the sentence adhering to the closed-class constraint, we postulate the following claim concerning the Algerian Arabic-French code-switching as follows:

- j) prepositions cannot be switched
- k) determiners cannot be switched

The closed-class constraint violated

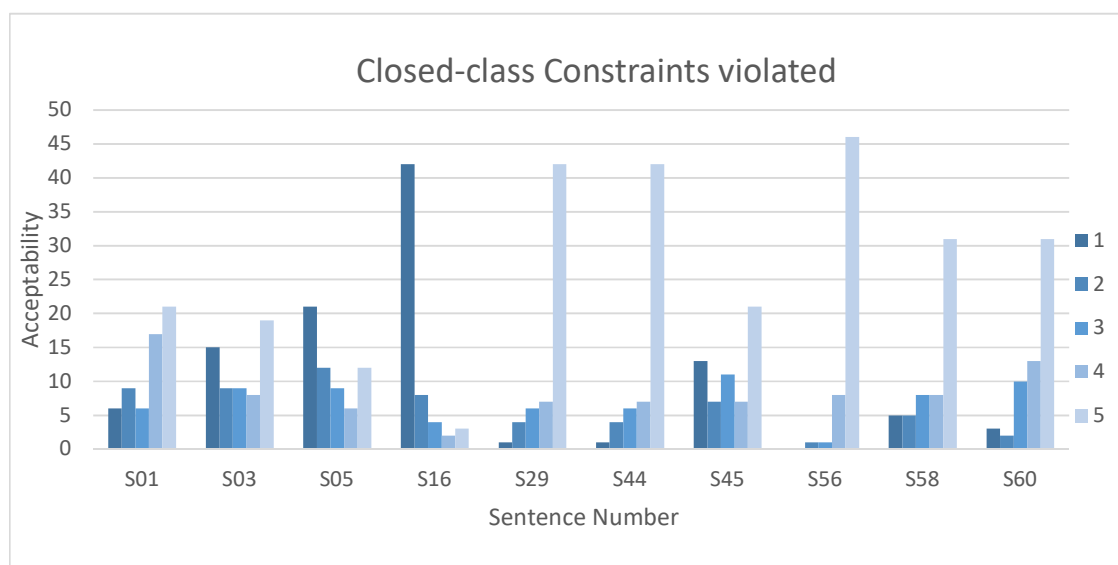


Figure 3. 6 Participants' response to sentences violating the Closed-Class Constraint

As demonstrated in graph 3.6, most of the sentence were accepted by the participants, respectively eight sentences. On the other hand, only two sentences were found odd by the participants.

49) C'est un traitement très efficace و il a des bonnes résultats

This treatment is very effective and has good results.

50) دارنا جاية en face لدار عمك

My house is in front of your uncle's.

51) رايحين تخدمو حتى à partir de quatorze heures cinq heures

You will be working from 2 until 5 p.m.

Looking at the structure of sentences 1, 56 and 58 (examples 49, 50 and 51), which were accepted, the code-switch occurs in the prepositions “ولا” “en face” and “حتى”.

Based on what has been noticed, claim e) holds and the closed-class constraints is valid the Algerian Arabic- French code-switching.

However, examining sentence S16 (example 37), which was perceived as the most unacceptable sentence, the code switch here occurs at the level of the French determiner « une », which leads to violating the constraint of the closed-class constraint. One of the participants clarified why he rejected this sentence strongly by saying that it does not sound natural but rather unacceptable, the speaker sounds as if he does know the French equivalent of « عباية » (dress), and chose to cover for his linguistic deficiency in Algerian Arabic.

52) عبايةune شريت

She said that she bought a dress.

53) Je sais بلي c'est difficile.

I know it is difficult

In sentence 60 (example 53), the switch occurred in the Arabic complementizer “بلي” in a sentence fully uttered in French. Based on this observation and the claim i), and Boumarane's (1988) studies that says that Code-switching between a complementizer and the clause is permitted. One may summarize:

j) “The switch is possible after the French complementizer and the Arabic complementizer [belli]”.

To sum up, based on the previously made observations:

l) we prove e), and nullify claim f), due to the fact that there are exceptions in the Algerian Arabic-French bilinguals' speech.

3.3 Results Obtained from the Interview

The analysis of empirical data needs to be done in details and carefully in order to meet our objective. code-switching remains a fickle phenomenon and should be analysed on an individual level. As aforementioned, the aim of the interview is to analyse qualitatively the social factors that may influence the occurrence of code-switching in Tiaret speech community. Therefore, four participants were selected according to age, gender and linguistic background. We conducted a semi-structured interview for the sake of giving our informants freedom to express their thoughts to achieve spontaneous speech. The interviews were all held online due to the current situation of the coronavirus. Also, in ordered to decrease the observer's paradox, we thought the interviewees would be more comfortable at their homes and surrounded by their family members or friends.

As far as the time of the interviews is concerned, the minimum time length lasted 10 minutes, while the longest interview lasted 30 minutes. Before the interviews, we briefly introduce the research work to all the interviewees and their general feedback on some of the questions in the questionnaire. By the half of the interviews, most of the participants were comfortable and started to share spontaneous speech, especially when we asked questions about issues that concern them as students, such as the problems they faced during their time in college and what changes they could make if they had the choice.

Then, they were asked to describe their linguistic patterns, whether they code-switch often and what languages they use, their attitude towards code-switching and whether they have ever noticed that there were some kinds of rules to their dialect.

Subject 01: 25 years old Female

this participant has an overall positive attitude towards code-switching. She believes that being exposed to mixed speech helps her develop the languages that she speaks. then, she mentions some aspects that motivates her to code-switch such as, prestige, context, topic, etc. furthermore, she claims that the questionnaire added no insights to how she views her speech, she was perfectly aware that there were syntactic rules that she follows to speak.

Subject 02: 25 years old male

This informant similarly to subject 01 believes that code-switching is a positive aspect of his speech. As far as what motivates him to code-switch, explains he relies on French more when he is speaking with someone familiar with French. For instance, he says:

54) “**par exemple, fi l’université, surtout fi les evenement, nahdro en frnaçais**”

For example, at the University, especially in events, we speak French.

Moreover, he claims the questionnaire enlightened his knowledge concerning his speech. He explains, that he thought that since Algerian Arabic is not an unofficial language, it was most likely to be random rather than a rule-governed process.

Subject 03: 23 years old female

This informant holds a negative attitude towards French. She does not like how the French language has overpowered Arabic. She describes a situation in which annoyed her a lot. This situation happened in a bakery shop where she ordered a cake in Arabic. She thought it was very normal until the worker replied at her by saying her order in French, in a correcting tone. She believes that Arabic is no less prestigious than French. To illustrate:

55) “Gɔ-telha aštini douq lim w hiya gætli qassdek **le citron!**”

I told her lemon taste and replied, do you mean lemon! (In French).

As far as the motivations of code-switching are concerned, she says that she only code-switches when she cannot think of a word’s equivalent in Arabic. Looking at code-switching from a structural perspective, she expressed her surprise due to the existence of such grammatical constraints in her speech.

Subject 04: 24 years old male:

This informant thinks that code-switching is a fascinating phenomenon since it can be an indicator for intellectual individuals. As for what motivates him to code-switch, he clarifies that he grew up in a speech community with a dialect that is not rich and needed to be filled with French words. Moreover, as far as the syntactic structure of his speech is concerned, he used to believe that code-switching occurs randomly and there were no rules to it.

In essence, the informants generally hold a positive attitude towards code-switching as a linguistic phenomenon existing in their speech. Furthermore, the participants have provided some motivation for code-switching, namely, the topic, the participants of the conversation, the context, etc. Lastly, it was observed that most of the informants were not aware that their speech was not merely a process of creating chains of Algerian Arabic and French words, but rather a rule-governed process. This perhaps is due to the fact that most of them code-switch subconsciously most of the time.

3.4 Discussion of the Main Results

In the light of the interpretations of our data, one can formulate few assumptions on the speech community of Tiaret. First, concerning the grammatical constraints of code-switching, it seems that all three constraints affect the speech of Algerian Arabic-French bilinguals. However, none of the constraint was strong enough to take control of all code-switching occurrences between the two languages in contact. Nevertheless, the closed-class constraint exceptionally, received higher acceptance rates, but it was not enough to generalize it to this speech community.

As far as the qualitative data is concerned, we came across interesting sociolinguistic facts about the Algerian Arabic-French bilinguals. First, they hold a positive attitude to code-switching. Second, they code-switch for various reasons, such as, the topic, the participants of the conversation, the contexts, etc. Third, they were unaware of the fact that they speech is built upon unofficial rules of grammar.

3.5 Conclusion

This chapter attempted to discover the evidence that supports our and interpretations. To answer the research questions, we analysed the collected data by presenting the results and the interpretation quantitatively and qualitatively. Initially, we sought to interpret the data obtained from the participant's judgment on sentences that follow and violate the grammatical restrictions in question, accordingly the equivalence constraint, the free-morpheme constraint and the closed-class constraint. The study then examines the responses obtained from the interview, respectively, is the participant's motivations for code-switching and their perception

gender and age connection to this linguistic phenomenon. Finally, the results obtained were discussed again and summarized in the light of Bouamrane's (1988) and our findings.

General Conclusion

General conclusion

This MA dissertation entitled "A Study of Grammatical Constraints on Code-switching in Algerian Arabic-French Bilinguals" aimed at sufficiently examining and describing the patterns of code-switching, specifically three grammatical constraints, namely, the equivalence constraint, the free morpheme constraint and the closed-class constraint, occurrences between Algerian Arabic and French. To evaluate the aforementioned grammatical constraints' significance in the light of the prevailing contesting arguments, recent studies and developments in linguistics and the participant's judgement. Additionally, we aspire at Discussing some criticism made by scholars working within code-switching syntax. Moreover, to describe, compare and interpret our findings with scientific research work in other sociolinguistic contexts.

The motivation of this choice is due to the claims of several scholars of the universality of such grammatical constraints. As, members belonging to a linguistically rich speech community, we wanted to test whether these syntactic patterns are strong enough to be applied. Also, we sought to test the Algerian Arabic-French bilinguals' perception of their own speech.

Our study started with an attempt to discuss the existing theoretical foundations of various linguistic models that have marked the morpho-syntactic analysis of code-switching. The main focus of our study is the structural perspective, where the universality of the grammatical constraints is questioned, in addition to its applicability in different sociolinguistics than the ones in which they were founded. These constraints have undergone many adjustments to fit the addressed speech community of this thesis.

Thus, the investigation was based on both quantitative and qualitative methods. It was assigned to test the applicability of three grammatical constraints of code-switching in the Tiaret speech community. This process was done through an acceptability judgement, where our informants were invited to judge sentences both adhering and defying three grammatical constraints of code-switching, the equivalence constraint, the free morpheme constraint and the closed-class constraint. Then, only a smaller sample was invited to an interview for qualitative purposes only.

Adhering to and violating the addressed grammatical constraints in the Algerian Arabic and French code-switching showed that there is a somewhat noticeable effect in the perception of the bilinguals' speech. These constraints needed to go through adjustments, where they were narrowed and tailored to suit such linguistic contact. First, the equivalence constraint, even though this

constraint is powerful in various sociolinguistic contexts, it does not hold in the one of Tiaret. Many occurrences were found, where either French and/or Arabic grammatical rules were defied in the natural speech of the Tiaret speech community. Within this context, we modified this constraint in a way that fits code-switching occurrences between Algerian Arabic and French. First, it is unacceptable for an Arabic noun to be switched in the boundary of a French sentence. Second, it is acceptable to switch a single French noun in a sentence in Arabic, if this latter is placed in the boundaries of the sentence. However, the opposite is unacceptable. Third, the French verb must be accompanied by its clitic pronoun when switched.

Second, the free morpheme constraint was the weakest constraint among the three. It had almost no power over the occurrences of code-switching in the Tiaret speech community. In this manner, further modifications had to be performed on this constraint. First, it is acceptable French verbs must be morphologically and phonetically integrated into the Arabic language if the verb's ending is "er". However, there are few exceptions, including the verbs that have common Arabic equivalents and rarely used ones.

Third, the closed-class constraint was particularly the strongest constraint among the three. However, some concepts required a more thorough look. Based on our speculations, prepositions are not allowed to be switched, except for some prepositions of the place and time. Additionally, determiners were proved to be restricted from switching. Lastly, the switch is possible after the French complementizer and the Arabic complementizer [belli].

Moreover, the qualitative data, namely the interview results, suggested considerable contribution to the body of knowledge that the study has created. We discovered the attitudes and motivations for code-switching. Our sample seems to have a positive attitude to code-switching. It was described as a natural aspect of their speech, an indicator of culture and personal linguistic development. As for the motivations, some of which were provided, such as, the topic of conversation, the topic, the context, the availability of terms in one language rather than the other. Lastly, we sought to find out whether the participants' perception of their own speech correlates with their own performance. Surprisingly, they showed total ignorance to the fact that, even though Algerian Arabic is a non-standard language variety, it is accustomed to being syntactically patterned.

Since this is the last part of the thesis, we intend to give certain recommendations for future researchers interested in similar research fields. There is a great need in building a bank of transcribed code-switching occurrences. This will help in comparing and drawing unique Algerian code-switching constraints. Also, a thorough study on the sociolinguistic situation of the Tiaret speech community.

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Appendice 01

Online Questionnaire:

We would like you to help by answering the following questions concerning code-switching between Algerian Arabic and French. This research is conducted by MA English students of the University of Tiaret to find out how Algerian Arabic and French bilinguals code-switch. This is not a test so there are no « Right » or « wrong » answers and you do not have to write your name on it. We are interested in your personal opinion. Please give your answers sincerely as only this will guarantee the success of the investigation. Thank you very much for your help.

✓ **First, we would like to ask a few questions about you.**

1. Age: a.20-22 b.23-25 c. Over 26
2. Gender: Female Male
3. What are your origins?
 - a. Arab
 - b. Chaoui
 - c. Kabyle
 - d. Other, explain:.....

✓ **Please answer these questions to the best of your ability:**

4. In which language you are most competent?
 - a) Standard Arabic
 - b) Algerian Arabic (daridja)
 - c) Berber
 - d) French
5. Do you have a French speaking environment at home?

- a) Yes,
 - b) Very little
 - c) Not at all
6. How often do you use French?
- a) Never
 - b) Sometime
 - c) Often
7. In what state of mind do you code switch when you cannot think of any French word/expression which has no AA equivalent?
- a) Consciously
 - b) Subconsciously
 - c) I do not know
8. How do you consider the phenomenon of code-switching?
- a) A natural linguistic phenomenon
 - b) A proof of linguistic deficiency
 - c) A prestige
 - d) Others, explain
9. How often do you code- between languages switch (Arabic – French or vice versa)?
- a) Never
 - b) Sometime
 - c) Rarely
 - d) Often
 - e) Always
10. If often or always, why do you code-switch?
- a) It is a habit

- b) You express your ideas and feelings better
- c) You are not competent enough to use one language
- d) Others, explain.....

- ✓ Second, please read each sentence and consider whether or not you think they are acceptable. Please check the box that you feel is most suitable, on a scale of 1-5 (1 being completely unacceptable and 5 being perfectly acceptable).

E.g.

	unacceptable	1	2	3	4	5	acceptable
روح اشري jus.		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	unacceptable	1	2	3	4	5	acceptable
1. C'est un traitement très efficace او a des bons résultats		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. C'est le seul استاذ		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. On mange ولا on mange pas		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. J'ai acheté le سروال		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Elle te pique فوق من drap		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. le mariage était chez عمته		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

7. je suis venu avec ماما
8. Il l'a acheté malgré غالي
9. C'est العممة de mon fils
10. ta tante est dans الدار
11. Selon ma mère الخياطة ساهلة
12. Il y a des gens qui يهدروا بزاف
13. ليوم تارمينو (terminer) القرابية
14. عند هابرو بلام (problème) فليز وغمون (les hormones)
15. لازم تخدم باش تريسبي (reussir)
16. قاتلي شريت une عباية
17. ليوم تبارتيري (partir) للدار
18. انا نفيمي (fumer) ثلاثة في النهار
19. انا هاذاك السيد مانسيبورتيهش خلاص (supporter)
20. هاذيك الورقة الـbleue

21. انا مانشرب ni اتاي ni قهوة
22. شربت القهوة في الكوزينة (la cuisine)
23. توشاتني (toucher) بهدرتها بزاف
24. moi دخلت البارح معاهم
25. فاكسينيته (vacciner) قبل ماتجيبه للدار
26. اعطيني نبواري (boire)
27. ماشافتش باباها depuis dix
28. شراو هاذيك la télévision الغالية بزاف
29. قالني تشري la bleue ولا la verte
30. شكون الجان (le jeune) هاذاك
31. واشمن branche خيرت
32. انالام الطعام كل جمعة manger
33. لبارح بلومبييت (plomber) ضروسي
34. ناس بكري disent لي بغاني مابنالي قصر و لي
كرهني ماحفر لي قبر

35. راه عند الكوافير (coiffeur)
36. بدلي هاذي la couleur ماهيش شابة
37. واش tu travailles
38. هدرنا معهاها بالFrançais
39. جال le control
40. جبتهم crédit من عند صاحبي
41. بنتك راحت ل'école إتقرا
42. قتلونيلبارح les douleurs
43. راكي تشوفي في هاذ la maison
44. ال femme لي جابت القهوة البارح وين راهي
45. قاتلي راه في deux jours ملي جا للدار
46. قتلو quitte هاذيك الجماعة لي مش مليحة
47. ايا dégage كرهتلي حياتي
48. Avancez للقدام ربي يحفظكم
49. راني majeur مكانش لي يسالني

50. on les veut pas حنا
51. تبغي la famille نع مامك ولا باباك
52. هاذاك parfum شباب بزاف
53. شيرات عندي problème في الدار
54. هو ما عندهم un role واحد اخر
55. خطيك منه هاذاك vicieux
56. دارنا جاية enface لدار عمك
57. علابلي que tu le connais pas
58. vous allez travailler à partir de quatorze heures حتى cinq heures
59. A qu'elle ساعة
60. Je sais عليلي 'est difficile
-

الملخص

يهدف العمل الحالي إلى التحقق في تبديل الشفرة بين العربية الجزائرية والفرنسية ، لا سيما في مجتمع الكلام في تيارت. وفقاً لذلك ، حاولنا في هذه الأطروحة دراسة التبديل اللغوي من ثلاث جهات نظر. أولاً ، المنظور البنوي ، حيث تمت مناقشة عالمية القيود النحوية. بعد ذلك ، تم اختبار قيد التكافؤ وقيود الشكل الحر وقيود الطبقة المغلقة من أجل معرفة تأثيرها على خطاب الجزائريين التي تحتوي على التبديل اللغوي بين اللغة العربية والفرنسية وتصوراتهم له. ثانياً ، المنظور اللغوي الاجتماعي ، حيث تناولنا دوافع ومواقف التبديل اللغوي. ثالثاً ، المنظور النفسي اللغوي ، حيث قمنا بدراسة بعض خصائص التبديل اللغوي كعملية معرفية وظاهرة لغوية.

الكلمات المفتاحية: التبادل اللغوي، القيود النحوية، التصورات، الدوافع، المواقف.

Résumé

Le présent travail de recherche vise à étudier la commutation de code entre l'arabe algérien et le français, en particulier dans la communauté linguistique de Tiaret. En conséquence, cette thèse a également tenté d'étudier le changement de code sous trois angles. Premièrement, la perspective structurelle, où l'universalité des contraintes grammaticales a été discutée. Ensuite, la contrainte d'équivalence, la contrainte de morphème libre et la contrainte de classe fermée ont été testées afin de connaître leur influence sur le discours des bilingues Algériens arabes et français et leurs perceptions. Deuxièmement, la perspective sociolinguistique, où nous avons abordé les motivations et les attitudes du changement de code. Troisièmement, la perspective psycholinguistique, où nous avons examiné certains aspects du changement de code en tant que processus cognitif et phénomène linguistique.

Mots clés: Code-Switching, Contraintes Grammaticales, Perception, Motivations, Attitudes.

Summary

The present research work aims at investigating code-switching between Algerian Arabic and French, particularly in the speech community of Tiaret. Accordingly, this dissertation also attempted to study code-switching from three perspectives. First, the structural perspective, where the universality of the grammatical constraints was discussed. Then, the equivalence constraint, the free morpheme constraint and the closed-class constraint were tested in order to find out their influence on Algerian Arabic and French bilinguals' speech and their perceptions of it. Second, the sociolinguistic perspective, where we addressed the motivations and attitudes of code-switching. Third, the psycholinguistic perspective, where we looked into some aspects of code-switching as both a cognitive process and linguistic phenomenon.

Key words: Code-Switching, Grammatical Constraints, perception, Motivations, Attitudes.