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Voice Onset Time and Vowel Duration of Arabic-Accented English: A Case Study on Béchar University's Students

Thesis submitted in fulfillment of the requirement for the degree of Doctorate in Linguistics.

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Declaration

I, Yakout KHELF declare that my thesis entitled Voice Onset Time and Vowel Duration Variation of Arabic-Accented English: A Case Study on Béchar University's Students contains no materials that have been submitted previously, in whole part or part, for the award of any academic degree or diploma, except where otherwise indicated. This thesis is my own work.

June 09th, 2020

Mrs. Yakout Khelf

Dedication

This thesis is dedicated to

The memory of my beloved sister, Aisha, May Allah bless her soul

My lovely parents: my father, who taught me that the best kind of knowledge to have is the one which is learned for its own sake, and my mother, who taught me that even the largest task can be accomplished if it is done step by step

My brother Noureddine and my sister Djamila for supporting me in everything; I cannot thank you enough for encouraging me throughout this experience

My beloved husband, Khalil, who has encouraged me all the way

My little angels, Tarek and Maya; you have made me stronger, better and more fulfilled than I could have ever imagined. I love you to the moon and back

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Abstract

In Algeria, English has the status of a foreign language; thus, the Algerian students learning English as a foreign language (EFL) at the university experience some difficulties with pronunciation, grammar, and vocabulary as well. As for pronunciation, foreign accent is often thought to be the result of an age-related diminution in the ability to learn the pronunciation of unfamiliar languages. The present study investigates pronunciation difficulties faced by EFL students in the Department of Letters and Foreign Languages, the English Section, at Tahri Mohammed University – Bechar –focusing mainly on two topics: Voice Onset Time of English plosives in initial position and vowel duration variation of English plosives in final position. It primarily examines Voice Onset Time for phonetically voiceless word-initial plosives in English. The purpose of this investigation is to determine how successfully the Algerian learners of English are able to produce native-like Voice Onset Time values for voiceless plosives, through a quantitative acoustic analysis of native and non-native speech. Second, it examines the effects of varying preceding vowel duration upon the production of word final plosives in a sentence frame in English. The study includes Voice Onset Time and vowel length measurement (using PRAAT Program) in two phonological contexts; namely, before and after voiced versus voiceless plosives by ten (10) EFL students (males and females) from all levels and specialties. Moreover, this study focuses on the students' pronunciation errors and the teachers' attitudes towards their students' mispronunciation through an interview for the ten (10) EFL students and a questionnaire for twenty (20) EFL teachers. The findings show that English plosives do pose some difficulty to the participants, regardless of the environment, plosives in initial or final positions. For this reason, it is recommended that teachers should create a suitable curriculum based on their students needs focusing on common problems such as the mispronunciation of /t, d/ and /k, g/.

Keywords: Acoustic Analysis; Error Analysis; Foreign Accent; Plosive Consonants; Pronunciation; Voice Onset Time, Vowel Duration Variation.

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List of Acronyms

AA: Algerian Arabic

CA: Classical Arabic

CAH: Contrastive Analysis Hypothesis

CLA: Communicative Language Approach

CPH: Critical Period Hypothesis

DAT: Digital Audio Tape

EA: Error Analysis

EFL: English as a Foreign Language

ESA: Educated Spoken Arabic

ESL: English as a Second Language

F: Female

L1 : Speaker's First Language

L2 : Speaker's Second/third Language (Target Language)

M: Male

MDH: The Markedness Differential Hypothesis

MSA: Modern Standard Arabic

TL: Target Language

SLA: Second Language Acquisition

TMUB: Tahri Mohamed University –Bechar

VOT: Voice Onset Time

List of Standard British English Phonemes

English Consonants	English Vowels
/p/ pen, copy, happen	/I/ kit, bid, hymn, minute
/b/ back, baby, job	/e/ dress, bed, head, many
/t/ tea, tight, button	/æ/ trap, bad
/d/ day, ladder, odd	/ v / lot, odd, wash
/k/ key, clock, school	/A/ strut, mud, love, blood
/g/ get, giggle, ghost	/v/ foot, good, put
/tʃ/ church, match, nature	/i:/ fleece, sea, machine
/dʒ/ judge, age, soldier	/eɪ/ face, day, break
/f/ fat, coffee, rough, photo	/ai/ price, high, try
/v/ view, heavy, move	/31/ choice, boy
$/\theta$ / thing, author, path	/u:/ goose, two, blue, group
/ð/ this, other, smooth	/əʊ/ goat, show, no
/s/ soon, cease, sister	/au/ mouth, now
/z/ zero, music, roses, buzz	/19/ near, here, weary
/ʃ/ ship, sure, na <u>ti</u> onal	/eə/ square. fair, various
/ʒ/ pleasure, vision	/a:/ start, father
/h/ hot, whole, ahead	/ɔ:/ thought, law, north, war
/m/ more, hammer, sum	/ʊə/ poor, jury, cure
/n/ nice, know, funny, sun	/3:/ nurse, stir, learn, refer
/ŋ/ ring, anger, thanks, sung	/ə/ <u>a</u> bout, comm <u>o</u> n, stand <u>ar</u> d
/I/ light, valley, feel	
/r/ right, wrong, sorry, arrange	
/j/ yet, use, beauty, few	
/w/ wet, one, when, queen	
/ ? / (glottal stop) department, football	

List of Modern Standard Arabic Phonemes

Arabic Consonants

/ʔ/- أمس /ʔams/ (yesterday)

/b/- برق /barq/ (lightning)

/ti:n/ (fig) تين - /t/

/ θarwa/ (wealth) ثروة -

 $/\widehat{d_3}/$ - جر / $\widehat{d_3}$ ar:/ (he pulled)

/ħ/ حمى /ħpma/ (fever)

/x/ - خيمة /xaıma/ (tent)

/d/ - دین /di:n/ (religion)

/ð/ - ذروة - /ðarwa/ (climax)

/raħma/ (mercy) رحمة -

/zir:/ (button) زر - /z/

/sir:/ (secret) سر -/s

/ʃ/ - شر /ʃar:/ (evil)

/s^s/arf/ (expenditure)

/d^s/ - ضار /d^sa:r/ (harmful)

/t/ - عار /ṭaːr/ (he flew)

/defr/ (nail) ظفر - /defr/

/fawq/ (up) فوق - /f/

/qaʃ/ (hay) قش -/qaʃ/

// - عين - /aɪn/ (eye)

/yaıma/ (cloud) غيمة -

/k/ - کتاب /kɪta:b/ (book)

/l/ - لحم /laħm/ (meat)

/mɪndi:l/ (handkerchief)

/nahr/ (river) نهر

/h/ - همس /hams/ (whisper)

/waraqa/ (paper) ورقة -

/jaraqa/ (caterpillar) پرقة -

Arabic Vowels

/a/ - فم /fam/ (mouth)

/u/ - ربو /rabu/ (asthma)

/i/ - طب / ţib/ (medicine)

/aː/ - فاز /fa :z/ (he won)

/uː/ - فز /fuːz/ (win! Imperative)

/oː/ - فوز /foːz/ (victory)

/iː/ - دين /di:n/ (religion)

/eː/ - دين /de:n/ (debt)

List of Standard French Phonemes

French Consonants

 $/\mathbf{p}/-\underline{\mathbf{p}}$ ublic (public)

 $/\mathbf{b}/-\underline{\mathbf{b}}$ ateau (boat)

 $/t/ - th\acute{e}$ (tea)

 $/\mathbf{d}/-\underline{\mathbf{d}}$ îner (dinner)

 $/\mathbf{k}/-\underline{\mathbf{c}}$ arreau (tile)

/g/ – gants (glove)

/**f**/ – <u>ph</u>armacie (pharmacy)

 $/\mathbf{v}/ - a\underline{\mathbf{v}}$ ion (plane)

 $/1/ - \underline{l}$ ait (milk)

 $/s/ - \underline{s}ac (bag)$

 $/\mathbf{z}/-\underline{\mathbf{z}}$ oo (zoo)

 $/\int/ - \underline{ch} at (cat)$

/3/- je(I)

/m/ - magasin (magazine)

 $/\mathbf{n}/-\underline{\mathbf{n}}$ ous (we)

/**p**/ –agneau (lamb)

 $/\mathbf{r}/-\underline{\mathbf{r}}$ ouge (red)

French Vowels and Semi-vowels

/**ɛ̃**/ −p<u>ai</u>n (bread)

/**@**/ –parf<u>um</u> (perfume)

/**õ**/−m<u>on</u>de (world)

 $/\tilde{\mathbf{a}}/$ – chamber (room)

 $/\mathbf{q}/-\mathbf{n}\underline{\mathbf{u}}\mathbf{i}\mathbf{t}$ (night)

 $/w/-\underline{oui}$ (yes)

/**j**/ – d<u>i</u>eu (God)

General Introduction

In English language teaching, four language elements namely: structure, vocabulary, pronunciation and spelling are taught in order to develop the learners' skills in the language learning process. Pronunciation is the main aspect in speaking, especially in an EFL context.

The study of pronunciation has become an important aspect in teaching English as a foreign language. In teaching-learning process, the EFL students may face some difficulties in pronouncing some English words. In fact, teachers play an important role in teaching the foreign language because they should be good role models to the learners. For instance, when the teachers deliver the material, they have to speak English with correct pronunciation since a good pronunciation makes it easier to understand what the speaker is saying.

Spelling is not a reliable guide to know how a word is pronounced. Indeed, incorrect pronunciation will make misunderstanding between the speaker and the listener. One reason is that students cannot only pronounce an English word correctly from its spelling for English spelling is only a poor reflection of pronunciation, although it must be admitted that there is much regularity between the sound and the written symbol (Umera-Okeke, 2008). On the other hand, pronunciation has to be integrated with other skills, and other aspects of language. In addition, it has to be isolated for practice of specific items and problems.

Therefore, pronunciation bridges the gap between two or more people to convey the information, ideas, and thoughts. Incorrect/ weak pronunciation does not really mean that it will ruin the whole message, but it will affect the person's communicative ability.

Based on previous studies' results, most of the students in contact with the English language do not have the required potential to use the pronunciation of the English language in the approved manner. The EFL teachers should be aware of the background of why students fail in presenting a good pronunciation. The teaching and learning of phonetics is a difficult process. If it had been taught using the right approach, it would have been an easy module for the EFL learners. Thus, if students have a better understanding of

the sound patterns of English, then they will probably be able to pronounce English correctly.

EFL learners want to "sound like natives"; however, this dream has yet to be achieved by the majority of them who are under the impression that they speak English intelligibly. The truth is that a vast majority of them make numerous phonological, lexical and spelling errors; in addition, learners produce pronunciation, rhythm, intonation and voice quality errors (Messiha, 1985).

To a greater extent, the EFL learners are not even aware of the pronunciation errors they make. There are numerous factors that contribute to the errors EFL learners produce, especially in the area of pronunciation. Certainly, the differences between the learners' native language and the target language play an important role in these difficulties. In addition, variations in the phonemic inventory of both languages, age and language transfer also play a significant role in the learning process.

Throughout years, many Arab EFL students, including Algerian ones, struggle in learning pronunciation as there are differences between their native language and English. One of the problems they face happens to be the production of English sounds. There are many sounds in English which have differences in the production like /t/ and /d/ or the ones that does not exist in Modern Standard Arabic namely /p/ and /g/.

Plosive sounds are one category of sounds that many EFL students still find difficult to pronounce. Although those sounds may not be too unfamiliar sounds since most of them exist in Modern Standard Arabic, except the bilabial voiceless plosive /p/ and the velar voiced plosive /g/. Those sounds are produced by adding an aspiration which sounded like they have some kind of plosives in the production. Another reason why those sounds are rather difficult to produce is the addition of subcategory such as voiced and voiceless sounds.

In solving the problem of plosive sounds mastery, many researchers conducted studies all around the world such as this study. Fellbaum (1996) studied the voiced plosive /b, d, g/. His research dealt with the ability of the voiced plosive production where he tested his subjects to pronounce words containing the voiced plosive sounds only. Koenig (2000) found that the participants made errors in pronouncing English voiceless plosive consonants /p, t, k/ in stressed syllables and few of them made errors in pronouncing some English voiceless plosive consonants in unstressed syllable. Another interesting research was conducted by Jaya (2008) who studied the plosive sounds /p, t, k,

b, d, g/ and found that the students are considered good in pronouncing the plosive consonant sounds.

Accordingly, learner's first language acquired during infancy and well established in mind superimposes itself on the language acquired later when learning a foreign language. The "foreign accents" in the foreign language speech of learners are the clearest support for this belief since, in today's world, the majority of English language speakers are non-native speakers who have learnt it and use it to communicate with other non-natives as a Lingua franca.

English, thus, has become an lingua franca not only because it is used by so many people all over the world, but also because it has developed into the essential means of global communication, embracing access to the world's intellectual and technical resources. English is the main language for people in this globalised world and thus it is used as the second language or a foreign language in some countries.

Algeria is one of many countries that compete in the global era to use English as a tool to get whatever information in the world since English is an international language. That is one of many reasons why English is taught in schools in Algeria. That is to say, Algeria is one of the countries where English is taught as a foreign language; the first contact of the pupils with this language is in the middle school.

Moreover, it aims at understanding students' weaknesses in order to be able to help them overcome their difficulties in pronouncing the English sounds. Furthermore, it helps improving the teaching methods and materials for the benefit of Algerian students to become more autonomous and goal-oriented.

The purpose of the study is to attempt to identify the errors made by Algerian EFL students at Tahri Mohamed University in Bechar, mainly the mispronunciation of the English plosives /p, b/, /t,d/, /k,g/ in order to look for the causes of the errors; and assess teachers' attitudes about their students' pronunciation in order to find out some efficient techniques to improve their pronunciation.

This dissertation investigates the pronunciation errors regarding EFL students. More specifically, it will look into some problematic consonants for EFL students in the onset (beginning) and coda (end) environments of words. It is significant in the sense that it will add knowledge to the field of Linguistics and Phonology in general and to pronunciation teaching in particular. It is an attempt to help both the EFL students and the teachers of English to overcome common errors of mispronunciation. Furthermore, it is expected from its findings to create a new teaching strategy based

upon the correction of the detected errors, the findings of error analysis will help teachers shape suitable oral skills students in order to make them practice more these 'unfamiliar' sounds.

In this work, the focus is on Arabic-accented English as produced by EFL students in the Department of Letters and Foreign Languages, the English Section, at Tahri Mohamed University in Bechar to study the following: (1) Voiced and voiceless plosive consonants in initial position differ in the amount of time between the release of the stop closure and the onset of vocal-fold vibration, this is known as the Voice Onset Time. As with other languages, there is a vowel duration difference before voiced and voiceless consonants. (2) Vowel durations preceding unaspirated consonants are longer than those before aspirated ones. (3) Closure durations of syllable final consonants are longer for unaspirated consonants and voiceless ones. Thus, this thesis aims at answering the following questions:

- 1. In what way do EFL students at Tahri Mohamed University pronounce plosives in initial position and to what extent do they lengthen the vowel preceding plosives in final position?
- 2. What are the plosive sounds that cause Voice Onset Time and vowel duration differences between a native speaker's English and the Arabic-Accented English of students?
- 3. What are the effects of the students' mother tongue, Bechari dialect, and the first foreign language, French on their production of English plosives?
- 4. What are the attitudes of EFL teachers at Tahri Mohamed University Bechar towards their students' pronunciation errors and what are their suggestions for better pronunciation?

Based on the above questions, some hypotheses can be formulated:

- EFL students at Tahri Mohamed University Bechar cannot differentiate between the production of voiced and voiceless plosives in initial as well as final positions. Thus, reducing the amount of time between the release of the stop closure and the onset of vocal-fold vibration and shortening the vowel length when it is followed by a voiced plosive.
- 2. English voiceless plosives /p, t, k/ cause some problems for EFL students in initial as well as final position.

- 3. EFL students at Tahri Mohamed University Bechar face pronunciation problems due to mother tongue interference; besides their pronunciation is highly affected by the French language since it is their first foreign language.
- 4. EFL teachers at Tahri Mohamed University Bechar do not pay attention to pronunciation teaching in general and to pronunciation errors specifically.

The present thesis consists of six (6) chapters. The first chapter provides information about language in general and the aspects of language focusing mainly on the most important aspects namely 'phonetics and phonology'. Thus, definitions of both terms are provided with some details. Moreover, the sound system of English is explained in details such as: English consonants and vowels; in other words, the first chapter focuses on segmental phonology and beyond: the structure and linguistic function of the articulatory apparatus, the characteristics and classification of vowels and consonants.

Furthermore, the most important parts of the topic namely Voice Onset Time and Vowel Lengthening Effect of Voicing are defined. Thus, some definitions of Voice Onset Time of plosives in initial position 'onset' and Vowel Duration Variation of plosives in final position 'coda' are provided. Moreover, this chapter contains some previous research studies' results in this field.

The second chapter deals with the most recurrent problem of EFL students which is 'Error'. The thesis is about Arabic-Accented English, and since one of the causes of errors is transfer or interference, it was preferable to provide a description of the Arabic language sound system and compare it with the English sound system along with describing the French language sound system since it is the second language in Algeria. In addition, an overview about foreign English accent is provided along with the two basic approaches of Second Language learning namely 'The Contrastive Analysis Approach or Hypothesis' and 'The Error Analysis Approach'.

Since the study is about the Algerian EFL students' pronunciation, specifically students in the Department of Letters and Foreign Languages, the English Section at Tahri Mohamed University, Bechar, it is important to give an overview about the sociolinguistic situation in Algeria. Thus, the third chapter comprises an overview about the language varieties used in Algeria in addition to discussing language contact phenomena. On the other hand, the second part of the chapter deals with Bechar speech community and the

different dialects spoken in this area. It will look at whether they have a certain effect on the students' pronunciation of English.

The fourth chapter is devoted to the methodology; it deals with the research tools and instruments used in collecting data like the students' recordings, the classroom observation, the questionnaire for EFL teachers, and the interview of the EFL students in the Department of Letters and Foreign Languages, the English Section at Tahri Mohamed University, Bechar. In addition, since the main focus of the thesis is on the production of the English plosive consonants, a contrastive analysis is drawn between the English plosives and their Arabic counterparts to predict the students' errors.

The last two chapters are meant for the results and the analysis of the collected data. Accordingly, the fifth chapter presents the findings and the results provided by the acoustic analysis of the recorded data of the ten (10) EFL students using PRAAT as well as the results of the students' interview. Thus, the students' pronunciations are recorded and interviewed about the difficulties they face when talking in English and their ways to overcome such problems.

The last chapter deals with the analysis of the findings collected from the teachers through classroom observation of six (6) sessions and a questionnaire for twenty (20) EFL teachers and compare them with other previous studies related to the topic. Along with the discussion, recommendations and suggestions for further research are provided. In addition to the six chapters, the dissertation includes three (3) appendices and a list of references.

For the referencing style, the American Psychological Association (APA) Sixth Edition is used in this thesis. As a complete style and guideline for writing, the APA is a valuable tool for writing scientific papers, laboratory reports, and papers covering topics in the field of psychology, education, and other social sciences (VandenBos, 2010).

Chapter I

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Chapter One

Literature Review

1.1. Introduction

Language is an acquired set of habits of systematic vocal activity representing meanings derived from human experiences. In other words, language is an acquired vocal system for communicating meanings (Hockett, 1958). Besides, language, as a system, operates in a set of patterns. These patterns exist on three closely related levels: phonology, morphology and syntax. Human beings can communicate with each other; they are able to exchange knowledge, beliefs, opinions, wishes, threats, commands, thanks, promises, declarations, and feelings. Many definitions of language have been proposed.

Henry Sweet, an English phonetician, stated that language is the expression of ideas by means of speech-sounds combined into words; words are combined into sentences, this combination answering to that of ideas into thoughts (1899).

In most accounts, the primary purpose of language is to facilitate communication, in the sense of transmission of information from one person to another. Language interacts with every aspect of human life in society, and it can be understood only if it is considered in relation to society (Bloomfield, 1933). This chapter attempts to survey language and its aspects focusing mainly on its sound system through defining phonetics and phonology to consider its various functions and the purposes it can and has been made to serve. Moreover, it sheds light on pronunciation teaching since it is essential and closely related to phonology. Furthermore, it provides the readers with definitions of the two basic topics in the thesis namely: Voice Onset Time and Vowel lenghethening effect of voicing.

1.2. Some Aspects of Language

Languages are immensely complicated structures. People realize how complicated any language is when trying to learn it as a second / foreign language. If they try to frame an exhaustive description of all the rules embodied in one's language—the rules by means of which a native user is able to produce and understand an infinite number of correct

well-formed sentences—one can easily appreciate the complexity of the knowledge that a child acquires while mastering a native vernacular.

1.2.1. Phonetics and Phonology

The most obvious aspect of language is speech. It is the universal material of most human languages, and the conditions of speaking and hearing have, throughout human history, shaped and determined its development. Phonetics covers much of the ground loosely referred to in language study as pronunciation. But, from a rather different point of view, speech sounds are also studied in phonology. Roach (1992, p.81) defines phonetics as:

"The scientific study of speech... the central concern in phonetics are the discovery of how speech sounds are produced, how they are used in spoken language, how we can record speech sounds with written symbols, and how we hear and recognize different sounds".

Roach adds that phonology is "the study of the sound systems of languages. The most basic activity in phonology is phonemic analysis, in which the objective is to establish what the phonemes are and arrive at the phonemic inventory of the language". (*ibid*, p.82).

Another definition for each one is given by Widdowson (1996:42) who claims that "the study of the allophonic manifestation, how the sounds of speech are actually made, is the business of phonetics." And that "the study of phonemes and their relations in sound systems is the business of phonology" (*ibid*).

When mentioning phonetics and phonology, readers expect some clarification concerning the difference between these terms. Thus, the difference between phonetics and phonology is that of generality and particularity. Phonetics is subdivided into three principal parts: articulatory phonetics, acoustic phonetics and auditory phonetics.

Articulatory phonetics is the branch of phonetics concerned with the study, description and classification of speech sounds as regards their reduction by the human speaking apparatus (O'Connor, 1980). Its oldest and simplest method of investigation is the method of direct observation (visual and auditory). Acoustics phonetics is the branch of phonetics concerned with the study of the acoustic aspect. It uses kymograph (records, qualitative variations of sounds), a spectrograph (shows frequencies of a given sound and

its amplitudes), an auscilograph (records sound vibrations) and intonograph (investigates the fundamental frequency of speech as the component of intonation). Auditory phonetics is the branch of phonetics which studies how sounds are perceived, the psychological and neurological implications of such an activity, i.e. how the sound waves activate the listener's eardrum, and how the message is carried to the brain in the form of nerve impulses (Roach, 2002).

Besides, there are other branches like Special Phonetics or Descriptive Phonetics, General Phonetics, Historical Phonetics, Comparative Phonetics and all these branches are closely connected with each other as well as with some other branches of Linguistics such as morphology, grammar, and stylistics. Sound interchange; for instance, is a vivid manifestation of a close connection between phonetics and morphology. It can be observed in the category of number (man – men; goose – geese; foot – feet). Sound interchange also helps distinguish between the basic forms of irregular verbs (sing-sangsung), adjectives and nouns (strong-strength), verbs and nouns (to extend-extent).

1.3. Pronunciation

Learning a language requires mastering its aspects starting from the smallest meaningless unit 'a phoneme' to putting words in context. In everyday communication, people usually do not have to use many complicated words, so the limited vocabulary is not a big issue since they can use more simple words to express the word that they do not know.

1.3.1. Definition

Foreign language learners learn the four skills: listening, speaking, reading and writing also called the "macro-skills" (Harmer, 2001). This is in contrast to the "micro-skills", like grammar, vocabulary, pronunciation and spelling. The four basic skills are related to each other by two parameters: the mode of communication: oral or written and the direction of communication: receiving or producing the message.

These skills are the core of the learning process, but only recently did speaking gain importance since it contains some important issues that must be mastered by learners through pronunciation. As defined by Seidlhofer (2002, p.228):

"Pronunciation is the production and perception of the significant sounds of a particular language in order to achieve meaning in contexts of language use. This comprises the production and perception of segmental sounds, of stressed and unstressed syllables, and of the 'speech melody', or intonation. Also, the way we sound is influenced greatly by factors such as voice quality, speech rate and overall loudness. Whenever we say something, all these aspects are present simultaneously from the very start, even in a two-syllable utterance such as Hello!"

In other words, pronunciation is a set of habits of producing sounds which are acquired by repeating them over and over again and by being corrected when they are pronounced wrongly (Cook,1996). Burgess and Spencer (2000, pp.191-2) define pronunciation as "the practice and meaningful use of TL (target language) phonological features in speaking, supported by practice in interpreting those phonological features in TL discourse that one hears".

Burgess and Spencer (2000) remarked that, in pronunciation, it is the nature of the process to practice listening and speaking by interpreting and producing phonological features respectively. Hence, pronunciation as a skill includes both recognition and production.

1.4. The Main Components of Pronunciation

Pronunciation includes both segmental and suprasegmental features. The former are the separate sound units which correspond to phonemes (Roach, 2002). These features may cause difficulties for learners, particularly if the learners' mother tongue does not have some sounds English language have or if the place of articulation for the same sounds in native and target languages are different. The latter should be a prerequisite in pronunciation teaching, and the instruction should be designed accordingly. These features include the stress in words and sentences, rhythm, connected speech, intonation, and so forth. (Demirezen, 2011)

In spite of the fact that these different aspects of pronunciation are treated in isolation, they all work in combination when we speak; so they can be considered as an integral part of speaking a language. Pronunciation refers to how we produce the sounds that we use to make meaning when we speak. It includes the particular consonants and vowels of a language (segments), aspects of speech beyond the level of the individual

segments, such as stress, rhythm, intonation, (suprasegmental aspects), and how the voice is projected (voice quality) (Gimson, 1989).

Although we often talk about these as if they were separate, they all work together in combination when we speak, so that, difficulties in one area may impact on another. Thus, it is the combined result that makes someone's pronunciation easy or difficult to understand. The various features that make up the production of sounds in English are illustrated in figure 1.1.

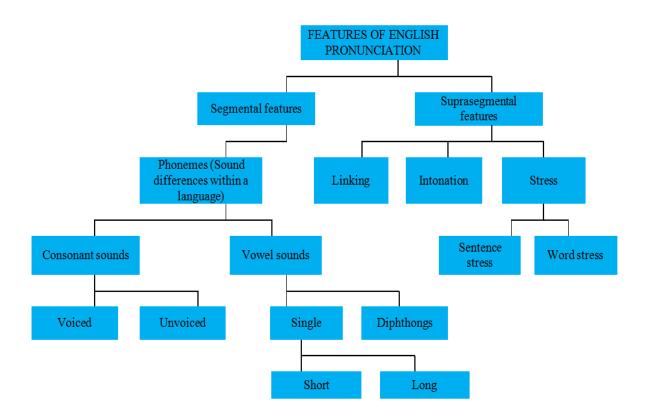


Figure 1.1. Various Features of English Pronunciation ¹

1.4.1. Segmental Aspects of Pronunciation

It is very important for EFL teachers to be aware of the English sounds' pronunciation. Such awareness will help teachers understand why learners make pronunciation errors. Thus, they will be able to take the necessary steps to correct the errors since they know the source of the problem. The study of how these sounds are

¹ Note. Gilakjani, A. P. (2012). The significance of pronunciation in English language teaching. In *English Language Teaching*, 5(4). P. 120

produced is called articulatory phonetics. It is necessary to provide how this field describes the sounds of English in terms of place and manner of articulation.

Speech sounds are produced when the air moves out from the lungs through the mouth and the nose; hence, different speech sounds are made when the air goes through different parts of the mouth. Here the researcher makes a distinction between articulators and the place of articulation. Articulators include the tip, the blade, and the back of the tongue. Places of articulation include the teeth, the alveolar ridge, the hard palate, the soft palate (the velum), the glottis, the uvula, and the combination of actions and movements undertaken by the parts of the tongue in the mouth cavity to create consonants and vowels (O'Connor, 1967).

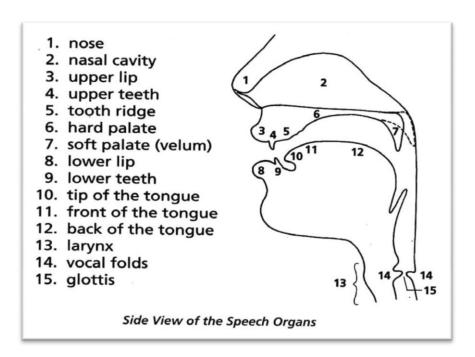


Figure 1.2. Side View of the Speech Organs

The segmental aspects of pronunciation deal with phonemes which are distinctive segmental entities. They are one of the smallest units of speech that make one word different from another. Phonemes are distinguished by distinctive features, i.e. the presence or absence of a certain quality. There are two types of phonemes: consonants and vowels.

1.4.1.1. The English Consonants

It is important to recognize that there is a basic distinction between consonants and vowels, since they are produced differently. Consonants are produced by narrowing the mouth which blocks the air or hinders it, and the active movements of the tongue to touch some parts of the mouth cavity. Crystal (1990, p. 296) defines consonants as "sounds which are made by a closure or a narrowing in the vocal tract so that the flow of air is either blocked, or so restricted that audible friction is produced". Moreover, all consonants have certain properties in common that identify them from vowels. There are twenty four (24) consonants in English, although seven (7) of them are referred to as sonorants because they share several features (sonority and continuation) with vowels: /m/, /n/, /n/,

Sonorants function in the English language the same way as consonants, and both groups of sounds have a lesser or greater obstruction of the airflow. Therefore, it is customary to attach sonorants to the class of consonants. Kelly (2000) adds that consonants can be described in three ways according to: (1) the place of articulations which consists of a tongue (tip, front and back), palates (hard and soft), lips, teeth and a tooth ridge (Figure 2.2 of the Speech Organs); (2) the Manner of articulation which refers to the interaction made between the airstream and the articulators which means the way in which the obstruction of air is made; and (3) Voicing which is used to refer to the vibration of the vocal folds (Jones & Laver, 1973). In short, consonants are classified in terms of place, manner, and voicing as detailed below.

1.4.1.1.1. The Place of Articulation

In the classification system for consonants, "place" denotes the location or place of obstruction and the active organ of speech involved in the articulation stage of the production of the consonants. Clark and Yallop (1992) list the following groups of consonants in which various tongue positions are combined with various locations: (1) **bilabial sounds** are produced with the upper and lower lips pushed together; for instance: p/, b/, m/, m/,

/n/, /l/, /s/, /z/; (5) **velar sounds** are made as the tongue makes contact with the soft palate; for example: /k/, /g/, /ŋ/; (5) A **palatal sound** is pronounced by advancing the blade of the tongue toward the highest part of the hard palate as in: /j/; (6) **retroflex sounds** are produced when the tongue tip is curled up and back. Retroflexes can be classed as apicopostalveolar, though not all apico-postalveolars need to be curled backward enough to count as retroflex such as: /r/; (7) **postalveolar sounds** are produced by raising the blade of the tongue toward the alveolar region as in:/ʃ/, /ʒ/, /tʃ/, /dʒ/; and (8) A **glottal sound** is produced by the narrowing of the glottis as the wall of the pharynx makes contact with the root of the tongue like: /h/.

1.4.1.1.2. The Manner of Articulation

Manner of articulation is about how the sound is produced. It is divided into two types: obstruents (obstruction of the air-stream causing the heightened air-pressure) and sonorants (no increase of the air-pressure). Then, each of them is further divided as follows:

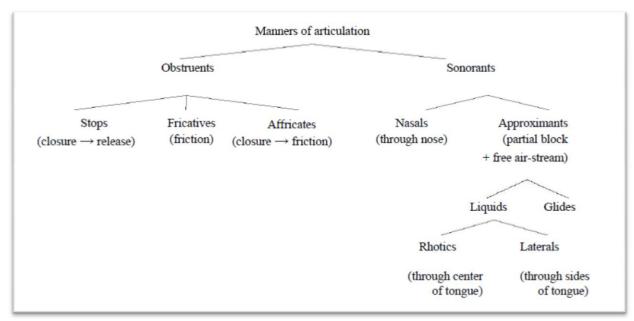


Figure 1.3. Manners of Articulation

In other words, manner of articulation means the way the articulators are positioned in shaping the vocal tract; that is, the degree of constriction that the articulation represents (Roach, 2002). There are five degrees in English: (1) **stops** or **plosives** involve a complete closure of the articulators, preventing the escape of the air. After the closure, there is a release stage. English; thus, shows six **oral stops** /p, b, t, d, k, g/ and three **nasal stops** /m,

1.4.1.1.3. Voicing

When the vocal cords are stretched tight so that they vibrate during the pronunciation of a sound, we say that the sound is voiced (Kelly, 2000). Sounds that are produced without vibration of the vocal cords are called voiceless. To tell if a sound is voiced or voiceless, a learner can touch his throat gently as s/he says it. When saying a voiced sound, learners can feel a vibration or buzzing in their throat. For a voiceless sound, they cannot. For example, to practice /t/, say only /t/, not /tə/ or /tiy/. If you pronounce a vowel after /t/, the voiced vowel will cause vibration and students will be confused and might mistakenly think that /t/ is voiced (Ladefoged, 2000).

Many of the consonants of English form pairs—a voiced and a voiceless sound that are the same except for voicing. For example, /b/ and /p/ are identical except that /b/ is voiced and /p/ is voiceless². However, the voiced sounds /m/, /n/, /ŋ/, /l/, /r/, /w/, and /y/ have no voiceless counterparts, and the voiceless sound /h/ has no voiced counterpart in English.

1.4.1.2. English Vowels

² Notice that one of these pairs—the voiceless sound $/\theta$ /and the voiced sound $/\delta$ /—are both spelled with the same two letters: 't' and 'h'.

A vowel is defined in Cambridge English Pronouncing dictionary (2003, p. 583) as: "the class of sound which makes the least obstruction to the flow of the air". Vowels are almost always found at the centre of a syllable, and it is rare to find any sound other than a vowel which is able to stand alone as a whole syllable. In the pronunciation of the normal vowel sounds, it is usually the front, the back, or the centre of the tongue which is highest; the different positions of the tongue (Kelly, 2000).

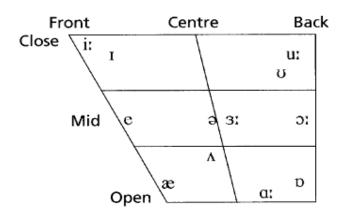


Figure 1.4. Vowels According to the Tongue Position

Thus, vowels are described in terms of three main articulatory properties: tongue height, tongue advancement and lip rounding. Standard English has a twelve (12) vowel system, distributed into an unusually rich set of front vowels /i, I, e, ε , ε /, central vowels /ə, Λ / and back vowels /u, υ , o, α /. Another feature that imposes additional contrast upon these vowels is tenseness where vowels are further divided into tense long and lax short vowels. English has six (6) tense vowels /i, u, e, a, o, α / and six (6) lax vowels /I, υ , ε , ə, Λ , ε / distributed across the vowel space as depicted in Figure 1.4 above. (Jensen, 1993; Carr, 1993; Durand, 1990).

Besides, single vowels can be divided into two types: **short vowels** and **long vowels**. Thus, English has seven (7) short vowels: $/\mathbf{i}$, $/\mathbf{v}$, $/\mathbf{e}$, $/\mathbf{a}$, $/\mathbf{a}$, $/\mathbf{a}$, $/\mathbf{n}$, and five (5) long vowel sounds: $/\mathbf{i}$:/, $/\mathbf{u}$:/, $/\mathbf{s}$:/, $/\mathbf{s}$:/, $/\mathbf{a}$:/. Vowels can be single, a combination of two-vowel sounds 'diphthongs' or a combination of three vowel sounds 'triphthongs'.

According to Jones and Laver (1973, p. 152), a diphthong is a sound in which there is a glide from one vowel quality to another. Kelly (2000) confirms that the eight (8) English diphthongs can be divided into two groups: (1) Centering diphthongs which end with a movement toward the central vowel schwa /ə/ such as: clearing /1ə/, Sure /və/, and

There /eə/; and (2) Closing diphthongs which end with a glide toward /ı/ or /ʊ/, the glide is toward a higher position in the mouth; for example: 'they' /eı/, 'mighty'/aı/, 'boy' /ɔɪ/, 'go'/əʊ/, and 'now'/aʊ/. Finally, a triphthong is defined as a vowel glide with three distinguishable vowel qualities (Jones & Laver, 1973).

Triphthongs occur when a closing diphthong is followed by /ə/, thus there are mainly five triphthongs, which are composed of the five diphthongs /eɪ/, /aɪ/, /ɔɪ /, /əʊ/, and /aʊ/ with the addition of schwa at the end. (1) /eɪ/+ /ə/= /eɪə / as in: 'layer, player'. (2) /aɪ/+ /ə/ = /aɪə/ as in: 'fire, tyre, liar'. (3) /ɔɪ /+ /ə/ = /ɔɪə/ as in: 'employer, loyal, royal'. (4) /əʊ/+ /ə/ = / əʊə/ as in: 'lower, slower'. (5) / aʊ/+ /ə/ = /aʊə/ as in: 'hour, power'.

1.4.1.3. English Syllable Structure

Before the appearance of non-linear phonology, generative phonological theories were primarily based upon the notion that phonological representation is the linear string of segments that do not have internal hierarchical structures except those provided by syntactic surface structures. This, by no means, suggests that the notion of "syllable" is newly introduced in phonology. The first and the most popular definition was Stetson's (1928). His motor theory³ of syllable tells us that syllables correlate with the burst of chest pulse activities (Lass, 1984). This means that the speaker is emitting one syllable at a time, as independent muscular gestures.

The syllable is a basic unit of speech is studied on both the phonetic and phonological levels of analysis. No matter how easy it can be for people and even for children to count the number of syllables in a sequence in their native language, there are still no universally agreed upon phonetic definitions of what a syllable is (Roach, 2002).

The present-day phonological theory agrees that the syllable has a constituent or hierarchical, rather than linear, structure. The syllable has two immediate constituents the Onset (O), which includes any consonants that precede the nuclear element (the vowel), and the Rhyme (R), which subsumes the nuclear element (the vowel) as well as any marginal elements (consonants) that might follow it. The Rhyme, in turn, further branches into Peak (P), also known as Nucleus (N), and Coda (Co). The Peak (Nucleus), as the designation suggests, represents the "nuclear" or most sonorous element in a syllable. The Coda includes all consonants that follow the Peak in a syllable (Lass, 1984; O'Connor,

³ This includes the autosegmental theory initiated by Smith (1975) and Metrical phonology advocated by Liberman (1975, 1977) that recognize that there is internal hierarchical structure in the phonological representation without the help of syntactically assigned structure.

1967; Roach, 2002). The syllable can be structured hierarchically into the following components:

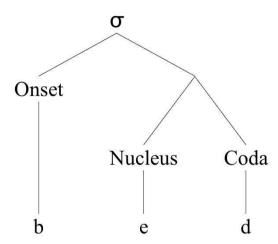


Figure 1.5. Syllable structure of a CVC syllable in the word "bed"

In this example, the English word 'bed' consists of a single CVC syllable. This syllable has been broken up into its onset (any consonants preceding the vowel) and its rhyme (all phonemes from the vowel to the end of the syllable).

1.4.2. Suprasegmental Aspects of Pronunciation

According to Gilakjani (2012, p. 121), "English is the language of stress and syllables, unlike Mandarin that is tonal". Suprasegmental aspects of pronunciation distinguish human speech from artificial speech of machines. Even though there are robots that can produce very "real" speech on the segmental level, it still does not sound natural to a human ear, especially in longer utterances. This is because suprasegmental features are an important part of pronunciation. Phonologically, they are "sound contrasts over several segments" (Roach, 2002, p. 37). Suprasegmental involve the melody of spoken language; this includes awareness of speech rhythm, and perception and production of stress placement and word boundaries. Thus, each of linking, intonation and stress may affect the macro level of language; each is described below in a brief way.

1.4.2.1. Stress

Stress is a suprasegmental feature of utterances that can be applied to individual vowels and consonants, and to syllables. Jones and Laver (1973, p. 511) define stress as

"a property of syllables which makes them stand out more noticeable than others". Stress can be defined as a stronger muscular effort both respiratory and articulatory, which we can feel in relation with some syllables as opposed to others.

According to Hewings (2007), stress is very important because its position can change the meaning or the function of the words. Since there are no firm rules regarding the placement of stress because there are always exceptions, students should learn every word with its stress. However, there are still some common points to take into consideration when placing stress and they are often useful for language learners.

The English words have been divided into two sections; content and function words. Function words are not stressed; they are words that have little or no meaning in themselves, they include: (1) Articles as: a, an, and the. (2) Prepositions as: in, at, and on. (3) Personal pronouns as: I, she, and he. (4) Possessive pronouns as: his, her, and its. (5) Relative pronouns as: who, which, and whose. (6) Common conjunctions as: and, then, and as; and (7) model verbs and auxiliaries. The latter are usually unstressed unless they are used in tag questions or at the end of the sentence.

Content words are words that carry meaning themselves, and they are usually stressed except monosyllabic words, unless we stress them purposefully to call attention on them. Kelly (2000) summarizes the rules of word stress as follows: (1) English prefixes and suffixes are usually unstressed. Thus words including prefixes or suffixes are not usually stressed on the syllable containing the prefixes or suffixes. For example: QUIetly, deFECtive, and inEVitable. Still there some exceptions as: BIcycle, DISlocate. (2) A lot of two-syllable nouns and adjectives tend to be stressed on the first syllable. For example: MOther, SISter, TAble, WAter, and COFfee. (3) Stress is often regular in compound words; usually the first word in the compound word is stressed. Whether written as one word or separated, this does not affect the stress placement on compound words. For example: DRUG store, CLASSroom, HAIRcut, and AIRplane. (4) For the words with two grammatical functions, the stress determines the verb from the noun; nouns will be stressed on the first syllable while verbs on the last syllable. For example: INcrease (n), inCREASE (v); IMport (n), imPORT (v); TRANsfer (n), transFER (v).

Though the rules of stress placement have exceptions, it is always useful for students to get used to them. When they get familiar with them, they will save time to memorize the stress placement of many vocabulary items. Thus teachers are advised to make sure that their students master the major stress placements.

1.4.2.2. Intonation

Intonation is a crucial element of correct English pronunciation. Ondráček (2014) even claims that errors in intonation are perceived as worse than errors in individual segments because errors in intonation are not expected by the native speakers. Wells (1990, p. 01) defines intonation as "the melody of speech". In studying intonation, we deal with how the pitch of the voice rises and falls. A comprehensive definition of intonation is provided by Levis (1999, p. 37); he views it as: "the quality of language that includes both rhythm and melody, and is produced by tonal height and depth along with stress, volume and varying length of pause."

English intonation can be divided into several categories according to the types of nuclear tones. Cruttenden (2008) distinguishes these types: falling nuclear tones, rising nuclear tones, falling-rising nuclear tones, rising-falling nuclear tones and level nuclear tones. Falling nuclear tones start on a high pitch and end on a low pitch. These are used for statements, wh-questions, imperative sentences and exclamatory sentences (Roach, 2002). Rising nuclear tones are used for yes/no questions, in requests and for unfinished utterances. The fall-rise pattern is reserved for limited agreement that includes some form of hesitation. The rise-fall pattern indicates a strong emotion: approval, surprise, disapproval or indignation. Finally, the level nuclear pitch expresses the exact opposite: something boring or routine.

Roach (2001) summarizes the importance of intonation as follows: (1)Intonation can indicate different types of utterance, such as statement and question; when there is a fall-rise of voice, this means a yes or no question, if the voice only falls so it is a statement. (2) Intonation gives the listener a lot of information about what is being said. (3)Intonation indicates the attitudes and emotions of the speaker; happily, angrily, or sadly.

1.4.2.3. Linking

In English, sounds between words are linked or blended in a way which is quite distinctive from that of other languages, and these features help manage the patterns of stress and pitch change. Crucially, learners whose first language final consonant sounds

are rare or not fully pronounced (eg many Asian languages and the Arabic language) may find it very difficult to say word-final consonants and therefore to link words in the way that is characteristic of English (Celce-Murcia, Brinton and Goodwin, 1996). These linking devices are not trivial, as they help learners to avoid the breathy, choppy delivery that can impede communication.

The connection of two groups of words together is referred to as *linking*, which occurs in connected speech when words within the same phrase or sentence often blend together. Dretzke (1998) defines linking as one of the typical features of spoken English; connecting sounds smoothly and there is linking between consonant to vowel, consonant to consonant, and vowel to vowel.

We usually link consonants to vowels when a word ends with a consonant is followed by another word that begins with a vowel. The consonant in the first word seems to become a part of the following word, as in the following examples: *Catch it, leave early, stand up, and laugh at.* Moreover, when two vowels meet at the edges of two words; usually when the first sound is either /ə /, /ɑ: /, or /ɔ: /, a /r/ is introduced between both of the vowels in order to make the transition easier; this /r/ is called intrusive as in the following example: *That is law and order* (Roach, 2002).

There are other ways used to link sounds together, these sounds are called linking /j/ and linking /w/. The former is used when /i:/ or a diphthong which ends with /ı/ is at the end of the word, a /j/ is often introduced in order to make the transition to the following vowel easier, as in the following example: *They are very good people*. Whereas, the latter is used when /u/ or a diphthong which ends with /u/ is at the end of the word, a /w/ is introduced in order to make the transition to the following vowel easier, as in the following example: *You are the kind of person who can understand Julie* (Jones, 2003; Roach, 2002).

1.5. Accuracy vs. Fluency in Pronunciation Teaching

When teaching pronunciation, objectives and methods differ. Some researchers believe that a learner must acquire the ability to produce and recognize all speech sounds used by the speaker of the target language (TL). Thus, the learner guarantees an accurate articulation of sounds regarding phonetics and grammar. Others think that if the goal is solely communication then it is not necessary to teach all phonemic aspects (Tlazalo-

Tejeda & Basurto-Santos, 2014). That is to say, if their main goal in the long run is to teach the foreign language (FL), they should learn pronunciation accurately, correctly, and authentically; otherwise, when communication is possible, there is no obligation to strive for perfect pronunciation. However, this does not mean that everyone accepts such a statement.

One of the general objectives in the foreign language teaching is to teach the learners to speak the target language accurately and intelligibly since to learn a language also means to produce its sounds, words, and utterances properly and correctly rather than just being able to communicate lousily with people in the TL. Miller (2009, p.04) introduces the two concepts as follows: "Accuracy is the ability to produce grammatically correct sentences but may not include the ability to speak or write fluently".

However, accuracy is always associated with, not only grammar but also phonetics, as it surrounds all sides of correct and accurate sounds and words uttered to produce meaningful sentences. Miller adds:

"Whenever learners are involved in communication, they are concerned with accuracy, in that they are making the best use of their language system to meet the communicative demands placed upon it. In spontaneous communication, learners have little time to reflect on the language they produce. But if they are given time to prepare what they have to produce then there will be a concern for formal accuracy within a communicative context" (2009, p.04)

In other words, accuracy is much more needed and important within any given communicative context to maintain the stability of communication and interaction between interlocutors. At the same time, they possess certain proficiency in the language system. By contrast, fluency is the ability to produce written and/or spoken language easily but not perfectly and thus produce continuous speech without causing comprehension difficulties or a breakdown of communication (Wilkins, 1978).

On the other hand, Jahan (2011) focuses more on accuracy in speaking and advocates that accurate pronunciation helps the learners achieve their goal in communication, i.e, their utterances can be understood by the audience clearly and they will also be able to understand native speakers' conversation easily. But achieving accuracy in pronunciation does not become so easy for the learners and teaching pronunciation seems to be difficult for the teachers as well.

As a result, teaching pronunciation, particularly phonetics, is stereotyped to be the most difficult aspect to be taught in foreign language teaching. Ur (2006) gives important clues to improve learners' pronunciation. She defends: "Pronunciation improvement is not to achieve a perfect imitation of a native accent, but simply to get the leaner to pronounce accurately enough to be easily and comfortably comprehensible to other speakers" (p.55). Ur (2006) suggests that teaching pronunciation does not mean extra imitation of a native accent but rather to pronounce comprehensible and intelligible utterance. It is certain that for a foreigner to have a perfect accent, it might be difficult to achieve as Ur (ibid) mentioned, but to be at least, an understandable or comprehensible speaker is one of the leading aims in teaching pronunciation.

Conversely, grasping the pronunciation of a foreign language or even master it flawlessly would be merely impossible if the learners encounter some crucial difficulties and the teachers perform no immediate remedies or solutions. Some of the main factors that impair learners from attaining pronunciation are discussed in the following.

1.6. Factors Involved in Teaching Pronunciation

When it comes to teaching pronunciation in the EFL classroom for learners, there are two opposing views (Avery & Ehrlich, 2008). One view holds that teaching pronunciation is important as it makes students aware of the differences between the mother tongue and the foreign language and thus eradicates the traces of the mother tongue accent through the use of drills. On the other view, some researchers believe that pronunciation cannot be taught pointing out several factors, other than instruction, that are responsible for the acquisition of good pronunciation, such as age and other social and psychological factors that are examined below.

1.6.1. The Learner's Age

Although many learners of a foreign language often show an ability to acquire a native-like proficiency in morphology and syntax, they often find it difficult to acquire a native-like pronunciation. This fact has often raised several questions among linguists and non-linguists.

It is widely believed that foreign language learning, especially in the area of phonology or speech learning is strongly influenced by a learner's age. This effect of age is best expressed by the Critical Period Hypothesis (CPH). The concept of critical age in

language learning was introduced by Lenneberg who stated that "foreign accent cannot be overcome easily after puberty" (1967, p.176).

According to the CPH, the sounds of a second language (L2) cannot be learned perfectly once a neurologically-based critical period has been passed (Lenneberg, 1967, Patkowski, 1990, Long, 1990). The exact age of learning an L2 at which a speaker's accent will be detected has been found to be inconsistent in previous research. For example, when Patkowski (1990) re-examined his 1980 study with 67 subjects, he found that the age of fifteen (15) was the turning point at which learners' accents became clearly detectable. In a study by Thompson (1991), Russian immigrants who had arrived in the United States before ten (10) years of age were perceived to have an accent. In Long's (1990) summary of studies addressing the effect of age on L2 phonological learning, he concluded that a native-like pronunciation is impossible for many individuals if their first exposure is not before the age of six (6) and for the remainder by about the age of twelve (12).

As a matter of fact, adults learning an FL tend to have a foreign accent while children succeed in most cases to achieve a native-like pronunciation. This is explained by the CPH (Birdsong, 1999, p. 01). So, the younger the students are, the easier it is for them to acquire an accurate pronunciation and it becomes increasingly difficult as the age as the brain's original plasticity diminishes and becomes more rigid.

1.6.2. The Learner's Personality

Cross-cultural studies of personality have provided cumulative evidence that personality factors are universal and replicable, which means that they can be found in all societies and cultures of the world (McCrae & Costa, 1997). Avery and Ehrlich (1992) agree that the acquisition of the sound system of an L2 can be affected by the personality of the learner. They think that learners, who are out-going and confident, are more likely to take risks, and probably have more opportunities to practice the L2 since they are more willing to interact with native speakers.

Learners who are sociable, courageous, talkativeness, and like to make friends and join groups, tend to express themselves and take part in any activities actively. Therefore, they have more opportunities to use the TL and improve their pronunciation. Contrarily, a typical introvert as someone who is very shy, quiet, like to stay alone, are introspective,

and like reading books more than talking with people, they cannot find any opportunities to speak in the TL and practice their pronunciation (Zhang, 2009).

The different personality leads to the different learning style. Compare to extroverted learners, introverted learners are afraid of making mistakes, losing face, feeling nervous when speaking in front of others, feeling uncomfortable in their first attempt at speech in English, and afraid of failure, laughter and ridicule (Avery & Ehrlich, 1992). In addition, young learners like to perform themselves in front of others, and speak out their mind without being shy (Zhang, ibid). However, with maturity, learners become more and more sensitive and do not want to perform themselves in front of others. It is also an important reason that young learners acquire an L2 more quickly than adults.

In fact, motivation is another factor that can make a difference in acquiring a foreign language pronunciation. Sparks and Ganschow (1991) state that students with motivation to learn with positive attitudes towards the TL and its speakers were more successful than students with less positive attitudes. For them, there are two types of motivation: first, instrumental motivation, which is motivation to learn the L2 for the value of linguistic achievement; second integrative motivation, which describes the desire to continue learning about the L2 culture. Thus, students with integrative motivation would be expected to work harder to develop communication skills in the L2 because they are more likely than their less interested counterparts to seek out native speakers of the language.

1.6.3. The Socio-cultural Factor

Another factor to which many researchers have attributed success or failure in achieving native-like pronunciation is the socio-cultural factor. Many researchers went on claiming that the more learners of an FL are associated with native people of the FL and their culture the more they will sound native-like.

Guiora et al., (1972) introduces a new concept 'the language ego' which is based on the idea that foreign language learners should take a new identity. They suggested that changes in ego states can improve pronunciation ability in an L2:

"To learn a second language is to take a new identity...we propose that the most sensitive index of the ability to take on a new identity, i.e. the degree of permeability of language ego boundaries, is found in the ability to achieve native-like pronunciation in a second language." (Guiora et al., *ibid*, p.185)

Guiora et al., (1972) suggest that good or native-like pronunciation can be achieved only if learners of the FL take the same social and cultural characteristics of the native speakers of the same language.

In other words, pronunciation is also affected by learners' learning identity and attitudes; in this contex, Buranavityawut (2000)⁴ states: "What strongly determines the accuracy of learners' pronunciation is a person's 'sense of identity' and feelings of 'group affiliation". Each learner brings a different attitude for the TL and its community, and it can support or hinder pronunciation skills development. If a learner has some prejudices or a negative attitude to the TL and community, it will bring bad influence for his/her language learning.

For example, some people do not believe that it is necessary to learn an L2, and they think language learning will influence the learners' cultural development in a negative way, and their culture will be imposed on the TL community. Contrarily, if a learner has positive attitudes for the TL or target culture, it will promote his/her pronunciation development easily and accurately (Zhang, 2009). As Cenoz and Garcia Lecumberri (1999, p. 8) pointed out, "in many cases, speakers tend to adopt more or less successfully the pronunciation they value as more positive or the pronunciation they identify with for both their first and second language".

Therefore, it is important to set up an appropriate goal for pronunciation. It may not be perfect pronunciation but effective communication should always be the ultimate goal. Generally, good pronunciation relates to intelligibility and acceptability. Intelligibility seems to be highlighted by many researchers. Levis (2005) pointed that learners should consider the intelligibility principle and understand as the goal to set up a native-like goal.

1.6.4. The Native Language Interference Factor

Another widely-recognized factor in the learning of an L2 is the influence of the speakers' native language. Such an influence is especially noticeable in the area of phonetics and phonology. Nonetheless, there appears to be some disagreement on the degree and nature of this factor. Odlin (1989) pointed out that transfer can take place at both the phonemic and phonetic levels in L2 speech learning. Typology or cross-linguistic frequencies of certain segments, common phonological rules, and syllable structure

⁴ As cited in Zhang (2009, p. 41)

differences between the native and target languages are other factors that can affect the level of difficulty in learning the sounds of the L2.

In other words, students from different nationalities have varying degrees of difficulty learning proper pronunciation. This difficulty depends on how different their native language is from English. Every language in the world is spoken with one kind of rhythm or with the other. There are three alternative ways in which a language can divide time: (1) the duration of every syllable is equal (syllable-timed); (2) the duration of every mora is equal (mora-timed), and (3) the interval between two stressed syllables is equal (stress-timed); for instance, French is a syllable-timed language, English, Russian and Arabic are stress-timed languages, Chinese is a tonal language. Consequently, phonemes are different in each language, as well as the way the mouth, teeth and tongue are used (Odlin, 1989).

Perhaps the strongest claim about the influence of first language (L1) on the learning of an L2 is the Contrastive Analysis Hypothesis (CAH). Lado (1957) is the first to propose the CAH; he believes that learners tend to transfer both the forms and the meanings of their native language to the TL. Therefore, he considers it important to compare the structures of the native language (NL) and the TL in order to predict the learners' difficulties. The cross-linguistic differences in the CAH approach cover all aspects of language as well as culture. According to the CAH, the areas of difficulty in L2 phonemes are mainly caused by the differences between the phonological systems of the L1 and L2. For example, a segment is predicted to be difficult to learn if it exists in the L2 but not in the L1. A learner will have trouble perceiving and producing the new segment. As a result, s/he will substitute some other phoneme from his/her native sound system, (Lado, 1957).

1.7. Some Approaches to Teaching Pronunciation

It is often mentioned that there was a remarkable absence of theory about pronunciation teaching. According to Kelly (1969), linguists have studied vocabulary and grammar longer than pronunciation which had not been studied till the beginning of the twentieth century. For this reason, language teachers have understood them better than pronunciation. For Kelly (1969), pronunciation has been taught through three general approaches: (1) The Intuitive-imitative approach, (2) The analytic-linguistic approach, and (3) The communicative language approach.

1.7.1. The Intuitive-imitative Approach

In the intuitive-imitative approach, it is believed that "a student ability to listen to and imitate the rhythms and sounds of the target language will give rise to the development of an acceptable threshold of pronunciation without the intervention of any explicit information" (Hismanoglu & Hismanoglu, 2010, p. 984). Particular technologies, such as audio-tapes, videos, computer-based programs, and websites, are used today for this approach.

Thus, this approach depends heavily on imitation and repetition without the intervention of any explicit information. It assumes that students will develop an acceptable pronunciation and speaking skills when exposed to the TL through accurate models. In this approach, the learner listens to and imitates the sounds and rhythms of the TL without the assistance of explicit instruction (Butler-Pascoe & Wiburg, 2003).

Celce-Murcia, Brinton, and Goodwin (1996) summarize that the effectiveness of this approach depends on two main factors: (1) the ability of the learner to listen and imitate; learners need to have a good listening skill and enough capacity to imitate and (2) the availability of good resources; teachers need to provide learners with good listening materials to enhance their listening skill, and motivate them to imitate what they listen to.

Based on previous studies' results, the intuitive-imitative approach is more effective for young learners and also more helpful to teach diphthongs in which explicit instruction does not work (Hashemian & Fadaei, 2011; Aydın & Akyüz, 2017). Moreover, concerning the teaching of diphthongs, Hashemian & Fadaei (2011) findings run contrary to what Jenkins (2002) has claimed; for them, the explicit instruction does not work to teach diphthongs, and the intuitive-imitative approach is more helpful.

1.7.2. The Analytic-linguistic Approach

The analytic-linguistic approach dominated the academic discussion of art and theory roughly from the 1950's to the 1970's (Thompson, 1991). For Celce-Murcia, Brinton, and Goodwin (1996, p. 02), an analytic-linguistic approach is summarized as follows:

"Unlike the Intuitive-imitative, here students are provided with explicit information about the production of sounds and rhythms of the target language. So, a variety of tools could be employed for that, as charts, phonetic alphabets, articulatory descriptions, and contrastive exercises".

The analytic-linguistic approach uses information and tools such as the phonetic alphabet, articulatory descriptions, charts of vocal apparatus, contrastive information, and other aids to supplement listening, imitation, and production. It explicitly informs L2 learners and focuses attention on the sounds and rhythms of the L2. The purpose of dealing with a sound in isolation in the classroom helps L2 learners move toward more successful pronunciation which has an effect on communication and intelligibility. In spoken language, all sounds are, of course, important, but at times certain sounds seem central to the success of communication (Hashemian & Fadaei, 2011). In fact, poor pronunciation can affect intelligibility and vowels present L2 learners with particular difficulty. Every time someone speaks in class, pronunciation is a matter for consideration.

According to Aydın and Akyüz's (2017) comparative study, the analytic-linguistic approach seems more effective, specifically in teaching the pronunciation of pure vowels, as the approach uses a more analytic view in presenting different linguistic features. Thus, teachers try to teach pronunciation using the phonetic alphabets, descriptive charts and may be more helpful for older learners.

1.7.3. The Communicative Language Approach

The Communicative Language Approach (CA) appeared in the 1980's by the growth of research showing the significance of pronunciation as a tool of communication, particularly at the level of interaction (Brown, 2007). Currently it is still the dominant approach in the field of language teaching, and it is based on the principle that the purpose of language is to communicate. Thus, communication should be the main focus in the language classes, and as an integral part of communication. The CA emphasizes the use of language in context, and this gives more significance to the speaking skill, and thus pronunciation.

The techniques and materials used under this approach that are derived from other teaching methods and approaches like Audiolingualism⁵ are as follows: (1) Listen and

⁵ Audiolingualism is "...a technique of foreign language instruction that emphasizes audio-lingual skills over reading and writing and is characterized by extensive use of pattern practice" (Richards & Rodgers, 1987, p. 49). It was based on Leonard Bloomfield's technique (informant method) of memorization and repetition in simple foreign language patterns.

imitate: a technique used in the Direct Method⁶ in which students listen to a teacher-provided model and repeat or imitate it. This technique has been enhanced by the use of tape recorders, language labs, and video recorders. (2) *Phonetic training:* the use of articulatory descriptions, articulatory diagrams, and a phonetic alphabet. (3) *Minimal pair drills:* a technique introduced during the Audio-lingual era to help students distinguish between similar and problematic sounds in the TL through listening discrimination and spoken practice. Minimal pair drills typically begin with word-level drills then move on to sentence-level drills (Celce-Murcia, Brinton, & Goodwin, 1996).

Pronunciation instruction, nowadays, is moving away from the segmental/suprasegmental debate toward a more balanced view (Celce-Murcia, Brinton, & Goodwin, ibid). This view recognizes that both an inability to distinguish some sounds and suprasegmental features (such as intonation and stress differences in yes/no and alternative questions) can have a negative impact on the oral communication—and the listening comprehension abilities—of nonnative speakers of English. Today's pronunciation curriculum thus seeks to identify the most important aspects of both the segmentals and suprasegmentals, and integrate them appropriately in courses that meet the needs of any given group of learners (Brown, 2007).

1.8. A Brief History of Pronunciation Teaching

According to Florez (1998), pronunciation was almost irrelevant and therefore, seldom taught in the grammar-translation method⁷. Then in the 1950s and 1960s, pronunciation took centre-stage with the introduction of the audio-lingual method. This was a method that emphasized the behaviouristic drilling of sound contrasts and word pairs, and the articulation of individual sounds. However, the drawback to this method was the failure to recognize the need to focus on "rhythm and intonation, the construction of useful sentences, or the practice of realistic conversations" (Fraser, 2000, p. 32). Instead, learners spent hours repeating sounds and sound combinations in the language laboratory.

⁶ The direct method of teaching, sometimes called the natural method, is often used in teaching foreign languages; it refrains from using the learners' native language and uses only the target language. Rivers summarizes the characteristics of the Direct Method as "students learn to understand a language by listening to a great deal of it and that they learn to speak it by speaking it associating speech with appropriate action" (Rivers, 1968, p. 18).

⁷ "Grammar Translation method was called at one time the Classical Method since it was first used in the teaching of the classical languages Latin and Greek." Freeman (2000, p. 11)

With the development of the communicative method in the 1970s, Fraser (ibid) and Bray (1995) observe that pronunciation was downplayed to disassociate itself with any link to the drilling practices of the audio-lingual method. It appeared to many teachers that they had to make a choice. They could either teach about "articulatory phonetics, with pictures of the human mouth and tongue in various positions" or they could choose not to offer any "explicit instruction in English phonology at all" (Bray, ibid, p. 2). As a result, there appeared to be no avenue for the teaching of pronunciation within the communicative method and thus asking the question: how to teach pronunciation as part of the CA? In fact, Fraser (ibid) notes that many ESL/EFL teachers today struggle with teaching pronunciation, and conclude that their training gave them an insufficient basis and that pronunciation should be taught in isolation.

As opposed to teaching pronunciation in isolation, the CA emphasizes the fact that pronunciation should be taught in L2 classes through a variety of activities, where the teacher provides his/her learners with the necessary tools to enable them to take the primary responsibility to improve their pronunciation.

Since English language plays an essential role as an international language of commerce, industry, politics and education to the extent that it has become an agreed-upon fact in the academic world of today, it is important to be able to express ourselves properly and to communicate to other people in native-like English. To do so, a speaker must master some of the basic phonological rules; i.e, pronunciation rules such as: Voice Onset Time and voicing-dependent vowel duration variation.

1.9. Definition of Voice Onset Time

In most languages, sound units vary by voice, and very often this is distinctive, leading to minimal pairs such as 'bat' and 'pat' in English. Voicing, in linguistics, refers to the physical production of vibration by the vocal folds as part of articulation; it is also the distinct difference between units such as /b/ and /p/ in many languages. Phonetically, voice varies by position in the speech stream and from language to language; English /b, d, g/, for example, are only fully voiced between segments such as vowels that are themselves fully voiced (Kelly, 2000; Roach, 1994; Roach, 2009).

The difference between a voiced and a voiceless sound is that during a voiced sound, the vocal folds are vibrating, but during a voiceless sound, the vocal folds are not vibrating. There is another property by which voiceless sounds can differ: they can be

aspirated (accompanied by an [h]-like puff of air) or *unaspirated*. Aspirated sounds are transcribed with a superscript [h] placed after the symbol for the unaspirated voiceless sound. Thus, the difference between voiced, voiceless unaspirated and voiceless aspirated sounds is a matter of the relative timing of oral and glottal closures/openings (Ladefoged, 2000). Both voiceless unaspirated stops like [p] and voiceless aspirated stops like [ph] are produced with the vocal folds spread apart so that they cannot vibrate. The way these two kinds of stops differ in the amount of time between the release of the stop closure and the onset of vocal-fold vibration, this is known as the Voice Onset Time (VOT) (Roach, 2002).

VOT refers to the period of time between the stop consonant release and the vibration of the vocal cords of the segment following this consonant. For Lisker and Abramson (1964, p. 420), three main VOT patterns can be found in the languages of the world:

Negative VOT (pre-voicing): the vocal cords start vibrating before the stop consonant release in an interval ranging from -125 ms to -75 ms⁸; Zero VOT: the vibration of the vocal cords start almost simultaneously to the plosive release in an interval ranging from 0 ms to +35 ms; Positive VOT (aspiration): a delay follows the plosive release and the vocal cords start vibrating at 35 ms to 100 ms interval.

Figure (1.6) below illustrates the wave form and the spectrogram which characterizes the production of the velar stop consonant /k/ in the word 'kit' (preceded by a pause), produced by a native speaker of English, as viewed in software PRAAT (which has been used in the data analysis).

_

⁸ ms= milliseconds

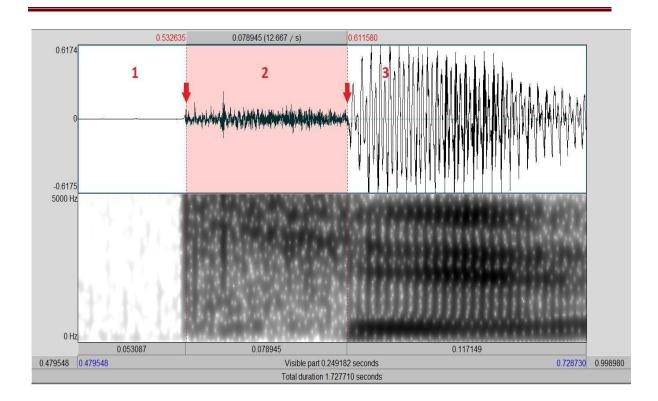


Figure 1.6. The Production of the Stop Consonant /k/

As shown in figure (1.6), *Number 1* corresponds to the closure period (the silence that precedes the consonant production), *number 2* stands for VOT (0,078945 ms), and *number 3* corresponds to the [i] vowel. The first arrow (on the left) signalizes the moment when the plosive is released; the second arrow marks the moment at which the vocal cords start vibrating.

Voicing contrast in stops has been widely discussed in phonetics and phonology. Lisker and Abramson defined VOT as "the time interval between the burst that marks release of the stop closure and the onset of quasi-periodicity that reflects laryngeal vibration". (1964, p. 422).

Although VOT is now in widespread use for measuring the timing of voicing in stops, its role as a reliable measure to distinguish between voiced and voiceless stops has been brought into question. Bohn and Flege's (1992) findings suggest that VOT, the acoustic parameter of voicing contrasts in word-initial stops, may not be as important to the perception of stop voicing as is commonly supposed.

On the other hand, some researchers argue that other acoustic cues play a role. For example, Klatt (1975) suggests that there are five equally important acoustic cues in English other than VOT, namely, low frequency energy in following vowels, burst loudness, fundamental frequency, pre-voicing, and segmental duration. Nevertheless,

despite some research showing the limitations of VOT, it is still regarded as one of the most important acoustic parameters and has been used extensively in measuring word-initial stops.

1.10. Voicing-Dependent Vowel Duration Variation

In English, the meanings of words remain the same no matter how long the vowels of the words are uttered. In fact, vowel duration in such a language does not function as a phoneme; that is, vowel duration in English cannot be used to differentiate words. However, a lot of previous studies reveal that the duration of preceding vowels is the cue to the voicing of word-final stops (Chen, 1970; Raphael & Tobin, 1983; Klatt, 1975). Chen (1970); for instance, finds that the duration of preceding vowels can be used as the cue to the voicing of word-final fricatives. A longer vowel cues a voiced fricative while a shorter vowel cues a voiceless one.

It is well established in English phonology that vowels preceding voiceless consonants are approximately two-thirds the duration of vowels preceding voiced consonants when these vowels occur in stressed pre-pausal environments (Klatt, 1975). It is claimed that such a large voicing-dependent effect does not exist in certain languages, such as French (Raphael & Tobin, 1983). One of the well-known phonetic features that have long been recognized and frequently studied is the vowel duration variation in pre-obstruent environments. Research has shown that magnitude of the variation as a result of voicing of the following consonant varies from one language to another (Chen, 1970).

In English, a language characterized as having greater vowel duration variation than most languages, the ratio of vowel duration in pre-voiceless consonant environment to that of pre-voiced has been reported to being 76% (Heffner 1937, calculated from the reported result). By contrast, corresponding ratios were found to be 87% in Spanish (Zimmerman & Sapon, 1958), 71% in German (Kohler & Kunzel, 1978), 74.05% in French (Mack, 1985), 97% in Saudi Arabic (Flege, 1979).

In addition, tense vowels correlate with phonetic length, being produced with longer duration than the lax vowels. However, contrastiveness in English is based primarily on the quality of the vowels while quantity, i.e. vowel length, is considered an accompanying property that does not create a contrastive feature on its own (Muller, 2012). Kondaurova and Francis (2008) found that native English speakers differentiate vowels based on two independent acoustic dimensions: vowel quality (spectrum) and duration, relying

predominantly on the former as the main acoustic cue. Durational difference is not considered phonemic in English. For example if one were to pronounce the word 'bat' with a prolonged vowel duration while preserving its quality, it would still be perceived as the word 'bat' for the native English hearer.

1.10.1. Previous Studies

Several studies have investigated the role of vowel duration in the recognition of English vowel quality. For example, Hillenband and Clark (2000) synthesized versions of 300 utterances of a syllable of the type /hʌd/, so that in each version the vowels were lengthened, shortened, or kept as original duration while keeping the spectral properties constant across the vowels. They found that participants were able to identify correctly the vowels /i, I, U, σ , e, ε / at their original and altered durations; therefore, it was concluded that duration had only a modest overall effect on vowel perception.

Flege (1991) studies the production of word-final voiced obstruents in English by L1 speakers of Japanese and Cantonese. He finds that Japanese has no word-final obstruents. Thus, it is possible for Japanese EFL learners to add a schwa after word-final obstruents to form the CV syllable, which is actually the prevalent syllable type in Japanese. For the syllable structures of Cantonese, there exist word-final voiceless stops (Flege, 1991). It is not difficult to imagine that the Cantonese subjects have a tendency to devoice English word-final consonants due to the phonetic forms of their native language. However, he finds that Japanese subjects devoice some word-final obstruents. The phenomenon of word-final devoicing can also be found in other studies (Flege, 1989; Flege, Munro & Skelton, 1992). Thus, the conclusion is that word-final devoicing is a common phenomenon in language learning. On the contrary, in English, when the voicing contrast in minimal pairs such as beat and bead disappears, the cue to the identification of such a pair of words is based on the vowel duration differences. Therefore, the study of preceding vowel duration differences as a function of the voicing of word-final consonants should be emphasized in EFL learning and teaching.

⁹ A sound spectrum is a representation of a sound – usually a short sample of a sound – in terms of the amount of vibration at each individual frequency. It is usually presented as a graph of either power or pressure as a function of frequency (Padhye & Nayak, 2016, p. 230).

Mack (1985) also conducts an acoustic study on the voicing –dependent vowel duration produced by nine (9) English and French monolinguals and bilinguals. The results show that the voicing factor affecting vowel duration in English is much more salient than that in French. In addition, his study reveals that to some degree learners' L1 would affect the learning of TLs.

Lisker (1972) points out the ratio of vowel duration preceding voiceless stops to that preceding voiced stop is 0.64. That is, vowel duration is shorter preceding a voiceless stop than that before a voiced one. Fischer-Jørgensen (1964) claims that vowel duration contrast can be used to identify the voicing of word-final velar stops. Moreover, Lisker and Abramson (1964) address that vowel duration variations can cue the voicing of word-final alveolar stops.

Arabic is one of the least studied languages with regard to this phenomenon. To this date, there have at least been four main studies which addressed this phonetic feature. The first study was Flege's dissertation (1979), the second study is that of Port, Al-Ani, and Maeda (1980), the third is that of Mitleb (1984), and the fourth is that of Flege (1984). The first and the third studies investigated the duration of /æ:/ in monosyllabic stressed words in pre-stop consonant environment for Saudi Arabic and pre-fricative consonant environment for Jordanian Arabic. Both studies concluded that voicing of the following consonant does not have a significant effect on the duration of /æ:/.

The findings of these studies provided a strong claim that voicing effect is indisputably learned. This claim was questioned by Laeufer (1992) who re-reexamined English and French. In her study, which was initially triggered by Mark (1992), Laeufer argued that vowel duration variation as a function of voicing should be conditioned. Laeufer (ibid) realized that earlier phoneticians who studied differential vowel duration in French tended to either miss or overlook some language-specific variable that always masked the effect of voicing on vowel duration. In addition, Mitleb (2009) found that voicing has non-significant effect on preceding vowel duration in Arabic. He also pointed out that the difference between English and Arabic in this non-segmental property has affected Arabs' production of English timing contrast of voicing in syllable final position.

For Laeufer (ibid), all languages show vowels to be slightly longer before voiced obstruents. He has proposed a phonological rule of vowel lengthening for English because the variation seems to be much greater than in French. In his study, a comparison of voicing-dependent vowel duration in English and French monosyllables, he shows that phrase finally and medially under focus, obstruent voicing is a significant factor

influencing the duration of preceding vowels in both languages. However, in unfocused medial position, the difference between the durations as a function of consonant voicing is much smaller. Thus, he suggests that languages universally exhibit fairly similar physiologically conditioned voicing-dependent variation in vowel duration.

It should be emphasized that despite all these studies, the nature and the scope of the effect of voicing on vowel duration is not fully understood yet. As can be detected from this introduction, each of the studies described above was built on the one(s) before and made its own contribution. Still, though, the problem of the effect being learned or conditioned is not resolved.

1.11. Conclusion

As a conclusion, phonetics does not merely exist on its own as a subject, but is an important discipline employed by a variety of linguistic fields and the knowledge and understanding of phonetics comes in useful in foreign language teaching and learning. What is more, phonetics provides data for phonology. These two disciplines are very closely related to each other and understanding phonology without a good knowledge of phonetics is almost impossible as phonetics 'feeds' phonology with data, which is then used in exploring sound patterns of a language.

The first chapter carries the literature review of this research work. It initially presents the notion of language and its aspects or components focusing on one of the most important components namely 'phonetics and phonology'; therefore, it was necessary to give brief definitions about such concepts in order to characterize the area which is under investigation. We have seen various notions and we defined the basic and most important concepts.

Previous studies had come to a conclusion that VOT and Vowel Duration of plosives in English cause some difficulties to EFL learners and thus resulted in creating what is called 'a foreign accent of English'. Therefore, the following chapter will provide an overview about foreign English accent and the notion of error analysis.

Chapter II

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Chapter Two

Foreign English Accent and Error Analysis

2.1. Introduction

Language is a unique human capacity that seems to be learned effortlessly in childhood. However, adult learners do not learn second/foreign languages as easily as children do, and their speech is usually described as being different from that of native speakers, especially in *accent*. Bradlow and Pisoni (1999) argued that accented L2 is caused by factors such as a reduction in adults' neural plasticity, which makes it difficult for them to modify their sensorimotor systems to produce the distinctive sounds in the L2 that are not present in their L1.

This chapter discusses the causes of foreign accent; it sheds light on the factors affecting learning English pronunciation. Moreover, more focus will be on the languages that affect pronunciation learning namely Arabic, the learnes' mother tongue and French, the learners' L2. Consequently, a description of the two languages is provided; in addition, a comparison between the sound system of the previously mentioned languages and the English sound system is drawn.

2.2. Causes of Foreign English Accent

It is quite common for L2 adult learners to speak the TL with a distinct accent. This is clear in the production of /faif/ for "five" by many Arabs, /sink/ for "think" by many French speakers, /kod/ for "good" by many Finns, /hant/ for "hand" by many Germans, /lait/ for "right" by many Koreans, etc. It is indeed atypical to have L2 adult learners pronounce the TL in a way indistinguishable from its native speakers. It has been suggested that L2 learners seem never capable of ridding themselves entirely of foreign accent (Scovel, 1969).

Flege (1995) claimed that age-related decline in L2 learners' recognition of certain auditorily detectable differences between L1 and L2 sounds is also considered to be a factor that hinders the formation of new phonemic categories, which may lead to developing a foreign accent. Flege, Munro, and MacKay (1995) examined the relation between the perceived foreign accent and age of learning in native Italian subjects speaking Canadian English. The native Italian subjects were asked to read English sentences that were later evaluated by native English speakers on the basis of whether the speakers sounded like a native English speaker. All subjects who began learning English after the age of fifteen (15) showed a varying degree of accented speech regardless of how long they had been living in Canada. They found a strong positive correlation between age of arrival and perceived foreign accent in speech.

In another study, Flege, Mackay, and Meador (1999) tested a number of Italian speakers on their perception and production of English vowels to determine whether accuracy increased as the age of arrival of the subjects decreased. Vowel perception was assessed through using a categorical discrimination test, in which participants had to discriminate between sets of Italian and English vowel contrasts by identifying the odd vowel out on a continuum. They found that there was a strong negative correlation between age of arrival and vowel discrimination scores; the older the subjects were when they learned English the worse their results were.

Both of Flege's studies made a strong claim that the success of early bilinguals in acquiring foreign sounds might be attributed to the establishment of long-term memory representations of the foreign sounds in question, which enabled them to create new phonemic categories. Several other studies have also supported the claim that inaccurate perception and categorization of foreign sounds is correlated with foreign accent (Trofimovich & Baker, 2006; Flege & Hillenbrand, 1984). Sound categorization here refers to subjects' ability to perceive and organize L2 into unique categories to facilitate discrimination and learning ability.

Adult learners face more challenges in L2 learning because they have already created lexical, semantic, and phonological representations of their L1 which interfere with their ability to establish new representations for L2 phonemes. Flege et al, (2006) showed that Japanese adults were unable to discriminate between English minimal pairs that contain /r/ and /l/ because these phonemes are not contrastive in Japanese and because the Japanese liquid consonant is phonetically closer to English /l/ than it is to English /r/.

L2 learners usually face perceptual and categorical problems when acquiring a new language, which arise due to the overlapping phonological units between their L1 and L2.

2.3. Factors Affecting Learning English Pronunciation

The role of various factors affecting learning English pronunciation in general has been investigated by many researchers. Fraser (2000, p. 82) stated: "at first glance, it looks as though learning foreign language pronunciation should be easy: a simple matter of imitating the pronunciation of native speakers. In practice, of course the reality is quite different". As a matter of fact, EFL learners think that the easiest thing to study in English is pronunciation. They assume that correct pronunciation could be achieved by listening to native-speakers of English and imitating them. However, it is not as simple as that. Learning pronunciation involves learning a set of elements which in practice learners find very difficult to comprehend such as intonation, rhythm and stress.

By the same token, English teachers find it very difficult to teach pronunciation. This is because of a set of factors that negatively interfere in the process of teaching. Wong (1987) stated that teaching pronunciation is a linguistic matter and that teachers must consider all the other factors that may affect learners' pronunciation and speaking skill. These factors include age, the amount of exposure to the practice of English, phonetic ability, personality and attitude, motivation, and equally important the mother tongue interference.

2.3.1. Mother Tongue Interference

English learners speak the TL in a way that is different from that of English native-speakers. This kind of English spoken by EFL learners is called "foreign accent" (Avery, 1987). This foreign accent is the result of mother tongue interference. Crystal (1991) defines the concept "interference" as the introduction of errors into one language and asserts that interference occurs while people are learning an FL. He asserted that the major problem faced is the difference in the language sound system which may result in difficulty in perception and production of foreign sounds. That is to say, languages around the world have different sound systems.

The mispronunciation of some sounds is the result of the over practice of the L1. O'Connor (2003) stated that the main problem of English pronunciation is to build a new set of sounds corresponding to the sounds of English, and to break down the arrangement

of sounds which were strongly built up under the habits and the systems of our L1. When L2 learners turn linguistic features that are correct in their L1, they will create permanent errors in the way they speak the new language.

It is too difficult for L2 learners to change their habits which they have obtained since their childhood in acquiring their L1. This means that their organs of speech were trained to produce a set of sounds which belong to their mother tongue. Then, they are required to these organs of speech to produce new sounds that belong to the L2. As a result, learners will confuse the new sounds which do not belong to their mother tongue and replace each of them with other sounds that are said to be nearest ones to them. (O'Connor, 2003)

2.3.2. Sound System Differences Between L1 and L2

The differences between the learners' mother tongue and the TL at the level of their sound systems cause many difficulties for learners to speak English correctly. Moosa (1972) noted that the Arab learners of English form habits of their mother tongue (Egyptian Arabic) and hence they strongly build the phonological features of Arabic. This makes them encounter many difficulties in distinguishing sound systems between a native language and the L2. For example, the sound /p/ does not exist in the Modern Standard Arabic (MSA) sound system which makes it difficult for Arab speakers to pronounce words like computer /kəmˈpjuːtə/.

Furthermore, Derwing and Munro (2005) noted that in the field of Second Language Acquisition (SLA), learners with different linguistic backgrounds would of course confront different difficulties in order to produce English sounds because of differences between the two languages. These differences between the sound systems of the two languages will make a barrier for learners in being competent in the pronunciation of English. The new sounds will remain strange for learners especially if they start learning English after the age of adulthood. However, this problem is expected to be solved after a long time of regular practice and hard work.

2.3.3. The Influence of Spelling on Pronunciation

Spelling in Arabic is phonetics, that is, the number of graphemes is equal to the number of phonemes (Hajjaj, 2001). So, Arabic orthography could be described as shallow

or transparent. Awad (2010, p. 12) defined shallow or transparent orthography as: "a type of orthography in which there is high correspondence between sounds and letters."

In contrast, English spelling is not phonetic in which there is no correspondence between the number of sounds and the number of letters. Hajjaj (2001) stated: "Arabic representation of sounds in writing is far more regular than it is in English". Kelly (2000) illustrated this notion by giving George Bernard Shaw's example of the word "ghoti". According to the famous Irish writer, the word "ghoti" is supposed to be pronounced as the word "fish". He assumed that 'g" and 'h' are together pronounced /f/ as in "tough" /tʌf/, 'o' is pronounced /i/ as in "women" /wimin/ and 't' and 'i' are together pronounced /ʃ/ as in "notion" /nəʊʃən/. From this example, Shaw attempted to explain the opeque or deep orthography of English spelling.

Therefore, the written form is not enough for English learners to detect the correct pronunciation. Moreover, Umera-Okeke (2008) summarized five different problems faced by English learners in pronunciation as follows: Same Letter Different Sounds, Same Sound Different Letters, Silent Letters, Inserting Sound where there is no Sound, and Variants of the Plural and Past Tense Morpheme.

The same letter does not always represent the same sound in English. Some letters can stand as many as different sounds. Examples: (1) The letter 's' is realized as: /s/ as in sat, sing, socks, etc; /z/ as in bosom, busy, cousin, easy, feasible, hesitate; /ʃ/ as in mission, sure, sugar; and / ʒ /as in vision, measure, leisure, usual. (2) The letter 'u' is realized as: /u/ as in put, bull, sugar; /aɪ/ as in buy, guy; /ə/ as in succeed, succumb, suspect; /// as in bud, gull, luck, such, study; and /uə/ as in jury, rural (Dale & Poms, 2005).

Another area of discrepancy between spelling and sound in English is a situation where the same sound is not always represented by the same letter. For instance, the velar plosive /k/ has different spelling forms as: 'k' in keen, speaker, peak, keg; 'c' in cut, cap, act, cattle; 'cc' in occasion, according, occur; 'ch' in chemist, stomach; and 'ck' in pack, back, black (Umera-Okeke, 2008).

A lot of English words have silent letters which though written are not meant to be pronounced. Writing such words as one heard them uttered may produce erroneous spellings. For examples: (1) Silent 'b' as in: limb, thumb, numb, womb, debt, subtle; (2) silent 'c' as in: muscle, scene, science; (3) silent 'd' as in: width, handsome, handkerchief, Wednesday; (4) silent 'g' as in: gnash, gnaw, gnat, gnome, sign, hang; (5) silent 'h' as in: hour, honest, heir, exhaust, vehicle; and (6) silent 'k' as in: know, knit, knight, knee, knife, kneel (Dale & Poms, 2005)...

Another sound / spelling problem in English is the intrusion of sound where there is no spelling to indicate that sound. The words could be spelt but the pronunciation is a problem to learners of English. Examples: (1) /j/ is pronounced before u in the following words: Use /ju:z/, cute /kju:t/, beauty /bju:ti/, cube /kju:b/, Europe /juərəp/; (2) /w/ is inserted before the letter o in one /wʌn/, once /wʌns/; and (3) /k/ is an extra sound inserted before /s/ in: Accept /əksept/, access /ækses/, accident / æksident/, axle /æksl/, axis /æksis/, axe /æks/ (Umera-Okeke, 2008).

The last area of variants that is a problem to non-native speakers of English is variation in the pronunciation of the plural and past tense morpheme. Everyone knows that the regular ways of forming plurals is by the addition of –s/es to the base word. To form the regular past we also add –ed to the base. When these are added to words, we still have variations in pronunciations of the words formed. For instance: (1) Formation of the plural: /s/: cats /kæts/, books /buks/, laughs /la:fs/; /z/: dogs /dpgz/, cows /kauz/, girls /g3:lz/; and /iz/: houses /hauziz/, rushes /rxfiz/, dishes /difiz/. (2) Formation of the past tense: /d/: stoned /staund/, played /pleid/, begged /begd/; /t/: washed /wpft/, faced /feist/, looked /lukt/; and /id/: started /sta:tid/, handed /hædid/, painted / peintid/ (Dauer, 1993).

All of these problems create obstacles for English learners whose mother tongue does not contain differences between the written form of words and their phonetic representation. Henceforth, these differences between L1 and L2 at the level of phonetics are the reason why English learners make errors in their pronunciation. In other words, the difference between the number of phonemes and the number of letters in English can mislead Arab EFL learners since in Arabic the number of phonemes corresponds to the number of letters. Accordingly, Kharma and Hajjaj (1989) stated that Arab EFL learners are often misled by the graphic representation of sounds.

2.4. Errors in Foreign Language Learning

Foreign learners of English are due to commit errors in pronunciation. The learners' errors will give a bad habit in pronunciation because, as beginners, they realize that their errors do not disturb their convenience in communication but it will become a problem if they have to speak in an international communication because they will be misunderstood.

Error is the most natural thing attached to human beings. A child learning his native language, an adult native speaker, or a foreign language learner; they all make errors both in comprehension and production. In the FL process, error has, most of the time, been

regarded as a negative thing indicating failure and obstructing progress and, thus should be avoided (Derwing & Munro, 2005).

An error is a form, a structure, or a linguistic item that the teacher regards as inappropriate and unacceptable, because it leads to misunderstanding. The Term 'error' has been defined from different perspectives. George (1972)¹⁰ defines 'error' as: "An unwanted form, specifically, a form which a particular course designer or teacher does not want". George's perspective on error regards the psychological status of the learner. His point of view leans on the role of affect in language learning. In other words, the term 'error' is used to refer to a systematic deviation from a selected norm or set of norms. Lennon (1991, p. 185) states: "an error is a linguistic form or combination of forms which in the same context and under similar conditions of production would, in all likelihood, not be produced by the speakers 'native speaker's counterparts".

On one hand, it was considered to be a sign of inadequacy of the teaching techniques, something negative which must be avoided. On the other hand, it was seen as a natural result of the fact that since by nature we cannot avoid making errors, we should accept the reality and try to deal with them.

The idea of 'error' as an effect to be avoided was supported by the 'behaviorist approach' that sees this phenomenon as "bad habits" formed as a result of ineffective teaching and, therefore claims that if they are repeated they become habitual. For behaviorists' learning theory, old habits hinder or facilitate new habits; that is why errors are unwanted (Lado, 1981).

A different conception from the behaviorist is the one which considers 'error' essential to the learning process, for without it there is no progress. This conception finds a more realistic attitude towards errors which are no longer a reflection on the teaching methods, but are rather indicators that learning is taking place, i.e., evidence that language acquisition is working (Corder, 1974). So, errors are no longer bad, but as natural as those that occur in learning an L1, and a learner errs because s/he is evolving in a new language system through which he is testing his knowledge of the new encountered data.

The investigation of errors can be at the same time diagnostic and prognostic. It is diagnostic because it can tell us the learner's "state of language" (Corder, 1973, p. 270) at

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¹⁰ (as cited in Rippel, 1983, p.7)

Behaviorist theory, which is basically a psychological theory in its essence, founded by Watson, is actually a theory of native language learning, advanced in part as a reaction to traditional grammar. The supporters of this theory are Leonard Bloomfield, Skinner, and Staats (Brooks, 1960). The major principle of the behaviorist theory rests on the analyses of human behavior in observable stimulus-response interaction and the association between them.

a given point during the learning process and prognostic because it can tell course organizers to reorient language learning materials. Another conception considers error to be the result of the social-cognitive interaction. This means that error carries a cognitive process as well as a social and cultural component which make it vary in different societies.

2.4.1. Types of Errors

Researchers in the field of applied linguistics such as Corder (1974) usually distinguish between two types of errors: *competence errors* and *performance errors*. Competence Errors are the result of the application of the rules which do not correspond to the TL norm. They occur when SL/FL learners do not know the rules of the TL adequately. Whereas Performance Errors are the outcome of the mistakes in language such as false starts or slips of the tongue. They happen when the learners suffer from stress, indecision, conflict and fatigue.

Another division done by Burt and Kiparsky (1978) who state that there are two types of errors: local and global. They make a clear cut distinction between 'global errors', which affect the overall organization of the sentence, i.e. the overall structure of the sentence making a sentence or utterance difficult or impossible to understand, and 'local errors' that affect a single element of the sentence, i.e., only a particular constituent, thus it does not cause problems of comprehension. Global errors include incorrect word combination in a sentence; while local errors involve word inflection and derivation as well as the use of articles, prepositions and auxiliaries.

Richards and Schmidt (2002, p. 226) give the following examples on both global errors and local errors: Global error: 1) "I like take taxi but my friend said so not that we should be late for school." (A complete disorder of words, therefore, it would be marked as erroneous.) Local error: 2) "If I heard from him I will let you know." (Only 'heard' is unsuitable as a verb tense, yet it does not affect meaning).

Thus, local errors do not hinder communication and understanding the meaning of an utterance. Global errors, on the other hand, are more serious than local errors because global errors interfere with communication and disrupt the meaning of utterances. Local errors involve noun and verb inflections, and the use of articles, prepositions, and auxiliaries. Global errors, for example, involve wrong word order in a sentence.

2.4.2. The Sources of Errors

Traditionally, under the influence of the strong version of the CAH, the sole source of language learners' errors was recognized as transfer from the learner's native language. Errors resulting from mother tongue interference were called Interlingual Errors. In the field of error analysis¹², many other sources of errors have been identified which extend beyond the scope of interlingual errors.

Perhaps, one of the first and most important studies conducted in the field of Error Analysis (EA) was the one done by Richards (1971). His study involved learners from different language backgrounds (Japanese, Chinese, French, Polish, and Indian and West African Languages) and showed the different types of errors relating to production and distribution of verb groups, prepositions, articles, and the use of questions. Thus, he distinguished two sources of errors: Interference or interlingual errors, intralingual and developmental errors.

2.4.2.1.Interlingual Errors

Interlingual errors are errors resulting from the use of elements from one language while speaking or writing another. Richards (1971, p.12) states:

"Items produced by the learner which reflect not the structure of the mother tongue, but generalizations based on partial exposure to the target language. The learner, in this case, tries to derive the rules behind the data to which he/she has been exposed, and may develop hypothesis that correspond neither to the mother tongue nor to the target language".

According to Rippel (1983), interlingual errors are those resulting from the first and second language contact; they occur because the foreign learner is trying to make easy the learning of the L2. S/he tries to find meeting points between the already known information and the new one s/he is learning.

Corder (1974) believes that interlingual errors are caused by transfer error. He suggested that interlingual errors are caused mainly by mother tongue interference. Al-Khresheh (2010) suggests that interlingual errors are committed by literal translation and

¹² "The field of error analysis may be defined as dealing with the differences between the way people learning a language speaks and the way adult native speakers of the language use the language" (Richards, 1971, p. 1).

are classified into three (3) categories: (a) Transfer Errors are caused by interference from mother tongue. A student who does not know the rules of the TL will use the same rules as s/he obtained in his/her NL. (b) Mother tongue Interference means errors that are produced in the learners' attempt to discover the structure of the TL rather than transferring models of their L1. (c) Literal Translation means errors that happen because a student translates his/her L1 sentence or idiomatic expression into the TL word by word.

2.4.2.2.Intralingual and Developmental Errors

Intralingual errors are errors reflecting general characteristics of the rule learning such as faulty generalization, incomplete application of rules and failure to learn conditions under which rules apply and developmental errors occur when exposed to the L2 itself. The learner reformulates rules and generalizations based on neither the mother tongue nor the foreign language. Thewissen (2015, p. 43) declares: "We can distinguish between two groups of errors: Interlingual/transfer errors, which are due to the interference of the learners' mother tongue, and interlingual/developmental errors, which are due to the new language learned".

Intralingual and developmental errors are due to the difficulty of the TL. Intralingual and developmental factors include the following categories which were considered by Richards (1971) as the four main causes of errors: (1) Overgeneralization means that the learner creates a deviant structure on the basis of other structures in the target language. According to Richards; "Overgeneralization covers instances where the learner creates a deviant structure on the basis of his experience of other structures in the target language." In other words, Thewissen (2015, p. 58) explains:

"Whenever learners meet a new pattern or a new rule they think that the pattern or rule applies to all cases without exception... Overgeneralization results from the fact that the learner finds it easier to transfer previous knowledge to produce a new pattern".

For instance; a learner may write "*She walked fastly to catch the bus" because he already knows "He walked quickly to catch the train"; or a he can say "*He can sings" where English allows "He can sing" and "He sings". (2) Incomplete application of rules involves a failure to fully develop a structure. Thus, learners are observed to use declarative word order in questions such as "*You like to play?" instead of "Do you like to play?" (3) False concepts hypothesized arises when the learners do not fully

comprehend a distinction in the TL; for example, the use of 'was' as the marker of the past tense, as in the sentence "*one day it was happened". (4) Ignorance of rule restriction involves the application of rules to contexts where they do not apply. An example is "*He made me to laugh" through extinction of the pattern found with the majority of verbs that take infinitival complements; for example, he asked/wanted/ invited me to go (Vadney, 2006).

Those experienced in the field of language teaching have always faced problems to locate the exact error made by learners in speech and in certain written productions such as essays. This means that an error cannot always be spotted. Hence, they are still faced with the problem of which error to correct and how to correct it. Since the thesis' field is phonology, we will look at some details related to learners' phonological errors; finally, the most important causes of phonological errors.

2.4.3. Some Causes of Phonological Errors

The errors foreign learners make in interaction with the FL are due to many reasons. The study of the error resulting from the difficulty of pronunciation of /p/ phoneme among EFL learners aims at investigating the reasons behind this difficulty. The following causes of phonological errors are from Vadnay's (2006) perspective.

2.4.3.1.Language Transfer

Language transfer is based on the influence of the learner's L1 on the production of the TL as a result of the similarities and the differences between the TL and the one previously acquired (Odlin, 1989). Learners, particularly in the first stages of L2 acquisition, usually transfer items and structures that are different in both languages. Negative transfer is the use of L1 linguistic items in FL learning context. It results from the difficulty occurring when learning what is different or unusual form the learner's L1. Odlin (1989, p.167) declares: "Cross linguistic influences resulting in errors, over production, miscomprehension, and other effects that constitute a divergence between the behavior of native and non-native speakers of a language".

This may take place at the phonological, grammatical, and lexical levels. L1 phonological and orthographic processes interfere with spelling L2 words with unfamiliar phonemes or graphemes; miscues in L2 reading can be attributed to native syntactical

knowledge; and word order variation, complex noun phrases and other complex structural differences between languages can be misleading to the FL learner.

According to behaviourists, L1 interference is the most widely recognized source of FL problems as a result of the differences between the system of L1 and L2. Lado (1957) confirms this when saying that language interference is also concerned with transferability of speech acts from one language to another and the extent to which the learner is able to apply his intuitive knowledge of how to use his NL to the FL.

Weinreich (1953) discusses how two language systems relate to each other in the mind of the learner. His key concept is interference, defined as "those instances of deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language" (p.1). By implication, this will be likely to produce errors which led linguists to develop 'Contrastive Analysis' in order to predict learning errors by examining differences between L1 and L2.

Not all speech acts are directly transferable from a language to another without a change from what goes beyond literal translation; this may lead to serious misinterpretations among the interlocutors, mainly when the structures of the two languages are distinctly different. In this case, one could predict a relatively high frequency of errors to occur in L2, thus indicating an interference of L1 on L2 (Ellis, 1994). Ellis says that when learning an FL, learners use some of the rules they have already acquired in L1 in the production and understanding of L2. This means that they exert some influence using L1 over L2. This influence is frequently apparent in the errors that learners make either orally or in writing. The learners' L1 not only affects L2 vocabulary and grammar but also its phonology.

2.4.3.2.Interference

Interference is another element that causes error production for foreign learners. Interference results from the FL itself. It shows the learner's attempts to avoid error production. The FL's new, complicated, and different structures, forms, and phonemes create confusion for the learner. S/he may overuse rules and exceptions in contexts where it is not appropriate. Vadnay (2006, p.124) states:

"A good example is the use of the third person singular suffix, which causes problems to a great number of learners irrespective of what their mother tongue is. The information about the suffixation confuses the learners and it comes from English itself".

In other words, when learning L2, the learner very often transfers the phonological system of the source language, i.e., L1. This transfer includes L1 phonemes and their variants, stress and rhythm patterns as well as intonation patterns and their interaction with other phonemes. Therefore, a sound that is infringed by the learner creates a deviation leading to a distortion in L2 pronunciation. This especially happens when L2 sounds are not part of the sound system of L1; i.e., in the phonemic inventory of L1, and thus the difficulty. For Lado (1957, p. 12), "the prime cause, or ever the sole cause of difficulty and error in foreign language learning is interference coming from the learner's native language' in this case is more persistent".

When comparing the sound system of English with that of Portuguese, Lado (1957) finds out that Portuguese does not have phonemes similar to the English / t \int , d χ , θ , δ , h, r, j, w/ as in 'chew jump', 'either', 'rose', 'year', 'wet', respectively. So, Portuguese learners of English have problems in pronouncing these sounds. Weinreich (1953) notes that the majority of French speakers substitute [t] for [d]. Similarly, Many Arab learners find it hard to articulate certain English sounds namely those which do not exist in Modern Standard Arabic (MSA). Hence, they substitute them by the closest ones from the local stock. This substitution may include both vowels and consonants.

2.4.4. The Categorization of Errors

According to Corder (1973), errors fall into four main categories: omission of some required elements, addition of some unnecessary or incorrect elements, selection of incorrect elements, and misordering of elements.

2.4.4.1. Omission

Omission is a type of error which is characterized by the absence of an item that must appear in a well- formed utterance (Muhsin, 2016). An L2 learner may omit certain linguistic forms as soon as s/he finds that the way of producing them is very complex. For example, in cases when the learner says: "I am here since three o'clock." does not only select the wrong grammatical item, but also shows that s/he has not learned the function

of the auxiliary system in English, the rule would be: Auxiliary + perfective + tense + since + point-of-time noun i.e., the verb is in the perfective form when collocated with the prepositional phrase of time: since + point-of-time (Corder 1973).

A learner very often makes omissions, as the case for the third person singular morpheme 's' as in "he speak" English well, the plural marker 's' as in "he has three brother." And the past tense inflection 'ed' is left out, as in "He help me yesterday." In syntax, learners may omit certain elements which are compulsory as in "must go there?" instead of "Must we go there?" and the definite article 'the' as in "I went to movies"

2.4.4.2. Addition

Addition is a type of errors which is characterized by the presence of an unnecessary item in a well- formed utterance (Muhsin, 2016). Learners tend to add redundant elements. In phonetics and phonology, a frequent phenomenon is referred to as "epenthesis", (Crystal, 1992), and consists of the insertion of an additional vowel. This epenthetic vowel which is taken from the L1 pattern can then be added to foreign words. With many learners of French and English, for instance, this sort of intrusive vowel has a vowel harmony of the learners' mother tongue and totally affects the accent of the TL. Learners also tend not to make the difference between short and long vowels as in 'leave' and 'live'; they usually pronounce both of them as /li:v/.

In morphology, learners tend to add the morpheme {s} of the third person singular to the first person singular as in "I thinks" instead of "I think", and the morpheme {s} of plurality to the singular noun as in "The books is on the table" instead of "The book is on the table." At the syntactic level, learners very often produce wrong combinations. An example of that is the use of the article with a name, as in "The London Big Bang" instead of "London Big Ben". Similarly an auxiliary might be added in English as the case of "does he can sing?". At the lexical level, learners may add unnecessary words as in "I remained there during two months." instead of "I remained there for two months." (Hemaidia, 2016).

2.4.4.3. Misformation

Misformation is errors that are characterized by the use of the wrong form of structure or morpheme (James, 1998). There are 3 types of this error which have been frequently reported in the literature, namely: First, regularization which is overlooking

exception and spreading rules to domains where they do not apply such as: *runned*, *womans*, *hitted* instead of *run*, *women and hit*. Second, archi-forms which is the selection of one member of a class of forms to represent others in the class; for instance, at the phonological level, learners often substitute a familiar phoneme from the mother tongue for a target phoneme that is completely different and difficult to pronounce. Some Algerian learners, for instance, pronounce /t/ for / θ /. One may say [t3:d] instead of / θ 3:d/ (third), or [d] for / δ /, as in [dauz] instead of / δ auz/ (those), because they are used to pronounce /t/ instead of / θ / and /d/ instead of / δ / in their ordinary speech in the Algerian Arabic variety. This is referred to as "*interlingual transfer*" (Ellis, 2008).

Third, alternating form which is derived from the use of archi-forms which gives way to the apparently fairly free alteration of various members of a class with each other; for example, the learner uses *he* for *she*, *him* for *he*, *they* for *it*, or *her* for *she*. In other words, learners may select the wrong morphemes; for instance, they may use {est} instead of {er} in comparatives, making a sentence like "*He is oldest than me*." instead of "*He is older than me*.", or they may substitute {er} by {more} in the case of short adjectives, as in "*more quick*" instead of "*quicker*" (James, 1998).

2.4.4.4. Misordering

Misordering is an error which is characterized by the incorrect placement of a morpheme or group of morpheme in an utterance (Muhsin, 2016). In pronouncing certain words, learners may make errors by shifting the position of a certain phoneme as in pronouncing the words (constitution) /kənstitju:ʃən/ as /kəntistju:ʃən/, and (facilitate) /fə'siliteit/ as /fə'sitileit/. At the morphological level, usually there are errors of misordering bound morphemes as in English "She's get upping now." instead of "She's getting up now." The learner links the inflection "ing" to the particle of the two-word verb "get up". There are also other errors of misordering; one may say "I think he is a man wise" instead of "I think he is a wise man." Or "He's a dear to me friend" instead of "He's a dear friend to me". This means that the constituents of a single noun phrase are split. At the lexical level, words may be reversed by learners. An example of that is the compound word "greenhouse" which becomes 'housegreen', or 'bookshop' into 'shopbook' and so on. In the classification of learners' errors, Dulay, Burt, and Krashen (1982) used a surface strategy taxonomy through which they attempt to describe the learners' errors categories.

2.4.5. The Significance of Learners' Errors

Corder (1974) maintains that researchers came to realize that the errors a learner makes in constructing a new system of language are to be analyzed and diagnosed carefully because they may contain the keys to the understanding of the process of FL acquisition. This means that from the study of his/her errors, they can be able to infer the nature of the learner's knowledge and discover what s/he has to learn. The most important aspect of errors is that they are indispensable as a means for a learner to learn (Mezrighi, 2011).

In his article "The Significance of Learners' Errors", Corder (1967) explains the value of errors in three different ways which can be summarized in the teacher's awareness of the learner's progress, the researcher's investigation for the strategies or procedures the learner is employing in his discovery of the language, and finally for the learner himself "A learner's errors...are significant in that they provide to the researcher evidence of how language is learned or acquired, what strategies or procedures the learner is employing in the discovery of the language" (Corder, 1967, p.167), he encounters those errors as being an important device for his progress and development.

Brown stresses on the same point when saying: "The fact that learners do make errors and these errors can be observed, analyzed and classified to reveal something of the system operating within the learner leads to a surge of learners' errors, called 'error analysis" (2000. p. 218). According to Dulay and Burt (1974), errors have played an important role in the study of language acquisition in general and in the examination of L2 acquisition in particular. Researchers see that errors contain valuable information on the strategies learners use to acquire a language. This means that one can determine a learners' level of mastery of the language through those errors.

Because of the global spread of English, there are more people who speak English with a non-native accent; the latter is the result of what Lado called 'the influence of the mother tongue'. Thus, the strongest claim about the influence of L1 on the learning of a L2 is the CAH.

2.4.6. Approaches to the Study of Errors

For most specialists in the field of teaching, errors are no longer "bad habits". They are clues to what is happening in the learners' mind. They are regarded as a natural phenomenon that must occur when learning the L1 or L2 and that all beginners learn by making mistakes (Shaughnessy, 1977). Zamel (1981) thinks that errors indicate that the student has not yet learnt but rather s/he is in the process of doing so. Yet the most important thing is how to diagnose the nature and the quality of those errors to seek for the possible causes beyond them, i.e., to build up an image of the features of the language causing problems to the learners, and finally decide for the possible and adequate remedial work to help them overcome their L2 acquisition problems. Along the years, studies in Second Language Acquisition (SLA) have focused on the nature and sources of errors. Researches show that error sources might be psychological, cognitive, or sociolinguistic. For that reason, two different linguistic approaches have emerged for the description and identification of learners' problems.

2.4.6.1. The Contrastive Analysis Hypothesis

Since the late sixties, a considerable number of researches have been conducted in the field of SLA. The complicated process of language learning has attracted continuing interest from researchers in Linguistics, Psychology, and Education. The major psychological task has been the investigation of how learners acquire L2 as well as the exploration of their cognitive processes in learning so as to predict and then explain encountered flaws, and finally think of and suggest the suitable material to be used in teaching. Lado, (1957) was the first to propose the CAH; he states (1981, p. 22):

"...it is assumed that the student who comes into contact with a foreign language 'L2' will find some of its features quite easy and others extremely difficult. Those similar elements to his mother tongue 'L1' will be easy for him to learn, and those different elements from his native language will be difficult".

In other words, Lado believed that learners tend to transfer both the forms and the meanings of their NL to the TL. Therefore, he considered it important to compare the structures of the NL and the TL in order to predict the learners' difficulties. The cross-

linguistic differences in the CAH approach cover all aspects of language as well as culture.

According to the CAH, the areas of difficulty in L2 phonemes are mainly caused by the differences between the phonological systems of the L1 and L2. For example, a segment is predicted to be difficult to learn if it exists in the L2 but not in the L1. A learner will have trouble perceiving and producing the new segment. As a result, he will substitute some other phoneme from his native sound system and this is considered as an error in the L2 production (Lado, 1957).

The application of the linguistic and psychological theories to the study of L2 learning have extended to the discussion of learners' errors as originated from learners' incomplete competence in L2 grammar or L1 interference. Such errors are related to two known approaches: the contrastive approach, deeply rooted in behaviorism and structuralism, claims that the principal obstacle to L2 acquisition is the interference of the L1 system to the L2 system, and thus suggests a scientific and structural comparison of the two languages in question in order to predict and describe the confronted issues.

2.4.6.2. Error Analysis Approach

Based on the works of Corder (1967), error analysis gained its place as a scientific method in linguistics and became a recognized part of applied linguistics. It is considered as a more established approach as an alternative to contrastive analysis. The approach influenced by behaviorism sees that the delimitation of L2 structures obstruct learning process as a result of the differences existing between the structures of L1 and the ones of L2, which results in L1 negative transfer. However, for EA, errors are not only due to the transfer of the learner's L1. They could be fully described in terms of the TL, without the need to refer to the learner's L1. This means that EA deals with the learner's performance in terms of the cognitive processes he uses to decode the input he encounters when learning L2.

For (Ellis, 2008), EA provides a methodology for investigating learner's language and thus it constitutes an appropriate starting point for the study of his/her L2 acquisition. EA claims that a careful study of errors committed by L2 learners would provide factual empirical data rather than theoretical speculation for developing a syllabus or a model of SLA (Schachter & Celce-Murcia¹³).

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¹³ as cited in Robinet & Schachter 1986

Another concept of EA is given by Brown (2000) who defines the term as the process of observing, analyzing, and classifying the deviations of the rules of the L2 and then revealing the systems operated by the learner. It seems that this concept is the same as the one proposed by Crystal (1992), i.e., EA is a technique for identifying, classifying and systematically interpreting the unacceptable forms produced by someone learning an FL, using any of the principles and procedures provided by linguistics. The definitions above clarify that EA is an activity to identify, classify, interpret or describe the errors made by someone in speaking or in writing and it is carried out to obtain information on common difficulties faced by someone in speaking or in writing a language sentences.

Formerly, not much focus was put on the role of learners' errors in L2 learning. Linguists used to observe them, divide them into categories, and see which ones were common and which were not, i.e., the main focus of the analyst was on the actual error, that is the 'product'. Yet, now the shift has gone from the product to the 'process' behind it. In EA, many studies (Corder, 1967, 1974; Dulay & Burt, 1974; Larsen Freeman, 1975, Ellis, 2008) show that the main investigation has been on why the learner makes errors. This has led to changes in attitudes towards errors which should not, any more, be seen as something to be avoided, but something that needs to be analyzed with great care.

Although languages of the world may have universal features, they are different from each other. That is to say that each language has its own semantic, grammar, morphology, phonetics, phonology and syntax. As mentioned earlier, we hypothesized that EFL students in the Department of Letters and Foreign Languages, the English Section, at TMUB produce some English sounds in an Arabic-accented way; besides, it was believed that the students' L2, French, will also have a certain effect on their pronunciation. Since the sound system of English was discussed in detail in chapter one, the researcher will provide an overview about the sound system of Arabic and French and compare them to English knowing that our respondents are bilingual speakers whose linguistic repertoire embodies Arabic and French languages (at varying degrees) in addition to their status as EFL learners.

2.5. The Arabic Sound System

Arabic is one of the Semitic languages. Versteegh (2001, p. 10) states:

"Arabic belongs to a group of languages collectively known as the Semitic languages. To this group belong a number of languages in the Middle East, some of them no longer extant. The earliest attested Semitic language is Akkadian, a language spoken in Mesopotamia between 2500 and 600 BCE; from 2000 BCE onwards it was differentiated into Babylonian and Assyrian. As a written language, neo-Babylonian was probably used until the beginning of the Common Era".

Arabic includes the Modern standard Arabic (MSA) that derived from the Holy Quran, Eduacted Spoken Arabic and the spoken Arabic varieties also called Colloquial Arabic that is spoken across the Middle East and North Africa.

2.5.1. Arabic Consonants

Arabic has twenty-eight (28) letters and three (3) notations; nominative, accusative and genitive cases. This gives thirty one (31) sounds. Consonants are found to differ in their place and manner of articulation. The following points will cover the articulation system of the Arabic consonants in terms of the point of articulation and the state of the air stream, i.e. place and manner of articulation.

2.5.1.1. The Place of Articulation

According to Masloh (1980), Arabic consonants are organized based on the place of articulation as follows: (1) Bilabials are produced when the lips come together as in the initials of /baṭah/ duck, and /madrasah/ (school), and they are represented by the symbols /b/, /m/, and /w/; (2) in Arabic there is only one labiodental sound . This is formed with the upper teeth and the lower lip. The sound is available in the initial of /fina`a/ (backyard) and this sound is represented by /f/; (3) Interdental sounds are formed by the tongue between the upper and the lower teeth. They are the initial sounds of / ðalek/ (that), /defr/ (nail), and they are represented by the symbols θ , δ and d; (4) Alveolar sounds are formed with the front part of the tongue on the alveolar ridge. Examples of the alveolar sounds are represented by the symbols /r/, /l/ and/n/; (5) Dental sounds are produced by the tongue tip behind the upper front teeth. They are initial of /taleb/ (student), /domiah/ (doll), and they are represented by the symbols /t/, /t/, /d/, /d/, /s/, /s/, /z/; (6) Palatals are sounds which are pronounced by the front of the tongue and hard palate. They are represented by symbols $/\sqrt{j}$, and $/\sqrt{3}$; (7) Velar sounds are produced with the back of the tongue against the velum. Velars are symbolized by /x/, /,g/, and /k/; (8) Glottals are the sounds produced when the glottis is open and there is no manipulation of the air passing out through the mouth. They are represented by the symbols /h/ and /?/; (9) Pharyngeal sounds are produced with the back of the tongue and the pharynx and they are represented by the symbols/h/, and / \cdot /; (10) finally, there is only one Arabic uvular consonant which is produced by the back of the tongue with the uvula. This sound is represented by the symbol /q/.

2.5.1.2.Manner of Articulation

Sounds in Arabic like the sounds of other natural languages are produced by the organs of speech, which we call place of articulation that give characteristics for every sound (Omar, 1981). However, we may face some sounds which have the same point of articulation. Thus, we can differentiate between them by looking at the state of the air stream, that is, their manner of articulation.

Arabic stop consonants are the result of a complete closure at some point in the mouth. The pressure builds up behind the closure, and then the air is suddenly released. /b/ is a bilabial stop, /t/, /t/, and /d/ are dental stops, // is a uvular stop, /k/ is a velar stop. In fact, if you combine a brief stopping of the air stream with an obstructed release, which causes some friction, the resulting sound will be the palatal affricate /ʒ/. Moreover, producing fricative sounds involves blocking the air stream and having the air pushed through the narrow opening. In Arabic, we find the labiodental fricative /f/, the interdental fricatives/ θ /, / θ / and/ θ /, the dental fricative /s/, /s/, /z/; the palatal fricative /ʃ/, the velar fricatives / ϕ /, / ϕ /, the pharyngeal fricative / ϕ /, the glottal fricatives /x/, / ϕ / (Abu-Chacra, 2007).

Most Arabic consonants are produced orally with the velum raised. However, when the velum is lowered and the air stream is allowed to follow out through the nose, the resultant sound is called a nasal sound. Arabic nasal sounds are the bilabial nasal /m/ and the alveolar nasal /n/. Along with the above mentioned manners of articulation, there are other three (3) manners in Arabic: the Lateral /l/ sound which is made by the front of the tongue pressing against the center of the alveolar ridge without contact with the sides of the hard palate, so the air stream escapes freely on the sides of the tongue; Trill which involves intermittent closure. These sounds can be produced by tapping the tongue repeatedly against appoint of contact. In Arabic we have the alveolar trill/r/; and glides which are made without closure in the mouth. In Arabic, we have two (2) glides; the bilabial /w/, and the palatal glide /j/ (Masloh, 1980).

2.5.2. Arabic Vowels

Arabic, as a Semitic language, has a limited vocalic system but a rich consonantal system. Arabic is a six-vowel (6) system, consisting of /i, u, a/ and their corresponding long vowels /i: , u:, a:/. Some claim that the vowel inventory of MSA does not contain any diphthongs. However, others argue that there exist two diphthongs /aw, ay/, raising the total number of vowels to eight (Abu-Chacra, 2007). Vowel length is phonemic in Arabic whereby duration is the primary acoustic correlate for the contrast among certain vowel pairs.

There are two types of vowels in the Arabic language: pure vowels and also called (monophthong) while the other type is named diphthongs. Monophthong are six (6) vowels: three (3) long (a:, i:, u:) and the other three (3) are short (a, i, u), they are also called diacritics. While, diphthongs are two: /aj/ and /aw/. According to Fatihi¹⁴:

The Arabic vowels are categorized into short and long vowels. Short vowels are further divided into: fatha: kasra and damma. Fatha is indicated by a small diagonal stroke above the preceding consonantal speech sound. Kasra is the similar stroke below the consonantal speech sound. Damma is like a miniature 'waw' above the preceding consonantal speech sound e.g. short vowels "i, u, a" and long vowels 'i:, u:, a:.

As for /i, i:, u, u:/, two (2) are long / i: , u:/ and two (2) are short /i , u/. Javed (2013, p. 189) clarifies that "Across North Africa and West Asia, /i/ may have other values: [II] or [i] and /u/ may have other values: [u] Sometimes with one value for each vowel in both short and long lengths or two different values for each short and long lengths." Using long vowels in the place of the other short ones can cause a big problem and threat intelligibility because vowel sound duration is phonemic in Arabic language 15. So, learners of Arabic should take care with the vowels in the words they pronounce whether they are short or long in order not to be misunderstood.

It is important to mention that despite their few numbers, vowels are essential in Arabic language because Arabs could not pronounce two consonants followed each other without breaking them with a vowel. This is because there is a rule in Arabic sound system that Arabs never start with sounds with pausing diacritic and never stop their speech on a vowel.

¹⁴ (cited in Ashour, 2017, pp. 134-5)

^{15 (}as cited in Hago & Khan, 2015)

2.5.3. The English Versus the Arabic Sound System

While comparing the sound system of two languages, the basic elements of such a comparison are consonants and vowels. The latter are segments that form the core of syllables. Languages of the world have different vowel systems, some with as few as three (3) vowels, and others with up to twelve (12) vowels. Every language has a different number of vowels but typical vowel segments that exist in almost all known languages are (/i/, /u/, /a/) (Javed, 2013).

In Arabic, for example, the words /ʃarika/ (company) and /ʃari:ka/ (female partner) which differ only in the length of the middle vowel, have different meanings (company and female partner, respectively). Although it is often difficult for non-native speakers of languages with phonemic vowel length to learn to use these contrasts phonemically, native speakers have a stable ability to categorize vowels based on length alone. Thus, the vowels of Arabic and English may share many similarities but they have distinct characteristics, and it is clear that each language relies on a different primary acoustic cue in discriminating between its vowels.

Moreover, based on a work done by Saadah (2011), the English vowel system is classified as 'a centripetal system' in which vowels are more at the center of the acoustic space as opposed to languages such as Russian and Spanish, where vowels are located at the periphery of the acoustic space. On the other hand, Arabic has a vowel system that falls in between the two types of systems. As a result, these differences between English and Arabic show that there seem to be no simple one-to-one mapping between the vowels of English and Arabic. Whereas English native speakers rely predominantly on vowel quality in making judgments about vowel types and where quantity is used to enhance the quality difference of the tense/lax pairs, Arabic native speakers use both quality and quantity as main acoustic cues when categorizing vowels.

Concerning the consonants, there are some similarities and differences between English and Arabic systems, both have eighteen (18) common consonants: /b/, /t/, /d/, /k/, /f/, /g/, /g/

two (2) nasals (/m/ and /n/), one (1) lateral (/l/), one (1) trill (/ɪ/), and two (2) semi-vowels (/w/ and /j/) (Watson as cited in Omar, 1981).

Also, there are "some English consonants that do not exist in the Arabic sound system like /p/, /tʃ/, /dʒ/, /ʃ/, /ŋ/, and /v/. El Zarka (2013) shows that Arabs pronounce /v/ as /f/ as in: "It is a fery nice fillage" because Arabic does not exhibit the phoneme /v/ and also the case of /p/, Arabs compensate it with the voiceless /b/. Moreover, although /t/ and /k/ are consonants, which seem to be similar to those Arabic consonants /t/ or /k/, they are not identical; they are different in manner and in place of articulation" (Hago & Khan, 2015).

Hago and Khan (2015) gave an example for this case. They explained that English /t/ is an alveolar and aspirated in word initial position followed by a vowel like tea /ti:/ whereas the Arabic /t/ is dental and non-aspirated in the same word position like in /ti:n/ (fig). Another example they provided related to the phoneme /r/ despite its existence in both languages: while Arabic /r/ is an alveolar trill, the English /r/ is a frictionless retroflex continuant). Hago and Khan (ibid) also clarified that although /n/ and /ŋ/ exist in Arabic, /ŋ/ never occur at the end of a word in Arabic, Arabic speakers have a tendency to add /k/ to the end of words ending in /ŋ/, such as [baɪɪŋk] for (buying) or [sɪŋk] for (sing).

2.6. The French Sound System

The French alphabet includes twenty six (26) letters. These letters are made up of six (6) vowels and twenty (20) consonants. However, one should also be aware of the various accented letters present in the French alphabet.

2.6.1. French Consonants

French consonantal system is different from the French vowel system in one important aspect. The consonantal system of French has remained stable for a long period of time during which the vowel system has undergone many changes. Consequently, the French consonantal system is relatively less complex. However, like its vocalic counterpart most of the consonants are anterior (13 out of 18) (Casagrande, 1984).

2.6.1.1.Place of Articulation

French has two labial plosives and one labial nasal. These are produced with light contact with the upper and lower lips. The voiced variety is produced with vibration of vocal cords; the French labials are /p, b, m/. For dentals, French has two dental plosives: voiced and voiceless. These are produced with light touch of the frontal part of the tongue against the upper teeth. Besides French also has a dental nasal and dental lateral /d, l, n, t/. The alveolar fricatives are produced by the proximity of teeth and front part of the tongue. The two alveolar fricatives in French are /s/ and /z/.

Like the other plosives, French has two velar plosives — voiced and unvoiced. These are produced by the blockage created by the back of the tongue and the velum Besides French has one velar nasal /k, g, ng, r/. The palatal fricatives used in French are /ʃ/ and /ʒ/. Like all other consonants the palatal consonants too have one voiced and one unvoiced variety. They are pronounced with the front of the tongue approaching towards the palate. The dental nasal /n/ is pronounced with the light touch of the tongue against the upper teeth. The distribution of this nasal consonant is similar to the bilabial nasal, i.e., in non-initial places, before a consonant it tends to be dropped leaving the preceding vowel nasalized. Finally, the palatal nasal, produced with the front of the tongue and the palate, is represented in French by the group /gn/ (Nitze & Wilkins, 1913).

2.6.1.2. Manner of Articulation

Based on points of articulation, French plosives are of three types: labial, dental and velar. Each of these categories have voiced and voiceless variety /b, d, g, k, p, t/. The fricatives are produced with audible friction caused by proximity of two articulators. In French there are three pairs of fricatives; of them, four are sibilants, two labio-dentals. Of the sibilants two are alveolar and two palatals /s, z, f, v, r, t \int , \int . So from the point of view of point of articulation there are three types of fricatives, each having one voiced and one unvoiced variety.

Labio-dentals are produced with the close proximity of the upper teeth and the lower lips. The two labio-dental fricatives in French are /f/ and /v/. From the point of view of the manner of articulation, the nasals are similar to that of plosives. But only the velum is lowered, so the air stream passes through the mouth as well as the nasal passage creating a resonance in the process (Markey, 1998).

French has four nasal consonants /n, m, gn, ng/ having four types of points of articulation: bilabial, dental, palatal and velar. The nasal consonants in French show a few common characteristics in their distribution. In some word positions they are not pronounced, instead the preceding vowel is nasalized. These positions are also dealt with

in the section of the distributions of the vowels. For liquids, the two different- kinds of consonants that are placed under this head are the uvular /r/ and the lateral /1/. Lateral: French has only one dental lateral, which is produced with the front of the tongue against the teeth. The air is constricted in the cavity by this closure and passes laterally to the sides of the tongue (Nitze & Wilkins, 1913).

In addition, French has three phonemes with vowel-like phonetic quality but consonant-like functions in the language. The standard symbols of transcription for them in French are /j/, /w/ and /q/. /j/ is the semivocalic counterpart of the high vowel /i/; /w/ has the phonetic qualities of the high vowel /u/; and / q / is the counterpart of the secondary vowel /y/. From the phonetic point of view these phonemes differ from their vocalic counterpart only in degree of constriction which is slightly higher in the semi vowels. They are alternatively called semi consonants keeping in mind their function as a consonant in the syllable. They are found only in the environment of other vowels such as: hier /je:r/ (yesterday), oui /wi/ (yes), and pluie /plwi/ (rain) (Markey, 1998).

2.6.2. French Vowels

Standard French contrasts up to thirteen (13) oral vowels and up to four (4) nasal vowels. In French, /i, u/ are consistently close, but the exact height of /y/ is somewhat debatable as it has been variously described as close [y] and near-close [y]. Although the mid vowels contrast in certain environments, there is limited distributional overlap so they often appear in complementary distribution. Generally, close-mid vowels (/e, ø, o/) are found in open syllables, and open-mid vowels (/ ϵ , œ, ɔ/) are found in closed syllables. [a:lɛ] (was going), vs. [a:le] (gone); likewise, open-mid /ɔ/ and /œ/ contrast with close-mid /o/ and /ø/ mostly in closed monosyllables, such as these: [ʒœn] (young), vs. [ʒøn] (fast, verb) (Markey, 1998)

The phonemic contrast between front /a/ and back /a/ is sometimes not maintained in Standard French, which leads some researchers to reject the idea of two distinct phonemes. The difference in quality is often reinforced by a difference in length (but the difference is contrastive in final closed syllables). The exact distribution of the two vowels varies greatly from speaker to speaker. Back /a/ is much rarer in unstressed syllables, but it can be encountered in some common words: [ʃa.to] (castle), [pa.se] (past) (Koutsoudas & Koutsoudas, 1962).

2.6.3. The English Versus the French Sound System

French is an Indo-European language and part of the Romance family, along with Spanish and Italian. The English language was strongly influenced by the introduction of French at the time of the Norman invasion of Britain in the 11th century. As a result, the two languages share some similarities, most notably the same alphabets, some grammatical features and contain many cognates.

The French alphabet contains the same vowels as the English alphabet but the sound of each of these vowels is different than their English counterparts (Koutsoudas and Koutsoudas, *ibid*). French has the same palato-alveolar fricatives as English, so a French speaker should not have trouble pronouncing the /ʃ/ and /ʒ/ sounds in English, as in the words 'sheep' and 'leisure' (Markey, 1998).

Koutsoudas and Koutsoudas (*ibid*, p. 54) point out; "the more closely associated a foreign sound is with the student's native phoneme, the harder it will be for the student not to substitute the native phoneme for the foreign sound." For example, French has a /ʁ/ sound while English has a /r/ sound. These two sounds are written in the same way as "r" in prose, but are pronounced differently and according to Koutsoudas and Koutsoudas (ibid), French speakers would want to substitute their /ʁ/ sound for the English /r/ sound after seeing a written word such as 'red'. French does not have the affricates / tʃ/ and /dʒ/that English has.

Ladefoged (1993), in his study about the difference between French and English phonological rules¹⁶, found that there are three English rules that may cause pronunciation problems for French speakers. The first rule is that voiceless stops /p, t, k/in English are aspirated in word initial position and syllable initially before a stressed vowel. Based on the aspiration rule, voiceless stops become aspirated at the beginning of a word or stressed syllable. In the same positions, the French counterparts are unaspirated.

The second rule looks at the /l/ sound. The English /l/ has two allophones. The first is before front vowels and is produced by a distinct contact of the tip of the tongue against the alveolar ridge. This allophone occurs in such words as 'really' and 'believe'. The second /l/ allophone is velarized and occurs everywhere else. Velarization Rule means that /l/ becomes velarized everywhere except before front vowels. According to Ladefoged (*ibid*), velarization is a secondary articulation in which the back of the tongue

¹⁶ Phonological rules are the descriptions of the systems and patterns of sounds that occur in a language.

is raised toward the soft palate such as 'ball'. French has only a single front allophone for /l/ which is always produced with energetic contact of the tip of the tongue with the inner side of the upper front teeth or the alveolar ridge. The French allophone is like the first English allophone described.

The third and final rule also deals with the voiceless stops /p, t, k/. This is an optional rule in English so not all native speakers regularly follow this rule. In English, voiceless stops are normally unreleased for some speakers in final position whereas in French, there is a clearly audible release phase. Optional final consonant release means that when a voiceless stop is in final position it is unreleased. Therefore, in words such as 'help' a native English speaker may not release the /p/, but a native French speaker may pronounce the final /p/ with a clearly audible release. Similarly, with words such as 'think' and 'that' may sound different when pronounced by a native English speaker who does not release stops in final position as opposed to a native French speaker who does release stops in final position. These rules are not the only phonological differences between English and French. However, they are representative of the kinds of problems that can arise when speakers of different languages pronounce the same sounds in different ways depending on the phoneme's location (Markey, 1998).

As mentioned in the general introduction, the main focus in this thesis is on the production of English plosives by EFL students at TMUB, more specifically, in initial position focusing on VOT value and measuring the vowel lengthening effect of plosives in final position. As a teacher, the researcher has noticed peculiar phonetic and phonological features in her learners' spoken English. Before we analyze the participants' production/recorded structures, it is better to provide a description of the English plosives and the problems that Arab speakers in general face when producing these sounds to see whether the Algerian students face the same problems that are encountered by other Arab speakers learning English.

2.7. A Descriptive Analysis of English Plosives

A plosive sound is articulated with a stricture of complete closure and sudden release (Roach, 2002). There are three stages in the production of a plosive consonant. They are (1) the closure or closing stage—the two articulators come together and make a firm contact with each other; (2) the hold or compression stage—the two articulators

remain in contact for some time; and (3) the released or explosion stage—the two articulators separate and the air escapes with a slight explosive sound.

In these three stages happens what is called 'a velic closure' which means that the soft palate is raised and the nasal passage of air is shut off completely (Kelly, 2000). During the articulation of a voiced plosive, the vocal cords vibrate in all the three stages. Besides, during the articulation of a voiceless plosive, the vocal cords are wide apart in stages (1) and (2). If the vocal cords start vibrating simultaneously with stage (3), the plosive is said to be unaspirated; however, if the vocal cords start vibrating a little after stage (3) is completed, the plosive is said to be aspirated (Ladefoged, 2000).

In fact, the English consonant inventory includes the voiced and voiceless plosives /p, b, t, d, k, g/ in contrastive distribution. English also permits the aspirated voiceless plosives /ph, th, kh /, but these are allophones of the voiceless plosives /p, t, k/. The CVC syllable structure is very common in English, and voiced and voiceless plosives are often realized as codas (Hammond, 1999). English also contains the feature of vowel duration as a cue to plosive coda voicing. Vowels appearing before voiced plosive codas have characteristically longer durations than vowels before voiceless plosive codas. A study performed by Raphael in 1971, as well as many studies since, demonstrated that native English speakers discriminate voiced and voiceless plosives consistently with vowel duration regardless of the voicing of the closure itself (Raphael, 1971).

2.7.1. Bilabial Plosives /p/ and /b/

During the articulation of the principal allophones of /p/ and /b/, the soft palate is raised and therefore the nasal passage of air is closed completely. At the same time, the two lips are in firm contact with each other and so the oral passage of air is also closed completely (Roach, 2002; Ladefoged, 2000; Kelly, 2000). Lung air is compressed behind these closures, during each stage the vocal cords are held wide apart for /b/ according to its situation in the utterance. When the two lips are separated suddenly, the air escapes with an explosive sound.

According to Kelly (2000), there are four allophones of /p/: (a) /p/ is a heavily aspirated [ph] (that is, it is released with a strong puff of breath) when it occurs initially in a stressed syllable as in pen [phen] and please [phli:z]; (b) /p/ is unaspirated [p] when it occurs in an unaccented syllable and in words in which it is preceded by [s] as in potato [pə'ther'təʊ] and stamp [stæmp]; (c) /p/ is nasally exploded [pN] (that is, the oral closure is

retained and the velum is lowered so that the air escapes through the nose instead of through the mouth) when it is immediately followed by its homorganic nasal /m/ either within a word or at word-boundaries as in topmost ['thopNmoust]; and (d) /p/ is inaudibly released [\vec{p}] when it occurs word-finally or when it is followed by another plosive or affricate as in cap [khæ \vec{p}], captain ['khæ \vec{p} tin] and capture ['khæ \vec{p} tfə](Singh, 2009).

The bilabial plosive /b/, on the other hand, has five allophones: (a) /b/ is partially devoiced [b] (that is, the vocal cords may not vibrate during all the three phases of its articulation; they may start vibrating only during phase (3) when it occurs initially, finally and when it is followed by a voiceless sound as in bill [bɪl], cab [kʰæb], obstruct [əbsˈtʰrʌk t]; (b) /b/ is nasally exploded [bʰ] when it is immediately followed by its homorganic nasal /m/, both within a word at word-boundaries as in submit [səbʰˈmɪt]; (c) /b/ is a fully voiced [b] when it is intervocalic and when it is followed by a voiced sound as in above [əˈbʌv]; (d) /b/ is inaudibly released [b] when it is word-final and when it is followed by another plosive or affricate as in object (v.) [əb ˈdʒekt] (Roach, 2002).

2.7.2. Alveolar Plosives /t/ and /d/

During the articulation of the main allophones of /t/ and /d/, the soft palate is raised and therefore the nasal passage of air is shut off completely. The tip or blade of the tongue makes a firm contact with the teeth-ridge and the oral passage is also closed. Lung air is compressed behind these closures during which stage the vocal cords are wide apart for /t/, but may vibrate for all or part of the compressed stage for /d/ according to its situation in the utterance (Ladefoged, 2000).

There are seven allophones of /t/ according to Roach (2000) and Kelly (2000): (a) /t/ is a heavily aspirated [th] when it occurs initially in a stressed syllable as in time [tham]; (b) /t/ is unaspirated [t] when it occurs in an unaccented syllable and in words preceded by [s] as in eight ['eit] and stop [stop]; (c) /t/ is a nasally exploded [the when it is immediately followed by its homorganic nasal /n/ as in cotton ['khothn]; (d) /t/ is a laterally exploded [the compressed air escapes along the sides of the tongue are lowered; the compressed air escapes along the sides of the tongue) when it is immediately followed by its homorganic lateral /l/ as in bottle [bothe than the two sides of the tongue) when it is immediately followed by its homorganic lateral /l/ as in bottle [bothe than the two sides of the tongue) when it is immediately followed by its homorganic lateral /l/ as in bottle [bothe than the two sides of the tongue) when it is followed by another plosive or affricate as in cat [khæth]; (f) /t/ is a dental plosive [the time than the two sides of the tongue) when it is followed by another plosive or affricate as in cat [khæthhæth]; (f) /t/ is a dental plosive [the time than the two sides of the tongue) when it is followed by /θ/ as

in eighth ['eit θ]; and (g) /t/ is a post-alveolar plosive [t] if the following sound is /r/ as in try [thrai].

The allophones of /d / are seven too (Kelly, 2000): (a) /d/ is a partially devoiced [d] in the speech of some people when it occurs initially and finally as in door [d σ :]; (b) /d / is a fully voiced [d] when it occurs in the neighborhood of voiced sounds as in under ['And σ] and leader ['li:d σ]; (c) /d/ is a nasally exploded [d σ] when it is immediately followed by its homorganic nasal /n/ as in sudden ['sAd σ]. (d) /d/ is a laterally exploded [d σ] when it is immediately followed by /l/ as in cuddle ['khAdLl]. (e) /d/ is an inaudibly released [d] when it occurs word-finally and when it is followed by another plosive or affricate as in bad [bæd σ]; (f) /d/ is a dental plosive [d] when it is followed by / σ / as in width [wid σ]; and (e) /d/ is a post-alveolar [d] when the following sound is /r/ as in dry [drai].

2.7.3. The Velar Plosives /k/ and /g/

During the articulation of the main allophones of /k/ and /g/, the soft palate is raised and therefore the nasal passage is shut completely. The back of the tongue makes a firm contact with the soft palate and the oral passage is also closed. (Ladefoged, 2000). The vocal cords are wide apart during the articulation of /k/, and they vibrate during the articulation of /g/ (Roach, 2002). The allophones of /k/ are five (Al-Hattami, 2000): (a) /k/ is a heavily aspirated [kh] when it occurs initially in an accented syllable as in king [khin]; (b) /k/ is unaspirated [k] when it occurs in an unaccented syllable and when it is preceded by /s/ in words as in sky [skai]; (c) /k/ is articulated further forward in the mouth (between palatal and velar regions) [k+] when it is followed by a front vowel as in keen [kh+i:n] and scheme [sk+i:m]; (d) /k/ is articulated further back in the mouth (in the post-velar region of the roof of the mouth) [k-] when it is followed by a back vowel as in school [sk-u:t]; and (e) /k/ is an inaudibly released [k] when it is word-final and when it is followed by another plosive or affricate as in pick [phik], and active ['æktīv].

According to Al-Hattami (2000), for the other velar plosive /g/, there are five allophones: (a) /g/ is a partially devoiced [g] in the speech of some people when it occurs initially and finally as in good [god] and egg [eg]; (b) /g/ is a fully voiced [g] when it occurs in the neighborhood of voiced sounds as in beggar ['begə]; (c) /g/ is articulated further forward in the mouth [g+] when it is followed by a front vowel as in geese [g+i:s]; (d) /g/ is articulated further backward in the mouth [g-] (in the post-alveolar region) when

it is followed by a back vowel as in goose [g-u:s]; and (e) /g/ is an in audibly released [g] when it is word-final or followed by another plosive or affricate as in bag [bæg].

2.8. Some Linguistic Barriers to EFL Learning

In learning a new language, a student will always face problems since there will always be similarities and differences between the NL and the TL (Lado, 1963). Most of the problems faced by students are in the matter of grammar or speech sounds. Non-native speakers of English encounter endless difficulties on their mission to acquire an L2. Some of these difficulties are phonological, syntactic, lexical, social, attitudinal and communicative. A New York corporation discovered that a communication difficulty between native and non-native speakers of English was limiting the company's efficiency (Mettler, 1989).

Differences between languages can cause difficulties in acquiring an L2. Many differences appear when cross-comparing two languages. For example, English have some sounds that are similar to Arabic language sounds, but there are other sounds that are totally different from Arabic sound system, as mentioned in chapter two, which make problems to Arab students. Arab students who learn English pronunciation may have a lot of problem.

Another problem is that there is a negative transfer from the L1 to the TL. It is a common belief that the learner's L1 (which he learns in his infancy and therefore is well established in his mind) superimposes itself on the language he acquires later on in life when he attempts to learn an L2. The foreign accents in the TL speech of learners are the clearest support for this belief. When an Arab speaks English, his English sounds like Arabic. The learning of the new set of structures of any FL after the acquisition of the set of habits of the L1 (mostly the mother tongue) is, therefore, bound to present problems, owing to the belief that the role of the L1 in SLA is a negative one. That is, the influence of the L1 gets in the way or interferes with the learning of the TL, in such a way that features of the L1 are transferred into the TL, because the transfer, as Lado (1963) argues, is usually in one direction, from the NL to the FL or from L1 to L2; this leads to what Eckman (1977) called "The Markedness Differential Hypothesis" (MDH).

It is well known that Eckman (ibid) proposed the MDH as justification for areas of difficulties in foreign language learning. He proposed his hypothesis on the phonological theory of markedness. The common sounds in many languages are considered unmarked,

while the less common sounds are considered marked. Eckman (1977) predicted that for L2 learners, the acquisition of an unmarked sound like unaspirated stops would be easier than the aspirated stops which are considered marked (Fellbaum, 1996). The MDH has gathered a wide range of audiences, some of whom agree with it and think it is the cause of language errors, while others think it cannot be the sole answer to identify sources of errors. The following part tackles pronunciation errors or the difficulties that Arab learners of English face.

2.9. Arabic-Accented English and the Arab Learners' Difficulties for English Pronunciation

An interest in the Arabic language and Arabic phonetics was established since the 7th century CE. Al-Khalil and Sibawayh were the authors of the two first and far most important books in Arabic grammar, phonology and phonetics (Rosenhouse, 2007). Arabic in the Arab world, like many other languages, suffers from an existing situation of the separation of the Al3amia or regional dialects and Fusha or MSA (Scott & Tucker, 1974). This separation is known as diglossia which was discussed in chapter three. Grodon (2002) reported that Ethnologue includes thirty-five (35) varieties of Arabic on its website. These versions of Arabic are scattered among twenty-one (21) countries. These varieties of Arabic are not restricted to Arab countries, but they transcend borders to other nations including Afghanistan, Cyprus, Malta and Uzbekistan.

Learners of English face countless difficulties that hinder their learning process. Arab learners are no exception. Although Arabs in general share some pronunciation errors, there are errors that characterize some Arab nationalities more than others. Messiha (1985) clarified that among the pronunciation problems that Egyptian Arabic learners face are $p/\sqrt{\theta/\pi}$, v/π and these sounds were represented as follows [b], [s], [f] respectively. This also corresponds with Val Barros' (2003) results with her Egyptian subjects. Messiha (1985) also pointed out that some Arab speakers do not share the same difficulties with Egyptian speakers regarding the interdental fricatives.

Tushyeh (1996) also reported errors caused by differences between the sound systems such as the substitution of the sound /b/ for the letter 'p' as in [bibəl] for 'people'. She claimed that the Arabic sound system does not include a voiceless bilabial plosive /p/, but only a voiced bilabial plosive /b/. It is important to highlight the difficulties in

pronunciation that are specific to Arabic speakers and to not assume they will make the same errors as other English learners from other native languages.

Altaha (1995) carried out a research study, which investigates the problems of Saudi Arabian students learning English and learning pronunciation. The participants in his study started learning English at age thirteen (13) and never left their native country to acquire English. Altaha collected the data by recording and analyzing the spoken English of the participants in different conditions and situations. His participants had problems with some pairs of consonant sounds (i.e. /tʃ/ and /ʃ/ as in 'chair' and 'share'; /v/ and /f/ as in 'van' and 'fan'; /p/ and /b/ as in 'pat' and 'bat').

Kharma and Hajjaj (1989) wrote a book attempting to identify problems faced by Arab learners of English. The authors identified some consonants (i.e. /p/, /v/, /n/, $/\theta/$, $/\delta/$, /r/, /l/) as problematic for Arabs to pronounce. Moreover, Avery and Ehrlich (1992) wrote a book about how to teach American English pronunciation to selected groups, and the difficulties listed regarding English consonants for Arabic speakers' pronunciation were $/\theta/$, $/\delta/$, /t, /n/, /d, and consonant clusters. However, the difficulties listed were generalized to Arabic learners of all learning levels.

Val Barros (2003) investigated in her study the difficulties of pronunciation in the consonant system produced by Arabic speakers when learning English. According to Val Barros (ibid), Arabic has emphatic consonants, and two of the English consonants, /p/ and /v/ are not present in the MSA inventory of phonemes. Other consonants (i.e. /n/, /r/, /d/) although present in both inventories, may have a different phonetic realization (i.e. while Arabic /r/ is an alveolar trill, the English /r/ is a frictionless retroflex continuant). According to Tushyeh (*ibid*), some of the pronunciation problems may be attributed to the learners' misconception that English consonant sounds have equivalents in Arabic. This misconception leads them to substitute the assumed similar Arabic consonant sounds for English ones.

Yost (1959) noted that Syrian and Lebanese learners of English often have difficulty distinguishing between certain sounds like /s/ and /t/. In addition, Yost further explained the absence of some English phonemes in Arabic which were substituted by phonemes from the native language as in the following: /p/ became /b/, /g/ was /k/, / tʃ / had no Arabic equivalent but it was not difficult for educated people to pronounce, /v/ also caused little trouble and that probably was due to the vocalization of /f/ as in the Arabic word mustashfa.

Thus, each L1 speaker of a language produces some errors that are different from another L1 speaker of another native language. Scott and Tucker (1974) proposed that the interference in spoken English by Arab learners is from colloquial Arabic (CA). As mentioned above, certain speakers from Arabic dialects produce different errors than speakers of other dialects. The present study will look into the difficulties of pronunciation of Algerian EFL students, basically Bechari students; more specifically, focusing on certain phonemes in particular English plosives.

2.10. Conclusion

In this chapter, some theoretical concepts in foreign language learning are presented so as to shed light on the notion of 'error'. These linguistic approaches are CAH, and EA. CAH covers different parts of language: phonology, morphology and syntax. Some examples of contrast are dealt with to demonstrate the differences that may exist between two or more languages. EA is defined as a technique for identifying, classifying, and systematically interpreting the unacceptable form produced by the learner of an FL, using any of the principles and procedures provided by linguistics.

Errors in foreign language learning, especially in English are the cases which are difficult enough to avoid. Many aspects of language lead learners to commit errors. Some of these aspects, discussed in this chapter, are interference, and overgeneralization. These strategies, according to different linguists, have a negative influence on L2. Thus, and for a better understanding of the process of FL acquisition, CAH and EA approaches are seen as suitable means for identifying and determining the kind of incident, nature, cause, and consequence of these errors so as to seek the possible remedial measures necessary to improve L2 learning. The following chapter will deal with the sociolinguistic situations in Algeria focusing on the languages used in Algeria as well as its educational system. It will also shed light on Bechar speech community and the use of English in this community.

Chapter III

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Chapter Three

The Sociolinguistic Situation in Algeria

3.1. Introduction

The Sociolinguistic research has provided a significant development in recent decades; it has attended more definite descriptions and a more realistic analysis of language in its social context. It studies language within society and the aspects that result from social context of language such as: bilingualism, multilingualism, diglossia, borrowing; code-switching and code-mixing. Such research investigates the influence of various social factors on the speaker's linguistic behaviour and the importance of synchronic variation in actual speech interaction.

In this chapter, it is attempted to draw a linguistic picture of the Algerian speech communities which displays a certain degree of multilingualism: Arabic, Tamazight, and French, though colloquial. This chapter also includes a study of the main sociolinguistic phenomena that take place in Algeria like diglossia and code switching and gives an overview about the status of English in Algeria and its educational system in addition to an overview about the sociolinguistic situation in Bechar speech community.

3.2. Languages in Algeria

The historical background of Algeria has a direct effect on its linguistic situation. The co-existence of Tamazight which is spoken in many parts of Algeria, the Arabic language which was brought by the Arab conquest, and the French language that intervened because of the French colonization, characterize the language repertoire of Algeria.

The sociolinguistic situation in Algeria is particular and complex. Each language or variety is linked to its social, cultural and political reality. Language is a great means of communication and the vehicle of civilization. In other words, it is the image of the

society which reflects its identity helps its economic and technological environment.

Each country has its own policies and planning for its own language and also for other languages with which the population may be in contact. In most countries, there is at least a language that is acquired from childhood, and another one that is learned at school.

Algeria, like all the other Northwest African countries, was conquered and inhabited by people from various identities and cultures, and this has had certainly a great impact on its linguistic situation. Based on the recorded history which goes back to the 15th century B.C, it was stated that the Berbers are the first settlers of Northwest Africa including Algeria (Versteegh, 2001). Algeria, in particular, was conquered in the late of the 7th century and early 8th century (642AD) by the Arabs (Benali, 2000). Arabic, the language brought by Islam, is regarded as the largest language in the Semitic family. With the coming of Islam, it appeared in the form of Classical Arabic¹⁷ (CA) and then it has developed into Modern Standard Arabic (MSA).

Algeria witnessed the longest period of French presence and harbored the largest number of French colons. The country was a French province from 1830, and independence was fought for in a bitter war that ended in 1962 (Versteegh, *ibid*). The situation of Arabic in French Algeria was precarious. There was constant pressure to prohibit instruction in CA, culminating in the edict of 1936 that declared Arabic a foreign language. Whatever education existed in a language other than French was in dialectal Arabic or in Berber.

3.2.1. Arabic

Concerning the Arabic language, it is known that it usually comes in two forms: Standard Arabic i.e. CA/MSA, and dialectal Arabic. CA is the language of the Quran; it is regarded as the formal version that was used in the Arabian Peninsula, and the language of royal and princely courts throughout the Islamic history. Similarly, MSA is the modern counterpart of CA. It is now the official language of all the Arab countries and the one used in educational spheres (Versteegh, 2001).

The main distinction between CA and MSA exists in vocabulary. CA reflects the needs of older styles while MSA reflects the needs of contemporary expression (Benali, 2000). The latter also includes terms of modern phenomena and loan words taken from

¹⁷ Classical Arabic started to be spoken in Hijaz in the north-east of Saudi Arabia and it is the language of the Glorious Qur'an. It is not the native language of any Arab county, but its role is to reflect the Muslim identity.

many Arabic dialects and other languages mainly English so as to fit the modern life and the technological and scientific requirements for its users. Nevertheless, any word, meaning, structure or any other linguistic element which is found in CA is still accepted in MSA both in the spoken and the written forms.

MSA is, therefore, the language used in formal, official and educational circumstances in all the Arab countries. Each Arab country or region has its own dialect of spoken Arabic. These dialects are divided into two major groups: Western Arabic which involves the dialects spoken in Morocco, Algeria, Tunisia, and Libya; and the Eastern variety which is again subdivided into Egyptian, Levantine, and Gulf Arabic (Mouili, 2012). These Arabic dialects differ considerably from each other and from MSA too. Those differences can be noticed at all levels such as pronunciation, vocabulary, semantics, phonology, morphology, and syntax. MSA is agreed by both the government and people of those countries as a sign of unification and historical levels.

In fact, the mid-way between MSA and AA is called "Educated Spoken Arabic" (ESA) (Promadi, 2016). It is a term which seems especially prone to misunderstanding because ESA is also called "Middle Arabic". It can refer not only to the style of Arabic but also to the historical phase from its beginning in the early Islamic period until the eighteenth century (Mitchel, 1986). In order to understand the position of ESA among the Arabic forms, one has to distinguish between ESA and the rest of the Arabic forms. ESA is neither specifically 'fusha' nor '3amiyya' (colloquial), but rather a form that sums up features of fusha and 3amiyya (Promadi, ibid). When people hear this term for the first time, they probably begin to think that ESA may be regarded as form of Arabic used in speaking by educated Arabs. When we talk about "educated Arabs", we mean according to EL-Hassan (1997, p. 114), "those who have been to school and college as well as those whose linguistic behaviour has been appreciably influenced by any social, cultural and professional institution, whether or not the latter group or has undergone any course of formal institution".

Form this point of view, we can note that ESA is not regarded as a form of Arabic used by uneducated Arabs i.e. those who have never been to school or those whose linguistic behaviour has never been influenced by any social, cultural and professional institution; nor by those who live in rural areas or remote villages or those who are illiterate (Promadi, 2016). The importance of education is that it plays a key role in changing the behaviour of individuals and groups whether in formal circles such as schools and colleges or non formal circles such as radio, television, newspaper, etc. When

we talk about spoken language, we do not mean any written forms of language but we are concerned with unscripted speech forms of it. Thus, ESA is not a written form of Arabic which can be found in any printed materials such as books, magazines, newspapers, letters, billboards, etc (Mitchel, 1986).

In addition to MSA and ESA, there are various forms of Arabic which exist in different parts in Algeria; these are regional varieties which carry different accents. Harrat et al. (2016) distinguished three major dialects varieties in Algeria: the eastern variety, the western one and the central one. This linguistic phenomenon is the result of the French colonization of Algeria for 132 years.

Linguistically speaking, AA shares many of the language features of MSA but differs considerably from it. In addition to vocabulary differences between the two, AA drops the case endings of the written language in words like: [baabon] which becomes [bab] (door), [tofaħaton] becomes [təfaħa] (apple). It also ignores the initial article of the standard form {al} in many words such as: [ləbħar] instead of [al baħr] (sea), [lbarəħ] rather than [al bariħa] (yesterday), and [ləktab] instead of [al kitab] (book), etc. (Mouili, 2012).

Phonological variations also appear particularly in the use of some phonemes which differ from one area to another like the variable /q/ which has different variants in the Algerian speech communities such as: [q], [k], [g], and [?] in words like: "heart" [qəlb] in Algiers, [kəlb] in Ghazaouat, [galb] in Bechar, and [?alb] in some parts of Tlemcen (Benrabah 2007, Mouili 2012). It is widely argued that MSA is the medium of all the formal settings like writing, education, government, and media. Similarly, AA cannot only be spoken and used in informal circumstances but also written. This can appear in folk poetry, plays, private letters, spoken media like radio, and even sporadically in written media. An example of this case may be noticed in some articles of newspapers where many dialectal terms are used.

3.2.2. French

The French colonization of Algeria in 1830 was not only a political, social, economic, and linguistic control upon the country but also a strong desire to eliminate its culture. The French imposed a harsh program of acculturation which positioned French as the dominant language on its colonies ignoring the local languages such as Arabic and

Berber (Benmesbah, 2003). Hence, French became the official language of the country while Arabic was the language of academics both in traditional and religious schools.

During the period from 1830 to 1962, education was directed towards the French language while the study of CA declined gradually. After the independence, the Algerian leaders, especially the Nationalists, supported a return to the study of MSA as a way to revive Algeria's cultural roots. Thus, educational reforms were highly programmed by the Algerian government. As a reaction to the French cultural and linguistic domination, policymakers have strongly defended school as a means to liberate the Algerians from the French assimilation. Their aim was to reverse the impact over one hundred and thirty-two years of French domination by reviving Islamic cultural values and establishing Arabic as the national language of Algeria (Benrabah, 2007).

According to Benrabah (*ibid*) although the government adopted a policy of linguistic Arabization of education, the strong position of the French language in Algeria was not deeply affected by this policy. Besides, it is part of the standard school curriculum in all the Algerian schools. Even after the political debate in Algeria in the late 1990s regarding the substitution of French by English in the educational system, the government decided to retain French (Mouili, 2012).

French continues to play the role of a dominant language in business and professional circles. Additionally, it is returning in certain aspects of formal education and researches which are still carried in French, as well as a great part of economic and industrial sectors and press which still use French exclusively (Benmesbah, 2003). Today the linguistic situation in Algeria witnesses the use of multiple codes; CA is still not mastered by all the Algerians, dialectal Arabic cannot be used in writing and the contact with French created a profound linguistic alienation (Benrabah, *ibid*).

3.2.3. Tamazight

The term "Tamazight" is used to refer to northern Berber languages and it etymologically means "the language of the free" or "the language of the noblemen". Berbers are the indigenous people of Northwest Africa since about 3000 BC. They are also called "Amazigh" which means "a free man" or "a nobleman" (Kagda, 2017). Today, most of the Berbers¹⁸ speak Arabic and French due to the Arab conquest and the French

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¹⁸ Berber has Greek origins; Greeks called barbarians the foreign peoples that spoke other languages different from Greek. Later on, this same word was chosen by Romans to designate the people of Northern

colonization of the Maghreb. According to kossman and Stroomer¹⁹, Algeria, in particular, includes 27% Berber speakers distributed on the north in Kabylia, and in the Aures; and on the south where there are different groups of Touareg and Mzab, in addition to some regions next to the Moroccan borders in Bechar.

The Berber languages are among the oldest languages in human culture. They represent a group of closely related languages and dialects which belong to the Hamito-Semitic linguistic family or the Afro-Asiatic language family; they are made up of 300 Berber dialects (Merrils, 2004). In the north of Algeria, Kabylia represents one of the most important areas where Berber is still used, and where the linguistic and cultural awareness is highly developed among the population. The next important region is the Aures where "Chaouia" or "Tachaouit" is used (Mouili, 2012).

Tamazight's status in Algeria is national. In order to reach their goals, the Berbers resorted to political protests, massive demonstrations, and general strikes (Mostari, 2005). On July 5th, 1991 a controversial law was passed announcing that MSA is the only language which must be used in all the official documents as well as the other formal settings (Merrils, ibid). Consequently, the Berber's anger soon turned against the state and its Arabization policy, and they asserted that the new law is a heavy-handed attempt by the government to reaffirm its Arabic identity.

In order to back the Kabylian political parties, the government formed in 1995 a body attached to the presidency called "Le Haut Commissariat à l'Amazighité" (the High Office of Amazighity). Benrabah (2007) described it as a defending force for the linguistic rights of the Berbers to revive their linguistic heritage through cultural meetings, manifestations, and concerts. In 2002, Tamazight was recognized as a national language, that is to say, it could be taught officially in schools in Berber-speaking regions, but Berbers pushed for it to be awarded official status.

In January 2016, Tamazight was initiated by the Algerian government to be an official language along with Arabic (Kagda, 2017). It is now recognized as one of the country's official idioms, i.e., it not only can be taught in schools, but also used in administrative documents. Although MSA will remain the language of the Algerian government, the Berber language can now appear on official documents. The reform is part of wider democratisation efforts in Algeria, and might in the future be complemented

Africa who did not speak Latin. When the Arabs came (between 670 and 800) to Northern Africa, they kept the same word, but adapted it to their language.

¹⁹ cited in Mouili, 2012, p. 54

by further steps to institutionalize the use of Tamazight, such as its standardisation through the creation of an Amazigh Language Academy.

Benghabrit (2014-2019), the former Minister of National Education, presented statistics about Tamazight in the school, proclaiming that teaching/learning this language has raised augmentation. She announced that the number of students arose with 6%, mentioning that the secondary school in the school year 2007-2008 counted around 10000 learners, whereas the total number is about 68000 learners in 2017-2018 (Benghabrit, 2017). Saadoun (2017) mentions that the High Commission of Amazighity and the Algerian Ministry of National Education (2017) announced that there are 600 000 learners of Tamazight in the Algerian primary, middle and secondary schools.

The Algerian language repertoire embodies Arabic, in its two forms MSA and AA, French, and Tamazight. Each of these language varieties owns a particular socio-cultural position. The latter is evidently the result of a historical development through which those languages gained different statuses of a great importance at the sociolinguistic and political levels.

Accordingly, one of the most important features that characterize the linguistic situation of Algeria is the existence of the four languages, i.e. MSA, AA, French, and Tamazight. These languages are given different political, social, and educational positions in society. They have also classified Algeria among the multilingual speech communities. Thus, new linguistic and sociolinguistic phenomena, such as diglossia and code switching, emerge on the scene.

3.3. Language Contact Phenomena

Language contact has attracted the interest of many scholars (Poplack, 1980; Gumperz, 1982; Trudgill, 2001) who describe it as a phenomenon where two or more distinct languages come into closest use within the same speech community. Trudgill (2001) defines language contact as a term used to describe situations where different groups of speakers who do not speak the same language are in social contact with each other. People in this situation may face a difficulty in communicating with one another, as their languages can influence each other. Consequently, various phenomena like borrowing, code-switching, language shift, and multilingualism appear on the scene. Yusuf (1999) argues that many situations of languages contact can be described as

interactions of two cultures, resulting from several constituents like colonization, migration and wars.

3.3.1. Diglossia

Languages in many speech communities involve two or more varieties which can be used by their speakers under different conditions and circumstances (Ferguson, 1959); such sociolinguistic phenomenon is referred to by 'diglossia'²⁰. It was defined by Ferguson as:

A relatively stable language situation in which in addition to the primary dialect of the language (which may include, a standard or a regional standard), there is a very divergent, highly codified (often grammatically more complex) superposed variety, the vehicle of a large and respected body of literature, heir (either) of an earlier period or another speech community, which is learned largely by formal education and is used for most written and formal purposes, but is not used by any sector of the community for ordinary conversation (Ferguson, ibid, p. 336).

Diglossia, as outlined here, reflects a situation where two languages or varieties are used, each one having its own function; the High (H) variety usually the formal one and the Low (L) variety is considered as the informal one. Thus, the H variety is always the standard form of the language, whereas the L variety is for the spoken vernacular.

To illustrate, in the Arabic speaking world the H variety is standardized with its well-established rules and learnt at school, whereas, the L variety, the different spoken dialects, varies from one region to another. Indeed, in the Arab Word, lectures at universities or schools are given in a formal speech in H, but these latter are explained mainly in L. Ferguson's (1959) view about diaglossia has been extended later on by Fishman (1967) who gives another definition to this phenomenon:

"...diglossia exists not only in multilingual societies which recognise several languages and not only in societies that utilise vernacular and classical varieties, but also in societies which employ separate dialects, registers, or functionally differentiated language varieties of whatever kind." (Fishman, 1972, p. 92)

²⁰ The term "diglossie" (diglossia) was introduced for the first time in 1930 by William Marçais in a paper celebrating the centenary of the French presence in Algeria.

Fishman's view about diglossia concerns more bilingual societies, for this reason, he focuses on the relationship between diglossia and bilingualism within the society. In the first case, *diglossia and bilingualism*, a large population in the society uses more than one language in daily life, having each one their functions; for instance, in Paraguay more than half of the population speaks Spanish as H Variety and Guarani as the L one. In the second case, *diglossia without bilingualism*, one may find this situation in colonized countries, where most of the time the (H) variety is the one of the colonial country and the (L) one is that of the local population. In the third case, *neither bilingualism nor diglossia*, Fishman (1972) explains that only very small, isolated and undifferentiated speech communities may be said to reveal neither bilingualism nor diglossia. According to him, this situation is more hypothetical than realistic.

The tetraglossic linguistic situation in Algeria is similar to that of the rest of the Arab world. It appears through the presence of CA, the language of the Qur'an; MSA, the language of instruction, religious recitations, media and formal contexts; ESA, the language of most educated people, and AA which represents the various colloquial forms used by people in informal contexts. Accordingly, Algeria involves a more inextricable situation than that of Ferguson's Arabic speaking communities. The complexity of the Algerian context lies, in fact, in the coexistence of four varieties which are used in relation to two varying settings: formal and informal (Hamzaoui, 2017). The varieties used in Algeria are MSA, French, AA, and Berber.

Therefore, speakers may apply Ferguson's (1959) 'original version' by using MSA as H in formal settings and AA in informal ones. However, there exist other possible distributions of H and L; French can be used asH and AA / Berber as L or MSA as H and Berber as L (Hamzoui, *ibid*). This distribution applies to Fishman's (1967) 'extended diglossia'. Hamzoui (*ibid*) summarizes the possible distributions of H and L in four situations: (1) MSA versus AA, (2) French versus AA, (3) MSA versus Berber, and (4) Berber versus French. In the first situation, Ferguson's (1959) classical diglossia/intralingual diglossia is applied, whereas, the other three situations belong to Fishman's (1967) extended diglossia/interlingual diglossia.

3.3.2. Bilingualism and Multilingualism

Bilingualism and multilingualism have both de facto existences and important places in the psychological, political, and social debates that define social and ethnic groups, communities, and regions (Edwards, 2013). Bilingualism is one of the debated terms in linguistics. In its broader sense, it means the fact of being able to speak two different languages with a varying degree of ability. As a sociolinguistic phenomenon, bilingualism emerges as a result of a direct contact between different languages in the shade of several reasons, such as colonization, trade, media... etc.

Miliani (2000) regards bilingualism as the practice of using consciously and/or unconsciously in every day speech two languages alternately with a certain degree of ability which could be mentioned in both languages. Such ability can be active or passive. The former refers to the ability of speaking, understanding, and sometimes writing and reading both languages; while the latter means understanding both languages, but speaking only one correctly and neither reading nor writing in either language.

Multilingualism is a norm in the Algerian speech community; it is regarded as a source of strength because it enables the Algerians to be in contact with people of different languages. Most of the Algerians can interact with people of various Arab countries; others can communicate with the French, while some of them can speak with the Berbers of the other countries. According to Ball (2010), multilingualism also creates a finite number of responses to the communicative problems. One of these problems is that multilingualism may lead to language loss especially among immigrants, and sometimes to diffusion, i.e. certain features spread from one language to the other as a result of the contact situation. The multilingual capabilities of the individual could be greatly increased, at the same time we realize that however proficient we were to become, communicative difficulties would remain.

Algeria constitutes an interesting example of different bilingualism sorts, where Arabic/French bilingualism is the most common among the big majority of Algerian bilinguals. French is used side by side with Arabic in domains such as education, the mass-media and administration. Fitouri (1983, p. 343) states "Arabic-French bilingualism has become necessary for promoting the development of the Maghreb". It is also used to display the social status of the speaker.

Bilingualism in Algeria is evidently the result of 132 years of French colonization. The French policy in Algeria aimed at achieving initially political control, and then in the 1950s the target became a total domination. The liberation movement of 1954 marked the beginning of the end of the French colonization (Benali, 2000). In 1962, Algeria became an independent state but still suffering from the linguistic effect of the French. For more than a century, the nation is gradually recovering from this effect since the linguistic impact is more rooted than it is generally admitted, besides the solution of complete and rapid Arabization is not really easy as it appears.

Miliani (2000) cites two types of bilingualism in Algeria; these are societal bilingualism and individual one. The first type is the result of the historical process mainly the gradual control of the whole country by the French who concentrated on the northern parts, especially around the capital and in the west. Individual bilingualism is the consequence of several variables mainly the regional, economic, social, cultural, ethnic, and educational backgrounds of the individual. Thus, each individual bilingualism is balanced or unbalanced, passive or active. Balanced bilingualism exists when the speaker masters and functions equally well in the L1 and the L2.

In the pre-independence period, people who were in contact with the French were qualified as more balanced bilinguals. Unbalanced bilingualism takes place when there is a dominant and secondary language. It is represented by those whose competence is higher in one language than the other and generally in the mother tongue (Fitouri, 1983). For instance, the generation after 1970 indeed has less competence in French. Active bilingualism concerns those who have an active ability in their productive and receptive skills, i.e. they can speak both languages but do not necessary write them. The pre-independence uneducated individuals were active bilinguals because they were able to speak and understand the French language. Whereas passive bilingualism occurs when only the receptive skills are more or less developed, i.e. one understands French but does not speak it.

3.3.3. Borrowing

In daily conversations, speakers may use words from another language for the purpose of describing, explaining or expressing an idea or an object. Such phenomenon is referred to as 'borrowing'. Borrowing is one of the processes that take place frequently when two languages come into contact. The linguistic borrowing is one of the linguistic phenomena that received the attention of linguists; it is the process where a language takes some of the linguistic elements of another language, and attempts to copy a similar picture

of the linguistic pattern of a language into another (Gumperz, 1982). Alwaseet dictionary²¹ defines it as: adding or borrowing words from one language into another, which is metaphorical because of the fact that borrowing entails that the individual takes a thing to benefit from it for a while and then return it to the owner.

Borrowing is involved when single words, phrases, or expressions from one language become part of another language system by being assimilated to its new linguistic structure (Gumperz, 1982). Borrowings also called loan words are usually integrated in the grammatical system of the L2 in the sense that they are dealt with as if they were part of the lexicon of that language. Gumperz (*ibid*, p. 66) says that borrowing is:

The introduction of single words or short, frozen, idiomatic phrases from one variety into the other. The items in question are incorporated into the grammatical system of the borrowing language. They are treated as part of its lexicon, take on its morphological characteristics and enter into its syntactic structures.

Cultural borrowing is the act of taking an item from another culture without changing its name since it does not exist in the native culture. The case of Algeria is a good example of that in the sense that the French language enormously affected AA. According to Schendl (2001), borrowing varies according to word classes. For instance, nouns are more borrowed than the other elements followed by adjectives and verbs. So, the speaker borrows nouns from an FL in order to name an object which his/her language lacks. In addition, there are many factors that encourage borrowing. For instance, lexical borrowings occur in order to fill in gaps of the vocabulary or according to 'lexical need' in the recipient language. A speaker may find himself in a situation where s/he needs to borrow an item in order to fill the gaps. Weinreich (1974) believes that borrowing is used for prestigious purposes.

According to Harmers and Blanc (1983, p. 265), "borrowing and code switching are phenomena at either end of continuum". Many non-educated Algerians use French words without actually speaking French. For Versteegh (2001), the lengthy period of coexistence with French naturally left its traces in the linguistic structure of Arabic; he quoted:

"...in the form of Standard Arabic that is current in North Africa, French idiomatic patterns can be detected. In the vernacular, too, a host of French borrowings have been integrated... the integration of

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²¹ (Cited in Anis, 1985)

loanwords from another language must necessarily be preceded by a period of intensive code-switching. Yet, judging from other situations of code-mixing, it appears more likely that the most integrated loans from French date back to a period in which most people had only a superficial knowledge of French. Only at a later stage, when there was a larger number of true bilinguals, did the number of *ad hoc* borrowings increase." (Versteegh, 2001, p. 269)

In fact, as a result of long-term contact with the French during the occupation of Algeria, a great number of words slipped in AA and are adopted such as /kozina/ (kitchen), /tabla/ (table), /restora/ (restaurant) and too many other words. Another important phenomenon in the above-mentioned topic is said to be loanwords or 'cultural borrowed lexemes'. There are some technical terms having no equivalent in Arabic such as "parabole" (Concave antenna or dish), "cassette" (cassette-tape) (Meghaghi, 2016).

3.3.4. Code-switching and Code-Mixing

Most bilingual speakers switch from one language to another within their speech or in a conversation, a behaviour that had led to a complex phenomenon called "code switching". Code Switching and code mixing are two types of discourse that occur as a natural and an inevitable consequence of bilingualism, Grosjean (1982, p. 145) defines code-switching and code-mixing as "the alternate use of two or more languages in the same utterance or conversation". In this case, bilinguals use two languages within a single word, or a sentence. Furthermore, the construct of AA/French code switching in the Algerian speech community emerge as a result of the French occupation, which imposes its language.

As far as individual bilingualism is concerned, it is said to be arising from the lack of vocabulary of particular items mostly nouns. That is why the bilingual speaker may alter to code switching. According to Gumperz (1982, P. 56), "code switching is the juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems of sub-systems".

Bloom and Gumperz (1982), in their study of the speech habits of Norway, introduced two distinct types of code switching namely "situational code switching" and "metaphorical code switching". The former occurs wherein the speaker changes the code as a result of a change in the situation (the status of interlocutors, the setting or the topic of conversation), while the latter denotes the switch from one language to another

according to changes of topics under discussion and the speaker has an attention to produce an effect.

Other types of code switching have been put forward by Poplack (1980) in relation to the kind of switch: (1) Inter-sentential code switching occurs at clause or sentence boundaries; for instance, one clause is uttered in English, the other in French: If you have an exam next week, tu devrais commencer à travailler maintenant (You should start working now); (2) Intra-sentential code switching is found within clause or sentence boundaries such as: You are sleepy la plupart du temps (most of the time), because you spend des heures (hours), in your bed; and (3) Extra-sentential code switching also called tag switching refers to the insertion of a tag, such as phrase markers, exclamations...etc from French, for example, into an utterance that is entirely in English like: He's like that, tu sais (you know).

Code switching represents a central aspect of language contact whereby bilingual speakers acquire the ability to switch from one code to another in various domains, situations and according to circumstances, rules of interaction, topic and addressee (Bloom & Gumperz, *ibid*). The long presence of French in Algeria and its impact on people's speech have resulted not only in the use of lexical items but also the appropriation of "ready-made" phrases such as *ça va?* meaning respectively (Do you feel all right?); sometimes mixed with an Arabic phrase as in '*ça va alhamdullah*' (good, thanks Allah) (Meghaghi, 2016).

Code-Switching and Code-Mixing, according to Brezjanovic (2011), may differ from one to another. The commonly known difference between them lies in the fact that in code switching, a certain change in the situation makes the speaker change from one language or language variety into another. Whereas, in code mixing the process happens just because of the fluency in the two languages or varieties that it becomes unconscious. In the Algerian society; for instance, it is common that people switch between languages during their speech, mainly Arabic and French. Here is an example: $/\widehat{d3}i$:b bisikletek w arwah sil tepli / (Bring you bycical and come please); in this example, the speaker is mixing two, a language and a dialect i.e. French and AA. $/\widehat{d3}i$:b/ (bring) and /arwah/ (come) are AA words and /sil te pli/ is a French expression meaning please and /bisikletek / derived from the French word 'bicyclette' meaning bicycle.

As shown in the example above, for code mixing the change happens within the sentence itself between the two varieties including words, affixes, and phrases, whereas, in code switching the change happens at the level of syntactic structure of the sentence

including grammar, phonology, and vocabulary changes at the sentence boundaries. Ayeomoni (2006) stated that sometimes we find that the term code mixing is used to refer to intra-sentential code switching. That is because the inter-sentential code switching happens at the sentence boundaries whereas intra-sentential code switching happens within the sentence itself.

3.4. Education in Algeria

Language teaching is a complex undertaking. It is an enterprise that is shaped by views of the nature of language, of teaching and learning a language specifically, and of teaching and learning in general; and by the sociocultural settings in which the enterprise takes place.

"Through education man is equipped to engage in profitable ventures that would earn him higher income and improve his standard of living. Man is enabled to gain access to better health care and other social services that add value to his life. Thus, education is regarded as a powerful instrument for human and national development" (Njoku, 2017, p. 212).

It is commonly held that the concept of education derives from the Latin 'educatio' (to educate) which refers, in general, to the process of acquiring knowledge, especially during childhood and adolescence. On the other hand, to educate is to impart knowledge or to develop from a potential. From a much broader perspective, it is the bringing-up of children physically and mentally. It is a word of such a wide reference that at times it is, of necessity, vague (Manheim & Stewart, 1962).

Education is not an inviolable and universal reality which would produce the same effects. An educational system is a social and historical reality, closely linked to national, economic, social, political and cultural conditions in which it developed and is often keeping on transformations. An educational system is neither autonomous nor universal. Each society determines its ideal education achieves (Benmati, 2008).

The educational profile of the Algerian society changed dramatically with independence, as the majority of technicians and administrators were Europeans, Algeria was left with a shortage of highly-skilled and educated people (Mostari, 2004). The Algerian education system, for instance, is divided into several levels: preparatory, basic (primary, middle), secondary, vocational and higher education. It is also necessary to take into account the continuing education provided by the University of Continuing

Education. The Ministry of Education is responsible for the organization and management of the primary, middle and secondary levels, the management of higher education is entrusted to the Ministry of Higher Education and Scientific Research, and the professional level is entrusted to the Ministry of Education and Vocational Training.

Primary education is for a period of five years. The age of admission to primary school is fixed at six years of age. The purpose of primary school is to help children to master the basics of reading, writing and numeracy. The end of primary school education is culminated by a final examination leading to the issuance of a certificate of achievement called "Certificate of Primary Education".

The middle school is a period of four years. At the end of schooling in the middle school and after a final examination entitled to obtain a diploma called "Certificate of Basic Education", the pupils are automatically admitted to the first general and technological secondary year, according to their wishes. The aim of fundamental education is to equip students with essential learning to develop their identity and to embrace the values of citizenship and the demands of life in society.

Secondary education is for a period of three years. It is divided into general secondary education and technical secondary education. The former consists of five specialties: the exact sciences, the sciences of nature and life, humanities and letters, literature and living language, and religious sciences and the latter includes the following specialties: electronics, electrical engineering, mechanics, public works and construction, chemistry and accounting techniques (Benmati, *ibid*). The secondary schools aim at consolidating and deepening the knowledge acquired in the different disciplinary fields, developing methods of analysis, reasoning and taking responsibility, having an openness to foreign civilizations and cultures and preparing pupils for the pursuit of further studies or higher education.

The Algerian framework of university degrees is currently under reform with the traditional system, modeled on the French structure, to be gradually replaced with a three-tier system deemed to be more internationally compatible. The reform, known as the "L.M.D,"²² is set to introduce a degree structure based on the new French model of bachelor's, masters and doctoral degrees (Licence, Master, Doctorat). The licence, corresponding to three (3) years of study beyond the baccalauréat; the master,

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²² It is a new university system initially called the B.M.D issued in the Executive Decree 04-371 of November, 21st 2004 on the creation of a new bachelor degree. The LMD is initially designed in the Anglo-Saxon countries, it is spreading nowadays everywhere, and Algerian authorities decided to apply it in partial replacement of the current system.

corresponding to two (2) years further study beyond the licence; and the doctorat, corresponding to three (3) years of research beyond the master.

3.4.1. The Major Educational Reforms

Reform is a complex concept. As a noun, the term is used to describe changes in policy, practice, or organization. As a verb, 'reform' refers to intended or enacted attempts to correct an identified problem. As an educational aspiration, its goal is to realize deep, systemic, and sustained restructuring of public schooling (Kurth-Schai & Green, 2008).

Entelis (1981, p. 201) stated that students learning weaknesses in general and more specifically in foreign languages are attributed to the educational system flaws: "Too many young people may be emerging from secondary schools with an incomplete command of both literary Arabic and functional French". Moreover, the entire education system appears to have been called into question, based on criteria such as examination results and educational wastage as stated by Benyahou in an interview with Le Matin: Newspaper: "Serious shortcomings can be identified at two levels: the level of performance and what one might call the "quantitative" aspects, and the level of the system's overall architecture, organizational structures and operation" (Rezig, 2011, p. 1328).

At independence in 1962, the Algerian education system was highly exclusive and geared toward the training of French colonial elite (Rezig, *ibid*). With the creation of the Ministry of Education in 1963, the process of building an inclusive and open national education system was set in motion (Clark, 2013).

Since then, many reforms occurred. An education reform passed in 1971 introduced the nine-year basic education program. Further reforms in 1976 extended the period of compulsory education from six (6) years to ten (10) years while also guaranteeing that education at every level is provided free to all. In addition to guaranteeing tuition-free instruction, the reforms of 1976 mandated that education be the exclusive domain of the state (Rezig, 2011).

After the election of previous Algerian president Abdel-Aziz Bouteflika in April 1999, the Algerian government started to re-evaluate its education system and its language educational policies (Baghzou, 2017). In a televised address to the nation in 1999, Bouteflika criticized the state of the education system by saying that the level of the

education system had reached an intolerable threshold, as he many times used the term of "doomed schooling system" in public before his election to describe the state of the education system.

In 1999 the Algerian government started to revise its whole educational policy. In May (1999) Bouteflika declared: "it is unthinkable to spend ten years studying in Arabic pure science when it would only take one year in English" (le matine 1999²³). The president was in full opposition with his predecessors and authorities which rejected the idea of institutionalized francophonia. Bouteflika declared: "Algeria does not belong to francophonia but there is no reason for us to have a frozen attitude towards the French language which taught us so many things and which at any rate opened (for us) the windows of the French culture" (Benrabah, 2007, p. 28).

Baghzou (2017) explained that in 2000, the government submitted a whole revision of the curriculum content and introduced the FL in education. French became the medium of instruction and teaching scientific subject because it facilitates the teaching of scientific discourse that required terminologies absent in MSA.

In 2002, a national education reform planned the reintroduction of French into the second grade of primary school. The higher education system of Algeria started introducing the LMD reform in the 2004/2005 academic year; this degree changes the length of the studies, too; it reduces the degree from four (4) to three (3) years.

Benrabah (ibid) believes that Algeria's development history has had an impact on language education policies. He divided it into three (3) phases; besides describing the impact of each phase on language education. The first phase is characterized by the colonial legacies amongst which was a network of schools and an educational system dominated by the French language with Arabic growing steadily in importance. In the second phase, which lasted from the 1960s to the 1990s, the Arabic language was gradually imposed in the educational sector. The third phase began in the early 2000s corresponding to the transition to the free economic market with less assertive Arabization policies. During the third phase, the authorities have encountered hostility to the reform of the schooling system.

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²³ as cited in Benrabah, 2007, p. 27

3.4.2. Arabization

Since independence, Algerian authorities have used a number of ideological processes to gain political legitimacy. One of these processes is the language policy known as 'Arabization'. The term Arabization has been explained through many definitions based on varying views of authors. For Sayadi (1982), Arabization means lexical expansion which includes the coinage of new terms, either from existing words, or through translation of foreign terms. Moreover, it is the extensive use of Arabic in all domains of life: political, social, and cultural i.e., it refers to the promotion of Arabic as a medium of interaction in public and private sectors.

The word "ta'rib" has got two equivalents in English Arabization and Arabicization. The former concerns the superiority of culture and identity, while the latter deals with superiority of Arabic as a language. The two terms existed as a result of colonialism of the Arab countries. Having defined Arabization in two spatially different concepts, it is worth noting that Arabicization planning refers to corpus planning; however, Arabization planning refers to status planning. Nonetheless, the terms are often used interchangeably (Wheeler, 1966).

The importance of Arabization lies in contributing to the enrichment of the Arabic language in the fields of the scientific terminology, symbols and specialized dictionaries and developing the spirit of creativity and composition for students since receiving science (Sayadi, ibid). In 1963, a year after the Algerian independence, school enrollment was as low as 850,000 students as Algerian society attempted to recuperate in the wake of six continuous years of strife and conflict (Mostari, 2004). As a first step of the Arabization process, the first Algerian president, Ahmed Ben Bella, decreed MSA as the national language of Algeria and the sole language of academic instruction, instructing all primary and secondary institutions to comply. The process was progressive and began from the basic levels of education. Textbooks and educational materials in French were gradually abandoned in favor of teaching materials in MSA.

Arabization, thus, led the government to reform the educational system based on the requirements of the country's language policy. In this respect, Mostari (2004, p, 29) states:

In the educational system, the first reform, adopted right after independence, was to teach Classical Arabic starting from the primary level. French became a second language (1964), and then a

foreign language with the application of the Foundation School system in 1976. In reaction to this change, within the Foundation School System a political attempt was made to reconcile the restoration of the national language Classical Arabic with the retention of French, an essential medium for the acquisition of technology and modern science.

In 1977, an official Technical Committee on Arabization was established to entrench further the usage of MSA in government administration jobs (Mostari, ibid). In December 1990, stricter Arabization laws were passed, mandating that all meetings, debates and conferences in both the public and private sectors be written solely in MSA (Paulin, 1992).

Arabization goals could not be achieved without an effective language policy (Mostari, ibid); it comes as a result of language planning and language policy. Both are done by governments as both are decision that needs to be supported financially and administratively by government authority. They both influence education, societies and consequently individuals and group behaviour as well (Balla, 2017). It is very important here to distinguish between these two terms "language planning and language policy" at the basis on their direct relation with Arabization.

According to Tauli (1968), language planning is the methodical activity of regulating and improving existing languages or creating new common regional, national or international languages. Language planning comprises all spheres of the oral and written form of the language: phonology, morphology, syntax, lexicology vocabulary and orthography. For Gorman (1973, p. 73) the term language planning refers to "measures taken to select, codify and, in some cases, to elaborate orthographic, grammatical, lexical, or semantic features of a language and to disseminate the corpus agreed upon". According to Haugen (1953, p. 307), language planning "includes the normative work of language academies and committees, all forms of what is commonly known as language cultivation, and all proposals for language reform or standardization."

The literature on language planning exposes a wide use of two interrelated terms: 'language planning' and 'language policy'. Some writers make a clear distinction between the two labels; others consider the distinction irrelevant, and still others use the two labels interchangeably.

Tollefson (1991) summarizes the difference this way: The commonly accepted definition of language planning is that it refers to all conscious efforts to affect the structure or function of language varieties. These efforts may involve creation of orthographies, standardization and modernization programs, or allocation of functions to particular languages within multilingual societies. The commonly accepted definition of language policy is that it is language planning by governments.

The implementation of the above mentioned reforms faces already many constraints among which we can cite the fact that the Arabization policy, applied since the independence, entailed huge numbers of teachers with an arabized education who do not have a good mastery of foreign languages either French or English because the policy had increased the Arabic language teaching hours on the expense of French and English.

3.4.3. The Languages of Education

Language allows people to develop a sense of self, and to interact with others in the community. Language is the means through which knowledge is transmitted. Every form of education, formal, informal or non-formal, is expressed and acquired through language. Through education, man's potentials are developed; skills, knowledge and expertise that will enable man become more productive and creative in his environment are acquired.

However, the issue of education cannot be discussed without the language through which the concepts are expressed. Because no matter how expertly the learning experiences are selected and organized, the ultimate objective of the teaching-learning process would not be achieved if the language of instruction is unfamiliar to the learner.

The formal tradition of language in education derives from the teaching of classical languages, emphasizing literacy, translation and grammatical instruction. Outside formal education, more naturalistic methods for effective development of FL skills co-existed, while the democratisation of schooling led to an increasing role of mother tongue education. As primary education expanded, basic courses developed to train teachers, and language study began to respond to the impact of psychological and sociological research as these disciplines established themselves through the 20th century (Benmati, 2008).

The Algerian linguistic background is very rich and complex too. It makes of Algeria a particular Arab nation with the number of languages taught and used either in academic or non-academic contexts as described by Ephraim and Tabory (1984, p. 64): "The Algerian situation is complex, as it is at a crossroad of tensions between French, the

colonial language, and Arabic, the new national language; Classical Arabic versus colloquial Algerian Arabic; and the various Berber dialects versus Arabic".

The presence of this variety created a language crisis, either political or educational, and gave rise to outcries where everyone claimed monopoly on the language issue: arabization, French-Arabic bilingualism, the English language status, never reaching consensus. Students learning weaknesses in general and more specifically in foreign languages are attributed to the educational system flaws such as having too many young people emerging from secondary schools with an incomplete command of both literary Arabic and functional French (Entelis, 1981).

3.5. Foreign Language Teaching in Algeria

The presence of foreign languages is equally as important as the presence of French is obvious due to the long-term stay of two civilizations in the Algerian lands for long periods of time. According to Baussant (2004)²⁴, Algeria has been occupied by the French, the Romans, and the Spanish since the year 1509 remaining a total of three centuries in the Algerian city. In the same way, the importance of the English language is relevant due to globalization and its influence in technology, as Mami (2013, p. 911) explains:

By the mid of the year 2000, Algeria has started a series of changes with the aim to improve the structure of the educational system. However, the traumatic past events have left the administration confused in certain areas where many schools required better organization and more teachers. Since the introduction of the English language into schools, it has become an important part of the curriculum and has recorded a great demand in all levels of education.

Furthermore, the history of foreign and second language teaching is a history of consecutive changes in the stated objectives of teaching accompanied by sometimes dramatic changes in the form and content of teaching materials. During the twentieth century, these changes, based on institutions and experiences of eminent language teachers, came to be increasingly influenced by advances in linguistic research on language and language acquisition, and more recently also by the results of discourse analysis and findings in related humanities and social sciences. As a result, during the

²⁴ (cited in Essayahi & Kerras, 2016)

1970s and 1980s the communicative approach to language teaching²⁵ was widely accepted and a new generation of textbooks appeared (Crozet & Liddicoat, 2000). These textbooks are used in all Algerian schools including Bechar city.

From the linguistic perspective, in Algeria, French has the position and function of an L2 and from the political perspective it is considered as the first foreign language (Negadi, 2015). As a result, it has become an important part of government, administration, politics, law, medicine, trade, media and education. In education, French is a medium of instruction starting from primary school specifically grade four (4) (Benrabah, 2007). Its spread is decidedly powerful, French expressions and words are still used in AA, which led to a co-existent relationship and a kind of bilingualism in some instances, and in others to code switching as it is noticeable in everyday speeches (Negadi, *ibid*).

Thus, the position of French language is so considerable that it is regarded as the major instrument of work in the media, government, culture, industry and in education. French is a lingua franca in Algeria, despite the government efforts to remove French and to arabize the education and other institutions, Algeria remains the second largest Francophone country in the world in terms of French speakers (Mami, 2013).

English, one the other hand, is the most important FL taught after French; it is introduced in the first grade in college as the second mandatory FL. Nowadays, the strong position of English in Algeria is continuously increasing and gaining an important part among its population. English can be regarded as the co-official language and the most widely studied foreign language. It is regarded as the language of modernity, advancement and intellectual distinction, gaining gradually a prestigious status among Algerian people who develop a clear and particular preference to learn it.

In addition to French and English, other foreign languages are taught in the secondary school for foreign languages pupils such as Spanish and German; thus, the pupils are given the chance to choose the language they want to study. Moreover, some languages are taught in private schools such as Italian, Russian, Turkish,...etc.

²⁵ The communicative approach is based on the idea that learning language successfully comes through having to communicate real meaning. When learners are involved in real communication, their natural strategies for language acquisition will be used, and this will allow them to learn to use the language.

3.5.1. The Status of the English Language

The status of French and English languages in Algeria does not depend only on cultural preferences and educational options. The country's modern history and political alliances are also taken into consideration (Benali, 2000). Nowadays, the necessity to know languages is increasingly recognized, as the world joins together in a 'global village'. The role of English in the world has become a controversial issue which leaves little space to mention the positive aspects of a common international language democratically.

English has become a global language because of the power of the people who speak it. A power can be industrial, scientific, historical, political, economic and socio-cultural. In fact, if we go through a close examination centuries ago, one finds that the industrial and scientific power dates from the 19th century, when Britain was the leading industrial and trading power in the world (Miliani, 2000). Most of the innovations were in the English language and to learn how to use them, people needed English. Historically speaking, the migration of English speaking people to other different areas in the world increased the spread of this language.

Technically speaking, English is apprehended as a second foreign language in Algeria (Merzighi, 2011). Its teaching is in competition with the French language since the year 2000, at the first grade level of middle school. However, in Universities, 95% of undergraduate and post-graduate courses in sciences or in medicine are taught in French language (Miliani, ibid). While, English is still considered to be the second foreign language in the Algerian Educational System after French, it has received considerable attention within the educational Reform. Above all, English is introduced at the level of first year middle school (i.e. at the age of 11). It covers seven (7) years – four (4) of which at the middle school and three (3) at the secondary school.

Moreover, English is used to convey prestige; it is used for interpersonal communication in formal and professional setting among teachers and students of English as a foreign language in addition to university students who share a certain interest to the language (Belmihoub, 2018). Although AA and Berber are predominant in creating and maintaining interpersonal relationships in person and online, English is used, to a limited extent and to varying degrees depending on the context. In addition, the interpersonal presence of English is also fulfilled by the use of the language for professional communication, prestige, status, and modernization.

In spite of the fact that English is not presently the main language of instruction in most public and private educational institutions in Bechar, its status has been changing since the early, 2000s. The start of the teaching of English as an FL, however, has been moved from the second year of middle school to the first year of middle school following educational reforms. In addition, English is now taught to all the university students from their first year license to their second year Master. In fact, the goal of teaching English is to allow Algerians to exchange scientific and cultural ideas and experiences with speakers of English.

English language plays an important role in the culture of nowadays. The majority of educated people use it to communicate, especially on social media platforms; specifically the youngest generation who tend to use English language widely in multiple situations. They use it for communication, social media, and playing games. Nowadays' youths use English language for prestigious status. People with higher educational levels gravitate more towards speaking English rather than French which used to provide more power for speaker.

Day after day, the speakers of English in Algeria grow. The main reason for this growth can be attributed from the massive influence of the internet world which grabs the attention of a number of people. The university students all over Algeria raised their voices asking for the English language to become the first foreign language in Algeria. Everyone wants English to take position in the country, since the whole world understands this language.

3.5.2. English Language Use in Algeria

Historically speaking, Kachru (1985) categorizes the usage of English into three concentric circles: the inner circle, the outer circle, and the expanding circle. He maintains that the inner circle represents the more traditional bases of English that are used in places like the United Kingdom, the United States of America, Canada, Australia, and New Zealand. The outer circle includes countries which "have gone through extended periods of colonization, essentially by the users of the inner circle varieties" (Crystal, 2008, p. 56), and includes Nigeria, Singapore, and India. In the expanding circle, English is used mainly for business and international purposes. The expanding circle includes such countries as China, Greece, Saudi Arabia, and Algeria, and represents the largest expanding numbers of English speakers in the world today (Crystal, ibid).

In a multilingual society, each language fulfils certain roles and represent distinct identities, and all of them complement one another to serve "the complex communicative demands of a pluralistic society" (Sridhar, 1996, p. 53). According to Belmihoub (2018), English is used in many fields and areas in Algeria such as industry, government, media and journalism apart from language teaching.

The oil and gas industry in Algeria is considered as a driver of demand for English by Algerian users. The towns of Hassi Messaoud and Hassi R'mel in the Sahara Desert in the south of Algeria are home to a great deal of advanced English users, most of whom work in the oil and gas industry. In fact, among all industries nationally that demand the most English proficient users, the oil and gas industry produces an astounding 96.5% of the demand (Belmihoub, 2018). Major companies in this industry, where English is important, include Sonatrach (Algerian company), Anadarcho (American company), and Total (French company) (Slougui, 2009).

The other area that prompts an increase in the number of users of English is government investment in the quality of English instruction. Private language centers, the US Embassy, and British Council support of various English education programs, contribute to the rise in the number of users since the end of the black decade in Algeria (Belmihoub, 2018). Facilitated by the Algerian government's Communications Ministry, the advent of the Internet and mobile technology has also facilitated access to online resources and platforms for English learning and use thereby driving up the number of Algerian youth using English.

Nowadays, as it is noticed, English is used in media and journalism in Algeria. Algerian private channels, such as "dzair news", have added English to their news languages. Moreover, the advent of such social media spaces as Facebook and YouTube offers a platform for Algerian youth to express themselves in English and become users of this language in an unprecedented fashion. For instance, there is a Facebook group of the *Algerian Association of Teachers of English*, and many of these teachers are highly proficient in English. While some Algerian English teachers panic the day before a lesson and, using fragmented sentences typical of online language use, frantically ask their fellow teachers for ideas on how to conduct a given lesson, others seem to be comfortable with their role as English teachers and deploy their educated English. Besides, another group called *I'm DZ and I Speak English* is considered as a space where Algerians can express themselves in English freely about any topic they like. While historically overshadowed by French in all domains of use, today, Algerian users of English seem to

have found space for expressing themselves in English throughout many kinds of Internet communication.

Aside from the democratization of access to English through public schooling by the government and access to the Internet, it is mostly affluent and educated Algerians who use English in addition to the teachers of the language. Slougui (2009) argues that, in addition to issues of funding, brain drain toward Western countries, and a lack of various material resources in Algeria, Algerian scientists face language difficulties when attempting to publish in English. In this context, she states:

For historical and practical reasons, Algerian scientists publish in a language that they master well: French. French, unfortunately, is a language that has already lost its aura as a language of international communication. Arabic hardly appears in the scene; its status is not yet fit to express the scientific thought. Algerian scientists are constrained to publish in a language that they don't know well. Their English language skills are too poor to enable them to cope with the international exigencies. Algerian scientists not only have difficulty in writing in English, but they also have difficulty in coping with the conventional style of the English research paper (Sloughi, 2009, p. 4)

However, despite English being the language in which most scientific publications by Algerian scientists are produced, a great number of Algerian scientists have only a reading knowledge in English, and writing is more difficult to them. It is worth noting, however, that despite the trivial number of scientific publications, these numbers show the importance of English among Algeria's scientific community.

In fact, the Minister of Higher Education and Scientific Research, Chems Eddine Chitour, declared on April 20th, 2020²⁶: "Ph.D. theses will now be written and presented in English; to give a more advanced and developed character to Algerian scientific research both internationally and nationally"²⁷. Indeed, he added that PhD students are obliged to submit their thesis in English, at the same time calling on academics to make efforts to ensure that final studies should be developed in English.

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²⁶ Courrier n°253/SPM du 20 février 2020

²⁷ « Les thèses de doctorats seront désormais rédigées et présentées en anglais ; afin de donner un caractère plus poussé et plus développé à la recherche scientifique algérienne tant sur le plan international que national ». www.dzairdaily.com

As a reminder, Chitour has opted for a smooth introduction of English into the Algerian university curriculum; the decision to generalize the use of the English language at university will be applied in progressive dose taking into account the necessary adaptation to this new situation. He has previously stated that the aim is not to remove the French language from scientific research, but to follow the world's movement that English is the most spoken language in the world, and thus, Algeria must not remain on the margins.

The above mentioned information focused on the sociolinguistic situation in Algeria in general; in fact, details were provided concerning the languages used in Algeria along with some historical facts. In the following part, the main focus will be on Bechar, a town situated in the south of Algeria, since the participants of the study are Bechari speakers who study/teach at TMU B. Furthermore, it is essential to provide some background about Bechar speech community.

3.6. An Overview of the Bechar Speech Community

Bechar is a town in the south of Algeria; it is situated in the south west bordered by other Saharan towns such as: Naama and El Bayedh in the north, Morocco in the west, Adrar in the east, which extends until the south with Tinduf (see figure 3.1). Nowadays, the language situation in Bechar involves significant variation at all linguistic levels, mainly because of the historical contact established between the inhabitants of Bechar and Morocco. Thus, considerable linguistic interferences began to emerge between the local and the external varieties. It is worth mentioning that Bechar speakers are so deeply characterized by the stressed and strong accent.

The sociolinguistic situation in Béchar is said to be complex because of the multiplicity and the diversity of the dialects; there are at least four (4) dialects spoken in Béchar: Arabic, the dialect used by the majority, the dialect of Doui Mni3, particularly used in the area of Abadla and by some people of the same origin living in the town and it is mostly spoken by old people as a sign of their solidarity, the dialect of Oulad jrir spoken by people who live in the center of Bechar and usually form small groups in distributed places, the dialect of the Ksourians, groups of people living in the Ksar of Kenadsa and the Ksar of the center of Bechar or "Takda", and a Berber variety called "Shelha" which is a very old variety used by different groups who live in small villages in Bechar such as: Igli, Wakda, Lahmar and Boukayes (Mouili, 2012).



Figure 3.1. a Map of Bechar Geography

The diversity and complexity of the sociolinguistic situation in Béchar creates a considerable number of variables at different levels. According to Fezzioui (2013, p. 106), variation in the speech community of Bechar is not very related to socio-economic status of the speaker. People speak more or less the same way, whatever is their social status, in fact variation operates on other dimensions: ethnicity, age and sometimes gender.

According to Mouili (2012), the dialect of the majority shares some lexical items with the Moroccan Arabic, such as: /makanəʒəmʃ ndirha waħdi/ (I cannot do it alone). In addition to lexical similarity, both regions share some phonological segments. For example, in Bechar as well as in some parts of Morocco, people use /g/ instead of /q/ as in: /ngu:l/ (I say), and adds the morpheme /ka/ at the beginning of the verbs to refer to the present tense like in: /kanəqra/ (I study), /kanəkrah/ (I hate). The dialect of the majority has also many similarities with the other Algerian dialects as well as some differences. The large number of vocabulary is almost the same in the entire Algerian context except of few items and rules. These items may refer to specific tradition, customs, or beliefs, and sometimes reflect their particular social or regional structure.

The dialect used by Ouled Djrir is almost identical to the previous one since both groups formed only one group in the past. Nevertheless, they still have a slight difference in pronunciation and in the meaning of some words, such as: /kul/ in Doui Mni3 and /gas/ in Ouled Djrir (all). Unlike the previous one, people who speak this dialect live in the center of Bechar and usually form small groups in distributed places (Fezzioui, 2013).

Shelha, or Berber, is a very old variety used by different groups who live in small villages in Bechar (Mouili, 2012). It is considered among the Northwest African Berber languages though its use has decreased after the coming of Islam and the Arabic language. It is spoken in the regions of: Beni Ounif, Igli, Wakda, Berbi, Lahmar, Boukayes, Moughel, and Tabelbala. It also extends to Feguig, a small region in the Moroccan border, and to other places in the kingdom due to country boundaries.

These Berber varieties, including Tabeldit, have many similarities with each other at the levels of lexis and phonology; except the one used in Tabelbala which consists of a unique vocabulary and a different phonological system. They also share many characteristics with Tamazight, Chaouia, and Touareg (Fezzioui, 2013; Mouili, 2012; Mouili, 2017). The existence of these Berber varieties in Bechar creates a complex linguistic situation, mainly when their speakers meet together and use them in the same situation. These people can understand each other and can also switch between the different Berber varieties. Shelha in these areas is spoken by elders more than the youngsters who acquire other languages of their generation.

In Bechar, like the other cities in Algeria, MSA is used in schools and Mosques; French is taught in the primary school and English in the elementary. As far as the English language is concerned, there are several private schools in Bechar where English as well as other foreign languages are taught. Besides, in Tahri Mohamed University in Bechar, there is a place called 'the American Shelf' or 'the American Space' along with the 'English Club' where university students who have a certain interest to the English language can learn the language through some organized activities about the four language skills such as: communication, writing short stories and poems, organizing study days and playing games in English.

In addition, English is used to convey certain values, prestige and status; consequently, businesses do not hesitate to take advantage of the values associated with the English language. For example, a small business in the center of Bechar calls their shop of kids' cloths *Baby corner* and also a shop for ladies cloths is called *Face look*.

3.7. Conclusion

This chapter was a description of the situation in Algeria including the status of French and English historically, linguistically and socially speaking. The first part of this chapter attempts to show the languages in Algeria (native and foreign). Thus, it can be said that, in Algeria, different varieties are used: MSA, ESA, AA, Tamazight and English. Thus, the contact between the Algerian population and English dates back to the middle of the twentieth century, more specifically during the Second World War.

English is also used in Algeria but as a second foreign language after French, it is taught from the first year of Middle School because of its status as a global language. The number of English speakers in Algeria is very limited; most of them are young people, who started to be very interested in English after the widespread of the internet. In fact, no one acquires English for daily communication; individuals who are competent in English are either teachers or students at university. Thus, the status of English was discussed in details in addition to English use in teaching as well as other fields such as: journalism, science, media and government. Since the topic of this dissertation is about Bechar speech community, we tried to shed light on this community and its dialects. Finally, we tackled the educational system in Algeria and the status of English as well.

In the following chapter, we will highlight the methodology used in our study including the instruments of research such as the questionnaire delivered to teachers at TMUB, the interviews and the recordings made with the EFL students.

Chapter IV

Chapter IV Contents

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- 4.2. Methodology
- 4.3. Samples and Population
- **4.3.1. Samples**
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Chapter Four

Research Methodology

4.1. Introduction

Research methodology refers to the scientific procedure through which a study is made, generally conducted to solve a problem, discover a phenomenon or prove a fact (Burn, 1994; Kerlinger, 1986). Any scientific research relies on different research methods to accomplish the final goal of the study represented in the forms of written data like books and articles, or other applied methods like interviewing, recording, questioning and investigating.

The purpose of this chapter is to describe the methodology of this study, determine the different applied tools and instruments for data collection, explain the sample selection and the procedure used to analyze the available data for this study. Therefore, the current chapter involves the main methods used for gathering information focusing on recordings and questionnaires. All these elements are explained in detail in the following sections; including place, types and the conditions under which the methods were undertaken.

An explanation of the samples, their size, and selection is also mentioned along with the research tools and instruments used for recording the data. Additionally, all the problems that were faced and the limitations of the study are involved.

4.2. Methodology

The methodology adopted in this research work is based on collecting information from both primary sources and secondary sources. The latter is based on collecting information from various documents such as books, journals, articles, dictionaries, encyclopedias, and others; and the data taken are placed around the various chapters which are based on the theoretical background of the topic being investigated.

The techniques of paraphrasing, summarizing, and quoting have been all used when borrowing a given text from any source. In addition to secondary sources, data were collected from primary sources which will be explained in the following section.

The research work is basically qualitative seeking to give an analysis of the production of English plosives by EFL students and the problems they face when pronouncing these sounds. The research work also involves an acoustic analysis of the recorded segments in addition to some statistics, tables, and charts which are the main characteristics of any quantitative study; those charts have been used only for the sake of drawing evidence of a given percentage being investigated or discovered.

Qualitative researchers, according to Merriam (2009, p. 13): "are interested in understanding human behavior and the reasons that govern such behavior, that is, how people make sense of their world and the experiences they have in the world". This research work has the advantage of being applied. Applied research, for Bickman and Rog (2009, p. 02), "strives to improve our understanding of a problem, with the intent of contributing to the solution of that problem". Its primary focus is to collect and generate data to further our understanding of real-world problems, but it can, and often does, generate new knowledge and contribute to theory. The purpose of applied research is to solve an immediate practical problem, and this is what we insisted on during our investigating.

4.3. Samples

Sample in research methodology refers to a small unit taken from a large population or a group to apply the study on it so the results can be generalized on the whole group later, for a valid reflection of the chosen samples the researcher should avoid bias when choosing his samples. Sampling is the process of choosing or selecting a few people from a larger group of the population to become the basis for estimating the prevalence of information (Yin, 2002).

The process of sampling is done in order to save time as well as financial and human sources. The sample size is also an important term in the sampling process which refers to the number of individuals from whom we obtain information (Kumar, 2014). The purpose of sampling in this qualitative research is to gain in-depth knowledge about the pronunciation errors of EFL students in the Department of Letters and Foreign

Languages, the English Section, at Tahri Mohamed University Bechar (TMUB) concerning the English plosives.

The samples involved in this research work are EFL students at TMUB. This study aims to see the way English students at TMUB pronounce stop consonants in initial positions (onset) in addition to the effects of these consonants on the vowel preceding them when they are in final positions (coda) and compare them to a native speaker's pronunciation; to find the pronunciation problems that they face; to know the effects of Arabic and French of their pronunciation; and finally to see the teachers' attitudes towards their students' pronunciation through a questionnaire.

Concerning the recordings and the interview, the participants in the present study were ten (10) Bechari speakers learning English as an FL in a formal instruction context. They were native speakers of Arabic studying at TMUB, almost all the levels: first year, third year and master students and all specialties when it comes to master students as described in the table below. The selection of participants was random. Along with these ten (10) participants, a native speaker of English was selected to be part of this research. The main aim behind this choice is that he can be a reference for correct pronunciation.

In fact, during our visit to Algiers, we went to the United Kingdom's Embassy so that we met a British citizen who came to Algiers to attend a conference, we asked him to be recorded and hopefully he accepted.

Table 4.1.Description of the Participants

Participants	Age	Gender	Level
A	23	M	Master 1
В	19	F	1 st year
C	21	M	3 rd year
D	21	F	3 rd year
E	24	F	Master 2
F	19	M	1 st year
G	24	F	Master 2
Н	24	F	Master 2
I	23	M	Master 1
J	24	M	Master 2

For the questionnaire, the participants were all teachers of English in the Departement of Letters and Foreign Languages, the English Section, at TMUB twenty (20 teachers). A Questionnaire has been designed online using Google Drive: a website that allows the user to conduct an online survey. It provides automatic calculation of the results, which can be time saving, and submits the result in the Google Drive personal account or via e-mail. Thus, this teachers' questionnaire has been sent to their personal e-mails

4.3.1. Sample Selection

There are various sampling strategies through which any researcher can select the samples s/he needs; these can be categorized into: random/ probability sampling design, non-random/non-probability sampling design, and the systematic design which has been explained before. In order to achieve random or probability sampling, each element in the study population should have equal and independent chance of selection (Yin, 2002).

The concept of 'equality' means that the choice of samples is not influenced by other considerations like education, ethnicity, social class, etc, i.e. samples are randomly selected. Similarly, 'independence' means that the choice of one element is not dependent upon the choice of another one in the sampling; that is the selection or rejection of one sample does not affect the inclusion or exclusion of others (Kumar, 2014).

The sample will not be considered as an independent sample if the selection of one is dependent upon the selection of others. In practice, there are always some people who may refuse to participate in the study, but one only needs to worry if the number is significantly large. Those who refuse to be part of the samples may have strong feelings about issues one wishes to explore, but the findings will not reflect their opinions.

The sample can only be random or probability sampling if both equality and independence are met. In contrast, non-random/non-probability sampling design is used when either the number of elements in a population is unknown or the elements cannot be individually identified. In such situations, the selection of samples is dependent upon other considerations like education, ethnic background, social class, etc (Hansen, Beard, & Hayes, 2006).

Both of random/ probability sampling design and non-random/non-probability sampling design have been used during the selection of our samples. The former design has been used when selecting the EFL students for the recordings. The two main criteria

of this design, equality, and independence, have been taken into consideration when samples were selected.

In regard to equality, the EFL students have been selected regardless of their level (first, second, third years or a master student). Samples have been also independently chosen; very few students refused to participate with us but in fact, their behaviour did not influence the other samples including their friends and colleagues. Non-random/ non-probability sampling design seems the most appropriate design for the questionnaire. The kind of data required demanded EFL teachers with a given level of experience.

The main types, as suggested by Kumar (2014) are the quota sampling, accidental sampling, judgment or purposive sampling, expert sampling, and the snowball sampling. only the last two types have been used in selecting participants for their appropriateness to our needs. "Expert sampling" requires that the samples must be already known as "Experts" in the field you are interested in; whereas the "snowball sampling" is the process of selecting samples using a network through starting with few samples or individuals from which the required data are primarily collected from them (Yin, 2002).

Afterwards, those samples will be asked to identify other people to participate and become part of the samples. The latter are also required to determine extra samples whom they know. This process continues until one gets into a saturation point of data. This technique is mainly used when there are only a few people in the group we wish to study, and the choice of the entire samples depends upon the choice of the individuals in the first stage.

Expert sampling has been used when we have intended to select people specified in the field of teaching. In the quota sampling, the researcher is guided by some visible characteristics s/he is looking for, such as gender, race, social class, etc. S/he initially selects the sample from a location convenient to him/her, then whenever s/he sees another person who has the same features as the first sample(s) s/he asks him to participate in the research. In contrast, accidental sampling does not attempt to search for people on the basis of their visible features, but the researcher stops collecting data when he reaches the required number of respondents he needs though some people contacted may not have the required data (Hansen, Beard, & Hayes, 2006).

Following the judgment or purposive sampling, the researcher goes directly to people who, in his opinion/judgment, can provide him with the data he needs and be willing to share it with him. The size of samples has not been determined before, but we

have involved as much participant as we could so as to arrive at data saturation or the data needed to make precise descriptions and draw exact conclusions.

4.4. Research Tools and Instruments

Tools, in this case, are the different required equipments to accomplish the main goal of the study. The use of different aids in this study facilitated the collection of data and helped the researcher to treat the topic of study from its different parts.

According to Glaser and Strauss (1967), research instruments fall into two different categories: qualitative and quantitative instruments. Qualitative instruments refer to the interviews, observations, note-taking. They generally rely on studying things in their naturalistic contexts in order to understand people's attitudes and behaviors. Quantitative tools, on the other hand, focus on numbers and statistics. Questionnaires are the most widespread instruments, they are considered as being objective since analyses, interpretation, and conclusions are based on statistics (Bradburn, Sudman, & Wansink, 2004).

Thus, to record the students and the native speaker a laptop and a microphone were used; for the acoustic analysis of the recorded segments a computer software package called PRAAT and the Microsoft Excel program were used; and for the statistical analysis of the questionnaire data, Google Drive provides automatic calculation of the results. The use of computer and the different statistical programs made the analysis quicker and easier, and provided many options like counting percentages, drawing graphs and comparing results.

4.4.1. An Overview of PRAAT

The introduction of the computer has brought about a virtual revolution in the linguistic sciences with respect to the usage of speech recordings. For Boersma and Heuven (2001, p. 341), "A lab full of cumbersome machinery has now been replaced by one PC, Mac or workstation, on which anyone who puts his mind to it can record, annotate and modify speech with some simple commands or a few mouse clicks". In fact, even the calculation of some speech parameters that were rather complicated to obtain in the past (like pitch and spectral analysis) but frequently used in phonetic research nonetheless, are now often just one or two mouse clicks away.

One of the software packages designed for the representation, annotation and analysis of speech is called PRAAT. It is a computer program for analyzing, synthesizing, and manipulating speech. It has been developed since 1992 by Boersma and Weenink at the Institute of Phonetic Sciences of the University of Amsterdam. PRAAT allows the user to record a sound with a microphone or any other audio input device, or to read a sound from a sound file on disk. Then, the user will be able to have a look inside this sound.

The upper half of the sound window, in the figure below, shows a visible representation of the sound (the wave form). The lower half shows several acoustic analyses: the spectrogram (a representation of the amount of high and low frequencies available in the signal) is painted in shades of grey; the pitch contour (the frequency of periodicity) is drawn as a cyan curve; and formant contours (the main constituents of the spectrogram) are plotted as red dots (Boersma & Heuven, 2001, p. 341). PRAAT is most often used with speech sounds, in which case the pitch contour is associated with the vibration of the vocal folds and the formant contours are associated with resonances in the vocal tract.

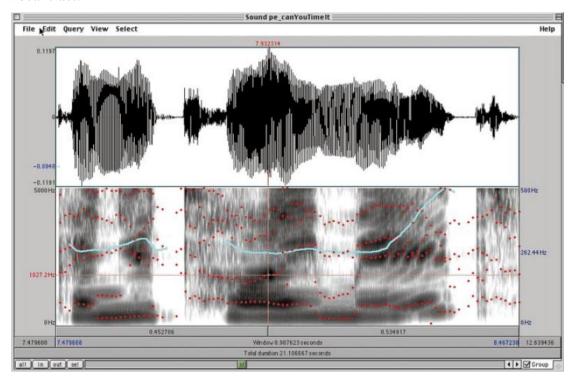


Figure 4.1. PRAAT's Sound Window²⁸

Note. From Boersma, P., & Heuven, V. (2001). Speak and Unspeak with PRAAT. In Glot

International, 5 (9/10), 341-347. Blackwell Publishers Ltd.

4.5. Data Collection Procedures

Data collection refers to the process of gathering information concerning the topic from a variety of sources, in order to get a clear, absolute idea, and an extract picture about a given study. Like any scientific or academic research, the researcher tried to vary the sources of data for more valid results. For the first three chapters, secondary data, like summarizing, paraphrasing or quoting information from other printed documents or stored on the internet was used, while observation, recordings, interviews and questionnaires were used as primary data in the research, i.e.; for gathering data, quantitative and qualitative methods have been implemented.

Therefore, this work is a mixed methods research where both qualitative and quantitative methods were used. Quantitative research deals with objectivity. In other words, by choosing this kind of research, the researcher will be able to be objective since numbers (statistics) are used for calculating the data collected. Whereas, when using qualitative research, the researcher's view of the phenomena is rather personal; s/he will use techniques such as personal accounts, unstructured interviews and participant observation so as to understand the causes behind people's attitudes, behaviours and choices (Bolderston, 2012). Thus, in this study, methodological triangulation was used.

Triangulation involves the careful reviewing of data collected through different methods in order to achieve a more accurate and valid estimate of qualitative results for a particular construct (Wiersma, 2000). It refers to the use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena (Patton, 1999). Triangulation also has been viewed as a qualitative research strategy to test validity through the convergence of information from different sources.

Methodological triangulation is designed as shown in the figure below:

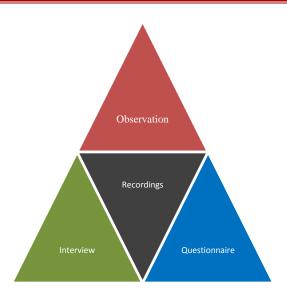


Figure 4.2. Methodological Triangulation as Used in the Study

The study's main aim is to deal with the VOT and vowel lengthening effect of plosives in initial and final positions. Thus, the most essential method in this study is the acoustic recordings. For this reason, it is placed in the middle of the triangle. Moreover, the first method used in this study was observation. The researcher started observing the students at TMUB so that she could select the elements to be recorded and could formulate the questions that should be asked to both samples namely: teachers and students.

After observing the students and teachers, as will be explained in detail later, the researcher selected the minimal pairs and started recording the students. Meanwhile, she prepared the questions for the students' interview. The aim behind interviewing the recorded students rather than providing a questionnaire was the fact that during the interview, the researcher can get information needed and more because the participants can express themselves freely without limits and they can move from one question to another non-designed question if needed based on the flow of the conversation.

Furthermore, the last method used in this triangle was the questionnaire for teachers. The questionnaire was used for two (2) basic reasons; the first one is that since the teachers have a busy schedule, it was difficult to meet every teacher for an interview; the second one is that while sending the questionnaire via e-mail, the teachers will be given enough time to think and answer the questions. These four (4) methods will be explained in detail below and they are classified as used in the study.

4.5.1. Observation

Observation, as the name implies, is a way of collecting data through observing. Observation data collection method is classified as a participatory study, because the researcher has to immerse himself in the setting where her respondents are, while taking notes and/or recording (Kawulich, 2005). Observation as a data collection method can be structured or unstructured. In structured or systematic observation, data collection is conducted using specific variables and according to a pre-defined schedule. Unstructured observation, on the other hand, is conducted in an open and free manner in a sense that there would be no pre-determined variables or objectives (Marshall & Rossman, 1995; Spradley, 1980).

In this research, observation has been done under 'natural' conditions; that is, we have observed the participants without interfering in their normal activities nor introducing some criteria so as to get a given reaction. Moreover, we have adopted both types of observation; participant observation and non-participant observation. The former refers to when the researcher participates in the activities of the group being observed in the same manner of the members, but the latter takes place when the researcher is not involved in the conversations between the groups remaining a passive observer listening and watching the interactions between the participants (Kawulich, 2005).

4.5.2. Description of the Observation

Participant observation was based on the researcher's five (5) years of experience as a university teacher. Non-participant observation has been used in formal settings; this type has been exclusively used within the EFL classrooms at TMUB. This technique is most suitable to observe the interactions of the teachers in their class and more precisely to check if they give importance to their pronunciation and also to their students' pronunciation; besides checking whether the teachers correct their students' errors and provide some help or not. We have spent one week attending some lectures with various teachers and different levels (first, second and third years; in addition to first and second year master (both specialties, i.e., Didactics and Language and Culture) at the TMUB.

In order to ensure the validity of the collected data, we have visited all the classes that were taught by various teachers except for the teachers of the French language and Law that are out of our research scope. It should be noted that we were obliged to keep

the subject of our study confidential to avoid misleading results in the sense that the teachers behave in their normal manner and interact spontaneously as they have used to do with their students.

4.5.3. The Acoustic Recordings

There are several options for recording data and several types of data one can collect. The most basic type of data consists of acoustic recordings. Nowadays linguists usually make digital recordings using a high quality microphone with a good signal-to-noise ratio connected to either a Digital Audio Tape (DAT) recorder²⁹, a minidisc recorder, or directly to a laptop computer. Minidisc recorders are considerably less expensive than DAT recorders and are fairly durable, but they rely on a signal compression algorithm that DAT recorders do not. Capturing data directly on a laptop computer is perhaps the most time-effective way of collecting data, since one ultimately must transfer data onto a computer in preparation for acoustic analysis (Gordon, 2002). For collecting or transferring data onto a laptop, there are several pieces of software used. One powerful piece of software which has the advantage of being available as a free download is the PRAAT program developed by Boersma and Weenink.

Acoustic recordings are an informative and non-invasive way of finding out about many aspects of speech. For measuring duration of a sound, it is useful to look at a waveform in conjunction with a spectrogram. A wideband spectrogram is an excellent general display which allows for segmentation of a word into individual sounds and provides information about both the time course of the utterance and the distribution of energy in the frequency domain (Gordon, 2002).

4.5.4. Description of the Recordings

The participants in this study were asked to join the researcher at the university library, specifically the American space at the TMUB which is a large room in the university library organized mainly for EFL students, to be recorded for the sake of silence. Thus, each speaker was asked to sit in front of the laptop, hold the microphone and read the words from individual cards presented by the experimenter. Cards were

²⁹ DAT (digital audio tape) is a magnetic tape on which sound is recorded digitally, giving high-fidelity reproduction.

arranged in a random order, all tokens were printed on the cards using normal English orthography. Along with these ten participants, a native participant was also chosen for the experiment to be used as a reference when comparing Arabic-accented English with native English.

Thus, to study the vowel-lengthening effect of voicing and the VOT the way it is produced by EFL students at TMUB, a list of minimal pairs was worked out for this purpose. Our informantswere asked to read randomized lists of the English words listed below from 3×5 in cards, inserting each test word into a carrier sentence:

4.5.4.1. Experiment 1: Voice Onset Time in Arabic-accented English

To ascertain whether EFL learners at TMUB aspirate the voiceless stops /p, t, k/ word-initially, a list of minimal pairs was prepared for the experiment.

Table 4.2.A List of Minimal Pairs (Voiceless Plosives in Initial Position).

/p, b/		<mark>/t, d/</mark>		<mark>/k, g/</mark>	
Putt	But	Ton	Done	cap	Gap
Pit	Bit	Tip	Dip	cot	Got

4.5.4.2. Experiment 2: The Vowel-lengthening Effect of Voicing

To study the vowel-lengthening effect of voicing the way it is produced by Algerian EFL students, a list of minimal pairs was worked out for such purpose.

Table 4.3.A List of Minimal Pairs (Stops in Final Position).

<mark>/p, b/</mark>		<mark>/t, d/</mark>		<mark>/k, g/</mark>	
Cap	Cab	Bit	Bid	Buck	Bug
Rip	Rib	Kit	Kid	rack	Rag

These minimal pairs include words in which the voiced stops of English and their voiceless counterparts occur in final position; in addition to words where voiced and voiceless stops, which are all considered to be an aspirated variants, occur in initial position. Subjects are not familiarized with the words and prompted to produce the words without actually being told what they are. Each testing session began by having the subject read aloud a set of English stop-initial words and stop -final words containing either of two voiced and voiceless consonants. Thus, the VOT and the effect of voicing on the preceding vowel can be clearly and precisely measured.

The same process was carried out with the native speaker. Concerning the native speaker recordings, since it was necessary to use them as a reference for correct usage, we thought that we should record a Standard British accent which is interpreted by many British linguists and sociolinguists (McMahon, 2002; Trudgill, 2001), as the model accent in an English Language Teaching (ELT) and especially in an English as a Foreign Language (EFL) perspective, where British English is used as the TL. Thus, it was difficult to find a British native speaker; the plan was to travel to the United Kingdom (UK) to do the recordings; fortunately, we met a British native speaker originally from London at the UK Embassy in Algiers and he accepted to be recorded. Thus, we waited for the room to be empty for the sake of silence and then we asked him to sit in front of the laptop, hold the microphone and start reading the sentences from cards.

Then, acoustic analysis was performed using PRAAT. The VOT of stop consonants and the duration of each vowel were determined from waveform displays and wideband spectrograms of recorded speech tokens.

4.5.5. The Students' Interview

An interview is a common method of data collection which focuses on a face to face conversation or person to person interaction, though the telephone can be used in some cases. Interviews can be a series of questions that a researcher addresses personally to respondents i.e. s/he participates himself through addressing questions and recording answers; as they can be submitted individually or within the group. Such method has been also used during the process of data collection (Bolderston, 2012).

For the fact that an interview is more time consuming than a questionnaire, it has been decided to adopt it with a limited number of participants mainly with the students who were recorded, basically ten (10) students. A group interview has been used to collect data. The latter helps us to speak about many complex and contradicted issues as it allows us to save time rather than individual interviews with each student where we need to spend a given time with each interviewee. In fact, there are three types of interviews: structured, unstructured, and semi-structured interviews (Kumar, 2014).

Unstructured interviews are interviews that take place with few, if any, interview questions. They often progress in the manner a normal conversation would, however it concerns the research topic under review. It is a relatively formless interview style that researchers use to establish rapport and comfort with the participant, and is extremely helpful when researchers are discussing sensitive topics (Burn, 1994).

Structured interviews are interviews that strictly adhere to the use of an interview protocol to guide the researcher. It is a more rigid interview style, in that only the questions on the interview protocol are asked. As a result, there are not a lot of opportunities to probe and further explore topics that participants bring up when answering the interview questions.

4.5.6. Description of the Interview

A Group interview was used in collecting data from the students; since the latter reduce the possibility of incomplete answers or unanswered questions because ambiguous questions have been clarified immediately; moreover, the students' own words have been recorded. Thus, the interviews has been addressed through prepared questions, i.e. interview schedule or interview guide which are regarded as research tools or talking directly to the interviewee leading him to say all what s/he knows about the main issue.

Thus, in this research study, only one type of interview was used, semi-structured interview, which is a mixture between the techniques of both structured and unstructured interviews. We have once asked pre-planned questions then added, changed and sometimes omitted some needless questions. We also let some interviewees say whatever they want.

The interview schedule involved various questions:

- 1. Do you find the English language difficult to learn specifically pronunciation?
- 2. How would you describe your level in spoken English?
- 3. Which skill do you believe is the most important to master?
- 4. Do you feel afraid to talk in the classroom? If yes, what are the reasons behind such a fear?
- 5. How often do you practice pronunciation activities in the classroom?
- 6. Do your teachers correct your pronunciation mistakes and give feedback?
- 7. Do your teachers ask you to check words in the dictionary to read their phonetic transcription?
- 8. Do you believe that your pronunciation is affected by French to a certain extent?
- 9. What would you suggest for EFL students to do in order to have a better pronunciation?

At the end of the recording session that was held on the English Shelf at the TMUB, which consists of English books and dictionaries, chairs, tables and internet connection, the interview took place, we asked the participants to choose any kind of sitting arrangement they like. Thus, they organized the chairs in a semi-circle or horseshoe. The latter offers a modified roundtable setup where all participants face each other. Besides, the horseshoe encourages discussion between interviewer and the interviewees in that they can exchange ideas and views. Generally speaking, the interviewees were happy to talk with us as we have ensured for them anonymity and confidentiality.

4.5.7. The Teachers' Questionnaire

A questionnaire is a list of questions prepared by the investigator who cannot be part of this process, and who has to select the questions and the items carefully and should avoid double questions. Questionnaire consists of a set of questions presented to a respondent for answers. The respondents read the questions, interpret what is expected and then write down the answers themselves (Burn, 1994).

The difference between schedule interviews and questionnaires is that the former requires the participation of the interviewer who asks the questions himself and records the answers, whereas in questionnaires respondents record or write the answers themselves. Moreover, since there is no explanation to the meaning of questions to respondents (because the investigator is not with them), the questionnaires must be clear and easy to understand (Kumar, 2014). It is important also to exclude any personal question; i.e. names, and specific details about the respondents. Questionnaires are two types: Closed questions and Open-ended questions.

Closed questions also called: yes/no questions, and multiple choice questions are less time consuming to complete and easier to analyze, they also have higher responses; but they restrict the responses as the respondent may not find the answer he wants to select in multiple choice questions, they lead the respondents not to give additional information, and need insurance. Whereas, open-ended questions or w/h questions, where people can answer freely and express their opinions using their own words; they are useful for collecting wealth information; but they take much time to complete and are difficult to analyze, i.e. data analysis is more complex.

A questionnaire can be addressed in a number of ways such as: first, collective administration, where the researcher seeks to obtain audiences such as students in classroom, people attending a conference, participants gathered in a given place, etc and give them his questionnaires; second, the online questionnaire, where the researcher post his questionnaire in a website so that everyone can access to it and those who are interested in the topic they can participate and answer the questions; and finally the mailed questionnaire where the researcher sends the questionnaire by mail to his respondents.

At the level of methodology, the way of asking the questions determines the number of responses. Therefore, our questions have been effectively formulated through using simple and clear sentences which can be understood by all respondents. Ambiguous and too long questions have been excluded along with the leading questions whose structure leads the respondent to answer in a certain direction. And at the top of these, we have tried to make our questionnaires as short as possible as the model which the appendix shows.

4.5.8. Description of the Questionnaire

In this research study, a mailed questionnaire was used. Thus, the questionnaire was directed to the English teachers at TMUB (see Appendix A). The latter was sent to twenty (20) English teachers' e-mails, since the teachers are our colleagues, it was easy for us to reach their e-mail addresses. The questionnaire was meant to find out (1) the common pronunciation problems that students at TMUB face, (2) the effects of the dominant Language, Arabic, on the acquisition of English sounds by TMUB's students, (3) the effects of the first foreign Language, French, on EFL learners at TMUB, and (4) the attitudes of EFL teachers at TMUB towards their students' pronunciation, i.e, VOT and vowel duration.

Our questionnaire involved a list of questions which were selected carefully and appropriately, they have been designed to meet the demands of the research questionnaire. Since there is no possibility to explain the meaning of the questions to respondents, and since questionnaires do not require the participation of the investigator, we have attempted to make them as clearer and easier as possible. The questions involved both closed questions and open-ended ones. Closed questions are yes/no questions and multiple-choice questions which were less time consuming to complete by the respondents and easier to analyze by us. They have also higher responses though they missed insurance and restricted the responses of the respondents who might not be able to give additional information. Open-ended questions are all kinds of 'wh' questions. In contrast to the former, these questions allowed the participants to answer freely and express their opinions using their own words. They were beneficial and more useful for collecting a wealth of information; though they took much time to complete and were hard and difficult to analyze, i.e. data analysis was more complex.

Both open-ended and closed questions have been used in the same questionnaire and we have put the appropriate type of question according to the kind of information we intended to elicit. When we were in need of limited and factual information, we have selected the closed questions, but when we sought for more information about opinions and attitudes we have adapted the open-ended ones.

The questionnaire is divided into three sections namely: background information, the importance of pronunciation in EFL teaching and teachers' attitudes towards students' pronunciation. The first section includes three (3) questions, mainly the participants' gender, the degree held and their teaching experience. Thus, it seeks to know some

background information about the teachers. The second section which aims at examining the importance of pronunciation in EFL teaching includes six (6) multiple choice questions, three (3) of them were composed of two parts to get more information; the first question seeks to know whether the EFL teachers believe in the importance of pronunciation in the students' language competence The second question is about whether they focus on pronunciation in their lessons and the reason behind this focus; the third one is about integrating some pronunciation tips during other lessons and here they were asked about the reason behind integrating pronunciation in any lesson.

In the fourth question, the teachers were asked about the frequency of correcting the students' errors. In the fifth question, the teachers were asked whether they look for the reasons that lead their students to errors or mispronunciations, here some choices were provided such as: lack of practice, the disability to read phonetic transcription, the interference of French language and other; the last question in this section was a w/h question that seeks to know the strategies or the techniques that the teachers use in the classroom to help their students improve their pronunciation, thus some choices were provided like: teaching students how to use the dictionary, using listening tracks or videos in classroom, and teaching them phonetics and phonology.

The third section also consists of six (6) multiple choice questions that are concerned with the attitudes of EFL teachers at TMUB towards their students' pronunciation; in addition to the effects of the dominant Language, Arabic, and the second language, French, on the acquisition of English sounds by TMUB's students. The aim behind this section is to see the strategies and methods used by the teachers to improve their students' pronunciation. The first question is about whether the teachers are satisfied with their students' level in pronunciation, in the second question they were asked about the amount of time they spend in improving their students' pronunciation in addition to the way they do this either by asking the students to check the phonetic transcription of new words or by giving them some rules of connected speech such as assimilation, elision and linking; the third one is a w/h question that is meant to know the problems the teachers face when teaching pronunciation, thus some choices were provided like: the disability to understand the students for their poor pronunciation, and the students' pronunciation is highly influenced by Arabic or French; the fourth question is about the students' motivation to pronounce correctly; the fifth and sixth question are open-ended question where the teachers are allowed to answer freely and express their opinions in their own words: the fifth question is about whether they focus on accuracy or fluency in teaching and the reason behind their choice and the sixth question seeks to know the teachers' suggestions concerning the methods that EFL teachers should use in the classroom to improve the students' pronunciation.

4.6. Limitations of the Study

The purpose of this study was to identify and analyze pronunciation difficulties experienced by Bechari EFL students at TMUB regarding certain English consonant phonemes. The variables of the study were limited to only English plosives in initial position to study the VOT and in final position for the vowel duration variation.

Researchers are sometimes interrupted by a number of obstacles such as the lack of sources, inappropriate techniques of data collection, or the unavailability of methods of data collection. During our investigation, there was no lack of secondary sources; but the problem lies, in fact, at the level of the primary sources of data collection as well as their instruments. One of the most crucial problems that we faced in the recordings is that the majority of the EFL students at TMUB refused to be recorded or interviewed.

Another problem faced by the researcher is related to the analysis of the recordings. As mentioned earlier in this chapter, twenty four (24) utterances were recorded from each participant in the study, i.e., the ten (10) EFL students at TMUB and the native speaker. Thus, the number of recorded utterances was 264. In fact, the researcher spent a very long period of time analyzing the recorded utterances; first by taking only the essential words namely the minimal pairs; then by selecting the VOT and the vowel length. This procedure is complicated; sometimes the selection of the VOT or the vowel length is done several times until we reach the possible correct mean value.

During this study, there were also some obstacles concerning the teachers' questionnaire that made the process of gathering data more difficult. As mentioned earlier, twenty (20) questionnaires were sent to all the teachers' e-mails at TMUB; however, only fifteen (15) answers were provided. In fact, in order to get all twenty responses, we printed the questionnaire; we made copies and distributed them again to the teachers but unfortunately those teachers who did not answer their mailed questionnaire did not answer the printed one claiming that they are not specialized in teaching phonetics and phonology. Thus, they argued that they cannot provide answers since this is not their field of study.

4.7. Conclusion

Methodology gave a powerful framework to this study; it enabled the researcher to accomplish the designed aims, also made the study more valid and academic. The use of tools and instruments has been very rewarding on the study, and helped to put the study case under investigation and analysis.

To conclude, the present chapter presented the methodology of the work. It provided an overview of the research design and the research instruments used in collecting data. Furthermore, it provides a description of teachers' questionnaire and students' interview to know their opinions about the different pronunciation problems while using the English language, as well as the description of classroom observation about the common pronunciation errors made by EFL students at TMUB. In addition to that, it supplies a description of the recordings in order to identify the VOT and the vowel lengthening effect of English plosives as produced by EFL students at TMUB.

Thus, this chapter gave a detailed description of how, where, and why these methods were used and how did they help the research work in gaining information. This research work moves from the general fact to the most special one. Therefore, this chapter is an introduction to the following chapter which deals with the results and the analysis of both the recordings and the questionnaire.

In the next two chapters, results and analysis of the collected data will be discussed in detail along with tables and graphs. The main aim behind dividing the analysis into two basic chapters is that chapter five will deal with the results and discussion of the students as participants, i.e., the acoustic analysis of the recordings and the interview and chapter six will deal with the teachers as participants through analyzing classroom observation and the way teachers deal with pronunciation errors within the classroom and the questionnaire results.

Chapter V

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5.1. Introduction

This chapter is devoted to setting out the results and the interpretation and discussion of the acoustic analysis of the participants' recordings along with students' interview. It starts with an interpretation of the results followed by a comparison of the study's finding with previous ones. The research questions posed in this study will be answered according to the findings.

In analyzing the phonological features of the speech of EFL students at TMUB, specifically VOT and the vowel lengthening effect of voiced consonants, different methods are used such as: acoustic recordings, interview and questionnaire. Participants, EFL students at TMUB, were observed and then requested to be recorded and interviewed. Besides, EFL teachers were asked to fill in a questionnaire about their attitudes towards their students' pronunciation. This chapter is meant also to analyze the students' production using PRAAT and their views concerning pronunciation through the interview results.

5.2. Results of the Recordings

Acoustic analysis, a method used primarily within the domain of phonetics, has become an increasingly necessary skill across the field of linguistics. The analysis of acoustic signals is mainly performed with the help of generally available software. Because of its capability of creating publication-quality graphics, the pictures in this chapter were made with PRAAT (Boersma & Weenink, 2007), a general set of tools for analyzing, synthesizing and manipulating speech and other sounds bundled into a single integrated computer program.

As mentioned in the previous chapter, a list of minimal pairs was selected for this study, i.e. twelve (12) words for VOT and the rest for vowel lengthening effect. The number of possible productions for each participant was therefore twenty four words. The number of possible productions for the entire study was 264 items. The target words themselves were chosen so that the participants would be familiar with.

5.2.1. Voice Onset Time in Arabic-Accented English

As defined in the first chapter of this thesis, VOT is the time between when the stop is released and when the voicing of the following vowel begins. Measuring this time can be positive for the English voiceless aspirated stops, around zero (0) for the English voiced stops, or negative for fully voiced stops, where voicing starts before the stop is released, as found in most non-English languages. Languages classify their stops largely based on VOT, and it is an excellent, more gradient empirical measure of the "voiced/voiceless" phonological distinction (Abramson & Whalen, 2017).

Measuring VOT is easy to do in PRAAT, as it is just a duration measurement between two set points, the release of the stop and the start of voicing. If the start of voicing came before the stop release, the VOT is negative. Otherwise, the VOT is positive. In general, voiced sounds (in languages other than English) have a VOT which is negative, voiceless unaspirated sounds have a VOT which is around 0, and aspirated sounds have a positive VOT. In this chapter, results of the participants recorded sentences were analyzed through PRAAT as shown in the figure below:

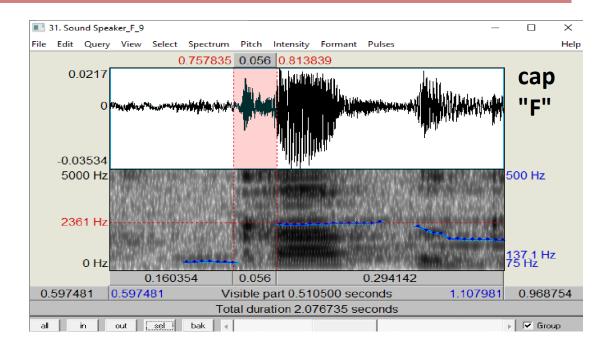


Figure 5.1. Voice Onset Time of the Voiceless Velar /k/ by Speaker 'F'

In figure 5.1, the mean of the VOT is 0.056; that is to say, the time between the burst and the start of periodicity (or voicing) is 56 Milliseconds. Even the computer's guess is around 56 ms and it is shown through the blue lines since all consonants can be counted by these blue lines. Table 5.1 below shows the VOT mean of the participants.

It is known that, in word-initial position, English voiced stops are voiced or voiceless and unaspirated, and that voiceless stops are voiceless and aspirated (Keating, 1984). Although there are two possible phonetic implementations of English voiced stops, Keating (1984, p. 290) indicates that "English divides up the VOT continuum with some lead values but mainly short lag vs. long lag". In Lisker and Abramson (1967), VOT measurements occurring before the release burst are assigned negative values and called *voicing lead*, while VOT measurements occurring after the release burst are assigned positive values and called *voicing lag*. Lisker and Abramson (1967) also provide two sets of values for English voiced stops (VOTs with lead and with short lag) and suggest that only a single type is produced by each native speaker. Based on the distinction of Keating (1984) and Lisker and Abramson (ibid), English is described as having, in general, short lag and long lag VOT patterns.

Lisker and Abramson (*ibid*) examine eleven (11) languages³⁰ and classify them into three (3) groups according to the number of stop categories each language contains. They also suggest that each stop category falls into one of three ranges, –125 to –75 ms, 0 to +25 ms, and +60 to +100 ms, respectively (Lisker & Abramson, ibid). Cho and Ladefoged (1999) go into further detail and classify the range for voiceless aspirated and unaspirated occlusives, concentrating particularly on velar stops across 18 languages. They distinguish four categories, which they name unaspirated stops with a mean VOT of around 30 ms, slightly aspirated with a mean VOT of around 50 ms, aspirated with a mean VOT of over 90 ms.

Table 5.1

VOT Mean of English Plosives by the Ten (10) Speakers

Words	A	В	C	D	E	F	G	Н	I	J
Putt	0.059	0.014	0.021	0.019	0.040	0.032	0.038	0.023	0.059	0.048
But	0.009	0.011	0.011	0.012	0.008	0.014	0.020	0.013	0.039	0.029
Pit	0.020	0.014	0.018	0.045	0.058	0.076	0.013	0.024	0.022	0.032
Bit	0.018	0.008	0.009	0.013	0.010	0.012	0.014	0.010	0.012	0.013
Ton	0.054	0.025	0.042	0.046	0.058	0.043	0.057	0.061	0.073	0.037
Done	0.022	0.011	0.028	0.017	0.014	0.028	0.025	0.016	0.062	0.016
Tip	0.042	0.030	0.037	0.058	0.040	0.058	0.056	0.054	0.047	0.024
Dip	0.016	0.013	0.029	0.015	0.016	0.031	0.028	0.024	0.015	0.012
Cap	0.045	0.040	0.056	0.047	0.047	0.058	0.037	0.025	0.045	0.055
Gap	0.040	0.019	0.028	0.028	0.031	0.022	0.028	0.016	0.040	0.031
Cot	0.059	0.079	0.049	0.053	0.039	0.017	0.040	0.052	0.059	0.065
Got	0.058	0.031	0.031	0.031	0.024	0.021	0.025	0.019	0.051	0.045

Based on the results of the study, it can be noticed that there is a difference in the mean of VOT of voiceless consonants /p, t, k/ and the voiced counterpart /b, d, g/. For instance; for 'Putt' the VOT is 59 ms and for speakers 'A' and 'I' which means that the

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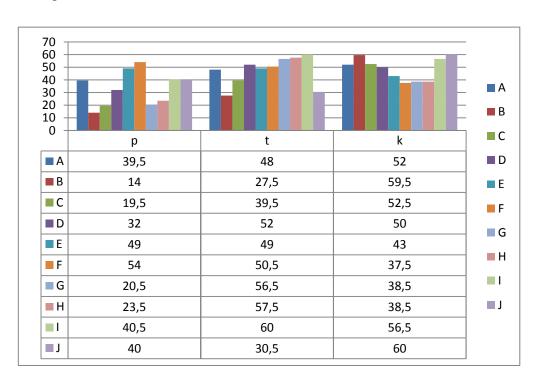
³⁰ The eleven languages that were examined fall into three groups according to the number of stop categories: (I) two-category languages: American English, Cantonese, Dutch, Hungarian, Puerto Rican Spanish, and Tamil; (2) three-category languages: Korean, Eastern Armenian, and Thai; (3) four-category languages: Hindi and Marathi.

/p/ sound is slightly aspirated and for 'but' it is 09 ms for speaker 'A', 11 ms for speakers 'B' and 'C' and 20 ms for speaker 'G'; these results show that the /b/ sound is not aspirated and that it is produced correctly to a certain extent.

It can also be noticed, as shown by the red circles, that some of the participants cannot differentiate between voiced and voiceless stops in their production. Accordingly, for some words, there is a slight difference between voiced and voiceless consonants like 'Cot' 59 ms and 'Got' 58 ms for speaker 'A', 'Ton' 73 ms and 'Done' 62 ms for speaker 'I' and 'Cap' 45 ms and 'Gap' 40 ms for speakers 'A' and 'I'.

Moreover, from the highlighted results, it can be noticed that some speakers produce voiceless aspirated stops with a mean less than 30 ms which is in opposition with Lisker and Abramson's (1964) categorization. Besides, they used to produce the voiced unaspirated stops with a mean more than 30 ms; for instance, for the word 'Got', the VOT of the /g/ sound is 58 ms for speaker 'A', 51 ms for speaker 'I' and 45 ms for speaker 'J'. In fact, none of the speakers have produced highly or fully aspirated voiceless stops where the VOT mean is around 90 ms.

Furthermore, the mean VOT value for /t/ is slightly higher than that for /p/, which conforms to the general agreement that the further back the place of articulation, the longer the VOT. However, the difference between /p/ and /t/ does not reach significance. This concurs with Rochet and Fei's (1991) finding that the mean VOTs for /p/ and /t/ do not differ significantly from each other. Consequently, VOT distribution for all stops is shown in Figures 5.2 and 5.3 below.



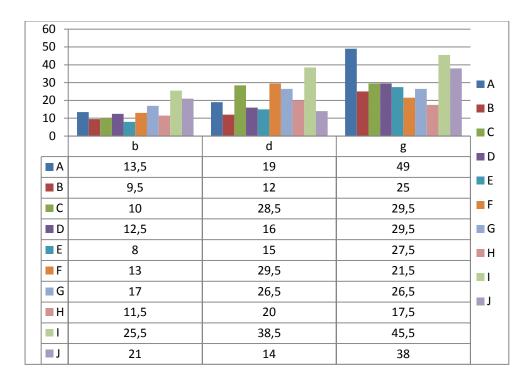


Figure 5.2. Voice Onset Time Distribution for Voiceless Stops /p, t, k/

Figure 5.3. Voice Onset Time Distribution for Voiced Stops /b, d, g/

As the figures indicate, the VOT ranges for voiceless aspirated /p, t, k/are 14-54 ms, 27.5-60 ms and 37.5-60 ms, respectively. However, it is clear that the VOT distribution for /k/ tends to be higher in the range. As for voiced unaspirated stops, the VOT ranges for /b, d, g/ are 8-25.5 ms, 12-38.5 ms and 17.5-49 ms, respectively. VOT distribution is also higher in the range of 17.5-49 ms for /g/ and.

These results agree with previous studies in English which revealed that voiceless plosives /p/, /t/, /k/ have longer positive VOT in the range of 30 to 100 milliseconds and voiced plosives /b/, /d/, /g/ showed shorter positive VOT in the range of 0-25 milliseconds (Lisker & Abramson, 1964). Besides, VOT values differ according to the place of articulation and voicing. For example, velar plosives show the longest VOT among the three primary (bilabial, alveolar, velar) places of articulation, and VOT is longer in a high vowel context than in a low vowel context. Koenig (2000) reported that the VOTs of the voiceless plosives were shorter for the bilabial plosive /p/ than the alveolar plosive /t/ and velar plosive /k/, with no significant differences among /t/ and /k/ VOTs.

In addition to that, these results also agree with Ghlamallah's (2017) findings about common deviations in English consonants by EFL students at the University of Oran.

According to Ghlamallah (ibid), the participants did not have difficulties in the articulation of the two voiceless plosives /p/ and /k/. However, when it comes to their contextual realizations, the participants did not produce the English allophonic processes. Moreover, she noticed that, concerning the voiceless alveolar plosive /t/, the participants tend to articulate it either as a voiced plosive [d] or as a dental one.

5.2.2. Voice Onset Time Gender Differences

Combined mean values of voiced and voiceless plosives of males and females are shown in the figure (5.4) below. T-tests, with the tails 2 and type 2, are performed to see the significance of the difference, using the standard (p <0.05). It is apparent from the figure that males had higher mean VOT than females in voiceless plosives, there is a significant difference by the t-test (p<0.05) observed across gender. In fact, the ratio of voiceless plosives is 40.73% for females and 45.16% for males; whereas, the ratio of voiced plosives is 18.26% for females and 25.06% for males; this difference is 0.03 which is less than 0.05 p value, and so it means it is significant by t-test (p<0.05).

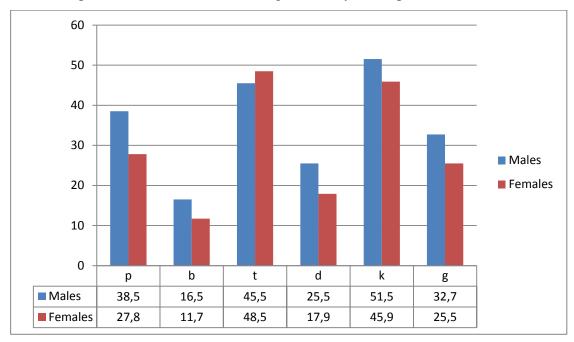


Figure 5.4. Voice Onset Time Values of Males and Females

Based on the results above, the participants produce a significantly different VOT's in aspirated voiceless plosives due to their gender. The VOT's of voiced, unaspirated plosives produced by females were smaller than in the male productions. Furthermore, the analysis shows a significant gender difference in VOT for the voiced/voiceless plosives uttered by the participants; in other words, male speakers produced voiced/voiceless

plosives with somehow a longer VOT interval than female speakers with a significant difference. The results are consistent with data from previous studies investigating gender and age differences in VOT (Koenig, 2000; Karlsson, Zetterholm & Sullivan, 2004).

Karlsson, Zetterholm and Sullivan (ibid) suggest that gender difference in VOT for the voiced plosives might be an effect of an airflow differences during plosive articulation. For them, a larger degree of oral airflow at plosive release may be due to a larger oral pressure being built up during the preceding closure. This would in effect create a reaction force to the pressure from the lungs, which in turn would decrease the likelihood of a rapid voicing onset in the plosives produced with a more powerful airflow (2004). In contrast, female uttered plosives, which were shown by Koenig (2000) to be produced with a relatively weak airflow at plosive release, would influence voicing onset time to a lesser extent, thus increasing the likelihood of a voicing onset relatively soon after the release of the plosive, causing a smaller mean VOT value.

5.2.3. The Vowel Lengthening Effect of Voicing

Length is the phonological correlate of durational differences between sounds, tied to the phonological concept "quantity." The concept of length usually considers duration segmentally, attributing length to particular segments (the vowel or consonant is the locus of the property "long" or "short," and not the syllable, foot, or word) (Odden, 2011). Length being a phonological attribute, distinctions are discrete mental categories, not physical measurement, and, like most phonological attributes in generative theories, length is traditionally treated binarily.

In addition to distinguishing short and long vowels, the complex vowel system shows a phonemic contrast between modal, breathy or aspirated, and glottalized or creaky vowels (Lisker & Abramson, 1964). In general, vowel duration can be influenced by many factors, such as vowel position and the number of syllables in a word, vowel quality, and the following consonant, among others.

This study examines only one factor namely the effect of the following consonant; thus, a list of minimal pairs containing one syllable words; these words consist of an onset, a peak which is a short vowel, and a coda which can be one of the plosives, the voiced and the voiceless counterpart /p, t, k, b, d, g/.

Accordingly, the well-known vowel length alternation that is observed before voiced vs. voiceless consonants is the most common and the most robust when the

consonants in question are coda consonants and when the syllable in question is phrase-final. This study aims at showing whether EFL students at TMUB make a difference in vowel length when producing words ending with voiced vs. voiceless plosives. As mentioned in the methodology, in doing the analysis, PRAAT was used. Figure (5.4) below is an example of how the vowel length is shown in acoustic analysis:

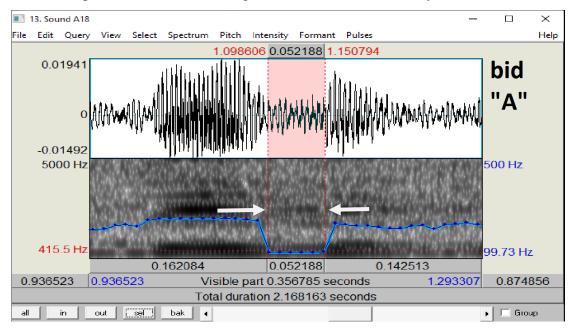


Figure 5.5. Vowel Lengthening Effect of the Voiced Alveolar /d/ by Speaker 'A'

As can be seen in the figure, duration of vowels was measured separately for each production by bringing up the parsed wave files in a window. The vowels were identified based upon the regularity of the waveform and vertical striations and formants on the spectrograph. The duration of vowel was measured for the first word 'Bid'. The vowel onset and offset were marked on the acoustic waveform by visual inspection. The vowel onset was defined as the first cycle where periodicity began and offset was marked as the end of the last cycle before periodicity ended as displayed on the acoustic waveform.

The areas between the onset and offset were highlighted and played back by the examiner to confirm that the highlighted portion of the waveform included the entire duration of vowel. The duration between the two cursor marks was taken as the duration of vowel for the production of 'Bid'. In other words, the space between the dark places, namely consonants, is the vowel length and it is also shown through the blue line. The latter was straight in the production of the onset, which is a voiced bilabial consonant /b/; then, it was lowered down when producing the short vowel /i/; this phase took 52 ms; after that, it was raised again to produce the voiced alveolar consonant /d/.

Table 5.2

Vowel Duration Variation Mean of English Plosives by the Ten (10) Speakers

Words	A	В	C	D	E	F	G	Н	I	J
Cap	0.048	0.058	0.057	0.052	0.078	0.097	0.069	0.129	0.054	0.110
Cab	0.049	0.065	0.075	0.071	0.100	0.107	0.076	0.233	0.066	0.130
Rip	0.049	0.030	0.046	0.050	0.082	0.095	0.072	0.120	0.042	0.100
Rib	0.054	0.070	0.053	0.073	0.089	0.084	0.048	0.110	0.076	0.120
Bit	0.069	0.047	0.026	0.051	0.044	0.075	0.032	0.093	0.059	0.059
Bid	0.052	0.054	0.027	0.065	0.098	0.035	0.047	0.115	0.069	0.075
Kit	0.056	0.044	0.040	0.083	0.044	0.065	0.037	0.095	0.072	0.073
Kid	0.068	0.052	0.040	0.075	0.084	0.049	0.032	0.077	0.081	0.095
Buck	0.063	0.071	0.047	0.057	0.050	0.086	0.042	0.070	0.047	0.047
Bug	0.067	0.070	0.035	0.055	0.066	0.096	0.047	0.074	0.059	0.047
Rack	0.067	0.053	0.051	0.035	0.057	0.071	0.054	0.058	0.053	0.045
Rag	0.081	0.071	0.064	0.053	0.073	0.056	0.057	0.064	0.067	0.054

As mentioned earlier, vowel duration may serve linguistic functions differently in different languages. In certain languages, meaningful difference may be associated with the change in the duration of a consonant or a vowel. Vowel duration can be used to signal the stressed syllable, mark the word boundaries, and identify the syntactic units and to distinguish between similar phonetic segments (Lisker & Abramson, 1964).

In some languages, changes in the duration of a sound may be determined by the linguistic environment and may be associated with preceding or following segmental sounds, initial or final position of an utterance, or type and degree of stress. Such durational changes in turn may become cues for the identification of the associated phoneme or pattern of productions (Keating, 1984).

In the table 5.2 above, as highlighted, some speakers fail in lengthening the vowel preceding a voiced consonant; they actually pronounce the vowel in the pair consisting of the voiced and voiceless counterpart in the final position with almost the same length; for instance, for speaker "C", the mean value of duration of the vowel is 40 ms. for both 'Kit'

and '**K**id'; besides, for speaker "J", the mean value of duration of the vowel is 47 ms. for both '**B**uck' and '**B**ug'.

In other cases, there is only a slight difference in the mean of vowel length when it is followed by the voiced plosive or its voiceless counterpart. For example, the mean value of duration of the vowel in 'cap' is 48 ms. whereas for 'Cab' it is only 49 ms. i.e., 0.001 as a difference for speaker "A". Accordingly, for speaker "C", the mean of vowel length in 'Bit' is 26 ms. and in 'Bid' it is 27 ms.

Moreover, the majority of the speakers lengthened the vowel before the voiceless plosive as in 'Rip' and 'Rib'. For speakers "F", "G" and "H", the mean value of duration of the vowel in 'Rip' are 95 ms., 72 ms., and 120 ms. Whereas, the mean value of duration of the vowel in 'rib' for the same speakers are 84 ms., 48 ms., and 110 ms. respectively. Furthermore, the same problem is applied by speakers "B", "C" and "D" when producing 'Buck' and 'Bug'; the mean values of duration of the vowel here are 71 ms., 47 ms., and 57 ms. for 'Buck'. However, the mean values of duration of the vowel by the same speakers for 'Bug' are 70 ms., 35 ms., and 55 ms. respectively.

In fact, vowel durations of vowels in the context of voiceless stop consonant were significantly lower than durations of vowels in the context of voiced stop consonants for speakers "E" and "I". The results of the current study in terms of differences in vowel duration between voiced and voiceless contexts are in consonance with studies done in English (Peterson & Lehiste, 1960). Peterson and Lehiste (1960) state that the duration of vowel with any intrinsic nucleus duration, changes according to the following consonants. They classify vowels into tense and lax and stated that this feature was dependent on the manner and voicing of following consonants. Vowel lengthening as a function of voicing of following consonant has been postulated as a language universal phenomena. Further the quantity of this effect is thought to be determined by language specific phonological structure. Chen (1970) observed differences in the duration of vowels in voicing contexts in four different languages namely French, Russian, Korean and English. In the four languages investigated, all four showed similar pattern of vowel lengthening for voicing contexts, but the effect was found to be varying among languages.

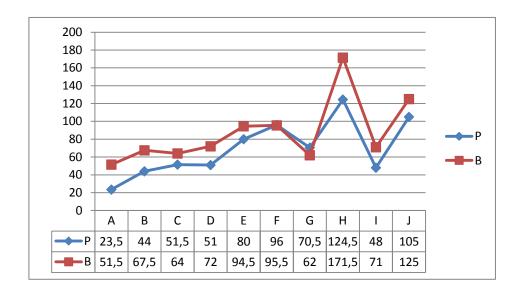


Figure 5.6. Vowel Duration of /p/ vs. /b/

As can be noticed in figure (5.6) above, the majority of the participants succeeded in lengthening the vowel when followed by a voiced plosive and making a difference in vowel length when followed by the voiced versus voiceless plosive.

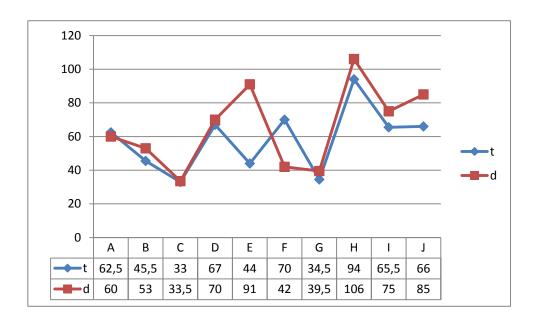


Figure 5.7. Vowel Duration of /t/ vs. /d/

In the figure (5.7) above, it can be noticed that the participants face difficulties in distinguishing between both sounds concerning the effect of the plosive on the vowel

length. For instance, speakers 'A', 'C' and 'G' provided almost the same length for the vowel when followed by a voiced versus voiceless alveolar plosive. Moreover, for speaker 'A' the vowel is even longer when followed by a voiceless alveolar plosive /t/ than its voiced counterpart /d/.

These results disagree with Flege's (1992) study of the four experiments, all of which focused on vowel duration, assessed Chinese subjects' production and perception of the contrast between /t/ and /d/ in the final position of English words. He found that the non-natives who learned English in childhood closely resembled native speakers in all four experiments. Three groups of non-natives who had learned English as a second language in adulthood, on the other hand, differed from the native speakers. The late learners produced significantly longer vowels in words ending in /d/ than /t/. In the case of our study, all the participants are considered as late learners but the majority of them failed in lengthening the vowel when followed by the voiced alveolar plosive /d/.

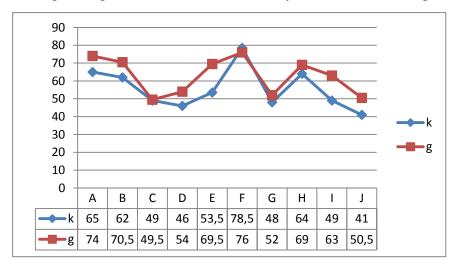


Figure 5.8. Vowel duration of /k/ vs. /g/

As can be noticed in figure (5.8), there is a difference in the duration of the same vowel in different position. That is to say, when the vowel is followed by voiced velar plosive, it is longer in duration than when it is followed by a voiceless one except for some speakers. In some examples, the speakers fail in keeping this difference; consequently, they either produce the voiceless and the voiced counterpart with the same mean length by speakers 'C' or higher than the voiced one by speaker 'F' as showed in figure (5.8). Flege (1992) and Mitleb (2009) explained this fact by saying that English voicing in syllable final position tends to be decided on the basis of voicing effect on

preceding vowel duration whereas Arabic does not show this timing property of voice contrast.

5.2.4. Vowel Duration Variation Gender Differences

When we compare the results of males and females in our study, we can notice that females produced duration of vowels significantly longer than that of males. The ratio of vowel length by females of voiceless plosives is 61.6% and the one of voiced plosives is 75.4%; whereas, the ratio of vowel length by males is 60.6% for voiceless plosives and 67.7% for voiced plosives (see figure 5.9 below).

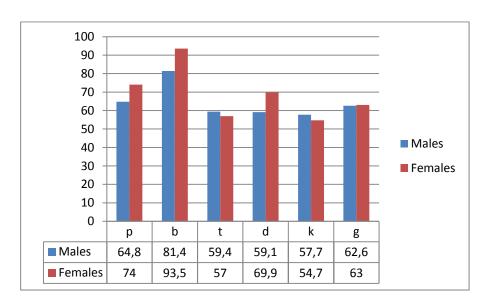


Figure 5.9. Comparison between Males and Females Vowel Duration

Thus, female vowels were always longer than male, and the difference was significant for all vowels leading to the conclusion that females used greater durational contrast when compared to males. These results are in accordance with Simpson (2001) and Prusty and Venkatesh (2012). They found that the productions by female speakers were found to be longer than the productions by male speakers in different age groups. The possible explanations for such a difference have been based on sociophonetic aspect that female speakers speak more clearly (Simpson, 2001; Prusty & Venkatesh, 2012). This was attributed to the use of less reduced forms by female speakers.

5.3. Discussion of the Acoustic Analysis

As mentioned in the previous chapter, in order to get a clear analysis of the recorded data in terms of the measurement of VOT and Vowel lengthening effect, a native speaker was also recorded. Thus, in the following part, a comparison between the production of the ten (10) participants and the native speaker concerning the VOT and the vowel duration variation is provided.

5.3.1. Comparison between EFL Students' Voice Onset Time and the English Native Speaker

As shown in the figure below, there are differences in the VOT mean of /p/ between the participants' production and the native speaker which ranges from 14 ms., 21 ms., and 24 ms. These numbers are far away from the VOT mean provided by Lisker and Abramson (1964), which was more than 30 ms., as well as the native speaker's mean which was 71 ms. In addition, it was noticed that all the participants produced the voiceless bilabial plosive /p/ in a correct way and this disagreed with other investigations like Mitleb (2009) and Hago and Khan (2015).

As shown in both studies, certain English consonant sounds are difficult to be pronounced by Saudi and Jordanian EFL learners. According to Hago and Khan (2015), most of the participants, i.e., Saudi EFL learners faced problems while pronouncing the consonant sound /p/. For them, the reason is that the consonant sound mispronounced by the participants is not present in Arabic; consequently, it causes trouble for the learners.

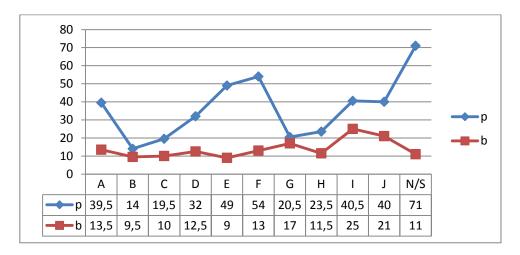


Figure 5.10. Comparison between EFL Students' Voice Onset Time and the English Native Speaker /p/ and /b/

The same figure above compares the production of the voiced bilabial plosive /b/ of the ten (10) participants and the native speaker. The figure shows similarity in the production where the VOT mean of /b/ ranges from 09 ms. to 14 ms. which agrees with the previous studies. Thus, all the participants succeeded in producing the /b/ sound correctly; the reason behind this correct pronunciation is that the participants are familiar with this sound since it exists in both the MSA and the Bechari dialect. The following figure compares the production of the alveolar plosives /t/ and /d/ of the ten (10) participants and the native speaker.

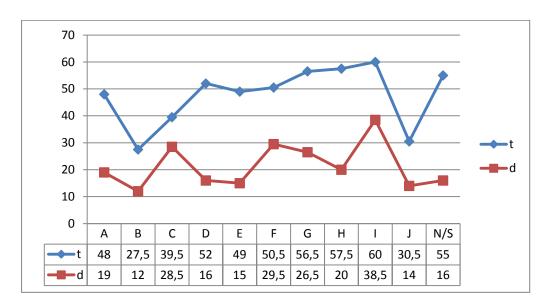


Figure 5.11 . Comparison between EFL Students' Voice Onset Time and the English Native Speaker /t/ and /d/ $\,$

Figure (5.11) above shows that there are differences in VOT concerning the production of /t/ and /d/ between the ten (10) participants and the native speaker. In some cases, the production of /d/ exceeds the VOT mean of the voiced alveolar plosives in English specifically for speaker 'I' by 38 ms. In fact, for the native speaker, it was only 16 ms. Moreover, it was noticed that the majority of the participants produce the voiceless alveolar plosive /t/ in a more dental way; this is mainly because the /t/ in MSA as well as in Bechari Arabic in a dental consonant.

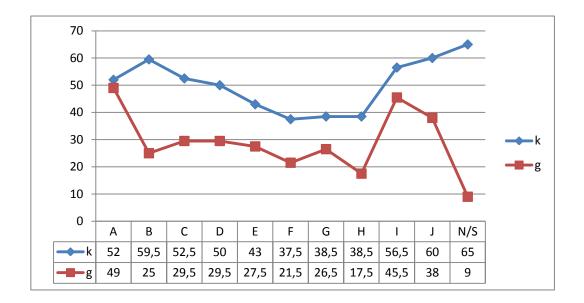


Figure 5.12. Comparison between EFL Students' Voice Onset Time and the English Native Speaker /k/ and /g/

As shown in the figure above, speaker 'A' produces the voiceless velar plosive with almost the same mean as the voiced counterpart. In fact, the majority of the participants failed in distinguishing between both sounds, in spite of the fact that the /g/ sound exists in the Bechari dialect. Moreover, the average mean of VOT in the production of /g/ for the participants was aound 30 ms and sometimes exceeds it to 49 ms. whereas for the native speaker it was only 09 ms. The following figure summarizes the VOT mean value of all the participants when compared with the native speaker VOT.

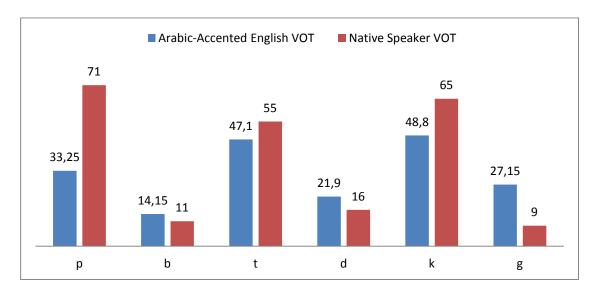


Figure 5.13. Comparison of Voice Onset Time Mean Value of Arabic-Accented English and Native English

It can be clearly shown that there are VOT differences between Arabic-Accented English and native English. These differences are significant in the production of the voiced velar plosive /g/.VOT values of the velar plosive /g/ are significantly different on the basis of comparison between the EFL students' production and the native speaker. The results show that the VOT value of /g/ sound is 30 ms by EFL students as opposed to 09 ms for the native speaker. The difference here amounts to 21 ms. The ratio frame here is 33% which is highly significant by t-test (p<0.05). The reason behind this difference, according to Flege and Port (1981), is the phonetic contrast between voiced and voiceless stops in Arabic which appears to differ from that of English. This cross-language difference offered the opportunity to assess how a difference in phonological inventory as well as more subtle differences in the phonetic implementation of a phonological contrast would affect production of foreign language speech sounds by adult language learners.

5.3.2. Comparison between EFL students Vowel Lengthening Effect and English Native Speaker

Vowel duration is used contrastively in some languages as an acoustic cue to show vowel identity which often adds up to vowel perception and production problems among EFL learners. In English, vowel duration presents a major element of intelligibility that is used as an acoustic cue for length distinction (Lisker & Abramson, 1964).

In other words, vowel duration may serve linguistic functions differently in different languages. In certain languages, meaningful difference may be associated with the change in the duration of a consonant or a vowel. Vowel duration can be used to signal the stressed syllable, mark the word boundaries (Peterson & Lehiste, 1960), and identify the syntactic units and to distinguish between similar phonetic segments (Lisker & Abramson, 1964). In some languages, changes in the duration of a sound may be determined by the linguistic environment and may be associated with preceding or following segmental sounds, initial or final position of an utterance, or type and degree of stress. Such durational changes in turn may become cues for the identification of the associated phoneme or pattern of productions (Peterson & Lehiste, 1960).

In this study, the main focus is on the vowel lengthening effect of plosives in final position. The above findings show that half of the participants face difficulty in distinguishing between the vowel length when followed by a voiced versus a voiceless plosive. These results, when compared to the native speaker's results, we can notice

differences in terms of the average mean in which it ranges from 62 ms. to 105 ms. for the voiceless plosives and from 214 ms. to 321 ms. for the voiced plosives; as well as the difference in the lengthening effect of voiced versus voiceless plosives (see figures 5.14; 5.15; and 5.16 below).

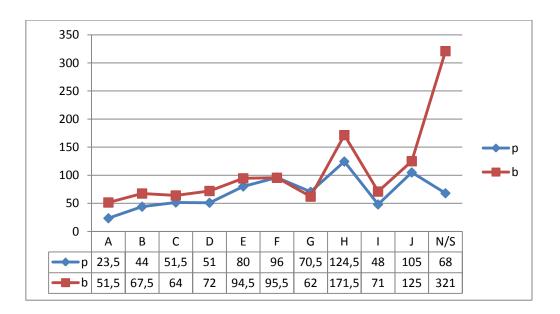


Figure 5.14. Comparison between EFL Students' Vowel Length and the English Native Speaker of the Bilabial Plosives /p/ and /b/ in Final Position

The first thing that can be remarked in figure (5.14) above is that in some cases the vowel lengthening effect of the voiced and voiceless plosive are equal or with slight differences; for instance, for 'G', the mean of /p/ is 70.5 ms. which is higher than /b/ 62 ms., for 'F', the mean of /t/ is 96 ms. and /d/ is 95.5 ms. When compared to the native speaker's mean which was 68 ms. for /p/ and 321 ms. for /b/, we can notice that more than half of the participants failed in producing the correct vowel length.

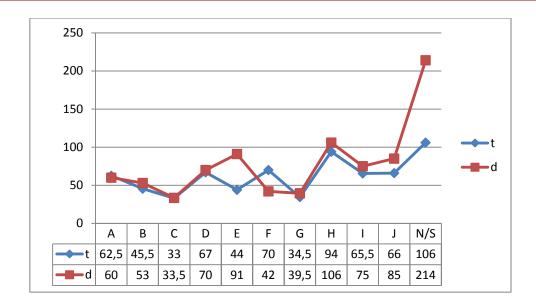
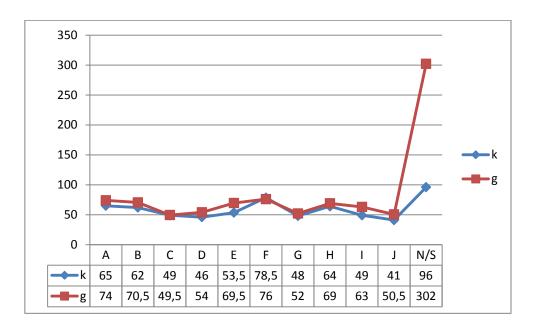


Figure 5.15. Comparison between EFL Students' Vowel Length and the English Native Speaker of the Alveolar Plosives /t/ and /d/ in Final Position

In figure (5.15), it was noticed that the vowel lengthening effect of voiceless plosives is higher or almost equal to the voiced ones. For example, the participants 'A' and 'G' lengthen the vowel when followed by an alveolar voiceless plosive /t/ with a mean 62.5 ms. and 70 ms., respectively. Whereas, the means of the vowel lengthening effect of the voiced alveolar plosive are 60 ms. and 42 ms. respectively. In fact, for the native speaker the mean value of the vowel lengthening effect of /t/ is 106 ms. and for /d/ is 214 ms.



*Figure 5.16.*Comparison between EFL Students' Vowel Length and the English Native Speaker of the Velar Plosives /k/ and /g/ in Final Position

As shown in the figure above, there is a clear difference between the participants' production and the native speaker's production concerning the vowel lengthening effect of /k/ and /g/. The mean value of the native speaker's vowel lengthening effect of /k/ is 96 ms. and of /g/ is 302 ms. Whereas, the average mean of vowel lengthening effect of /k/ by the participants ranges from 41 ms. to 78.5 ms. and for /g/, it ranges from 49.5 ms. to 70.5 ms. respectively. Besides, for speaker 'C' both /k/ and /g/ have the same effect on the vowel length which is 49 ms. for speaker 'F' the mean of vowel length of /k/ is higher than /g/ by 78.5 ms. for /k/ and 76 ms. for /g/. The following figure compares the mean value of the participants and the native speaker's vowel duration variation of plosives.

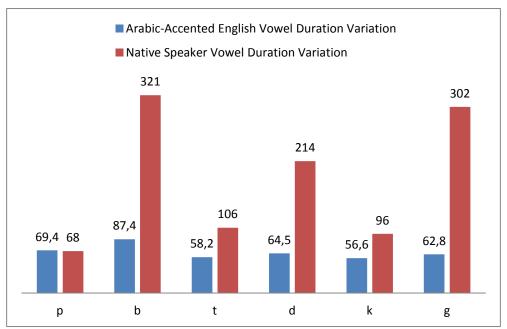


Figure 5.17. Comparison of Vowel Duration Variation Mean Value of Arabic-Accented English and Native English

Based on the above comparison, it can be clearly noticed that EFL students fail in providing the correct vowel length when it is followed by a voiced plosive. The t-test of the means of the different voicing of the following plosives is 0.02 which is smaller than 0.05, and it means the difference is significant.

Cross-language phonetic interference is also evident in Arabic-accented English. Native speakers of Arabic produce smaller voicing effects in English words than native speakers because there is very little if any effect of stop voicing on preceding vowel duration in Arabic (Flege & Port, 1981; Mitleb, 2009). In fact, while some of the English consonant sounds are not present in the MSA inventory of phonemes, they are present in the Bechari dialect. However, they have a different phonetic realization. According to

Tushyeh (1996), some of the pronunciation problems may be attributed to the learners' pronunciation that English consonant sounds have equivalents in Arabic.

This mispronunciation leads them to substitute the assumed similar Arabic consonant sounds for English ones. The failure to realize that English consonant phonemes have a particular phonetic realization can be the cause of the foreign pronunciation accent.

According to the findings of this study, the words that consist of the velar plosives in both positions, i.e., in intial position for VOT and in final position for vowel lengthening effect has the higher degree of errors that 60% of the participants in this study have failed to overcome this difficulty.

Al-Hattami (2000) contended that phonological differences between Arabic and English systems are likely to create problems of pronunciation to native speakers of Arabic learning English as a foreign language. Moreover, Rababah (2003) asserts that many Arab learners have certain difficulties in speaking, especially in pronunciation and phonological errors. Though the participants are familiar with the /g/ sound since it exists in the Bechari dialect, they still produce it with difficulty leading therefore to errors.

Furthermore, this study presents the findings which show that the sounds /t/ and /d/ cause some problems for the participants in final position. In fact, the sound /d/ is present in English and Arabic (MSA and Bechari dialect). However, its manner of articulation is different. In English, the consonant /d/ at the end of words is often unreleased but retains its voicing. However, in Arabic language, the /d/ always released in word final position and it is voiceless in this position. This concords with Hago and Khan (2015) results where they reached the conclusion that the allophonic difference may cause the native speakers of Arabic to mispronounce the /d/ sound as a /t/ sound such as 'bed', 'head', 'mad'...etc. Native speakers of Arabic often pronounce them as bet, heat, and mat (Hago & Khan, 2015). Thus, the result of this study shows that 60% of the participants had trouble in the pronunciation of this consonant at word final position.

Moreover, the participants produced the sounds /t/ and /d/ in initial position correctly and without difficulty when compared to the final position. This result disagrees with Tushyeh (1996); Al-Hattami (2000); and Hago and Khan (2015). Based on their studies, the initial /t/ and /k/ sounds cause problems for the learners comparing with the other positions of the sounds /t/ and /k/. The reason is that, these sounds are aspirated in word initial positions followed by a vowel, in English language, whereas the Arabic

counterpart sounds are non-aspirated in the same word positions, for example in the word /ti:n/ (fig) (Hago & Khan, 2015).

Accordingly, based on the study's results, vowel durations of vowels in the context of voiceless stop consonant were significantly lower than durations of vowels in the context of voiced stop consonants. The results of the current study in terms of differences in vowel duration between voiced and voiceless contexts are in consonance with studies done in English (Peterson & Lehiste, 1960; Lisker & Abramson, 1964; Mitleb, 2009).

5.4. Results of the Students' Interview

As mentioned earlier in the fourth chapter, a group interview was used in collecting data from the students. Thus, the students' own words are recorded. Interviews have been addressed through prepared questions. Accordingly, only one type of interview was used which is semi-structured interview; that is, a mix between the techniques of both structured and unstructured interviews. The interview schedule involved various questions. The following table shows the questions, the participants' answers and the results of the interview:

Table 5.3. *The Participants' Answers of the Interview Questions.*

Questions	Answers and Percentages								
1) Did you find	Did you find Very easy		,	Difficult		Very difficult			
English	n 0% 4			40%		20%			
difficult?		4 F		1 F – 3 M		2 M			
2) Your level	Average	Goo	<mark>d</mark>	Very Goo	<mark>od</mark>	Excellent			
in spoken	0%	40%		60%		0%			
English		1 F - 3 M		4 F – 2 M					
3) Which skill	Listening	Spea	<mark>ıking</mark>	Reading		Writing			
is essential to	10%	40%		10%		40%			
master?	1 F	4 M	M 1 F			1M – 3 F			
4) Do you feel a	the	Yes		No					
classroom?		40%		60%					
	4 M		5 F – 1M						

5) How often	Always	Som	etimes	Rarely		Never
do you practice	30%	40%		10%		20%
pronunciation	2F – 1M	1M -	- 3F	1M		2M
activities?						
6) Do your tea	achers correct	your	Yes	es No		
pronunciation	mistakes and	give	50%		50%	
feedback?						
7) Do your teach	ers ask you to c	heck	Yes No		No	
pronunciation in	the dictionary?		100% 0%			
8) Do you think	that French ha	s an	Yes			
effect on your pr	onunciation		30% 70%			
			3 F		2 F -	5 M
9) What do	9) What do - Listening to native speakers' speech or songs.					
you suggest for	u suggest for - Watching movies and videos.					
better	- Reading books					
pronunciation?	- Contacting	nativ	e speakers	s through	n soci	ial media for
	communication.					

As can be noticed in the table above, the answers of the participants differ from one question to another. However, they all agreed on the point that pronunciation is important and that making errors in pronunciation will probably lead to misunderstanding. Thus, a detailed analysis of each question will be provided.

5.4.1. English Language Difficulty

All the participants in this study like English but they believe that learning English might not be as easy as it appears. In fact, it is important for any learner to demonstrate knowledge about English and about the way it works and is used. The participants were asked about their view regarding English language in general and whether learning English is easy or not. Thus, the answers range from easy to very difficult (see figure 5.18 below). In fact, it can be noticed from the percentages that females believe that English is easy to learn where four females thought it is easy, three (3) males and one (1) female said

it is difficult and the rest two males believe that English is very difficult and that they face obstacles while learning it.

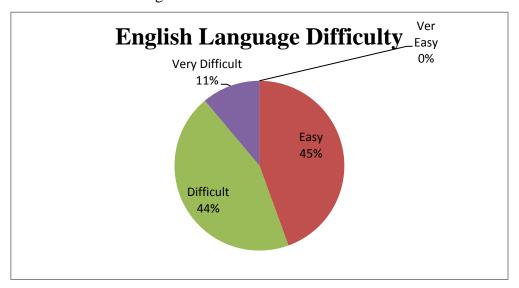


Figure 5.18. English Language Difficulty

For those who believe that learning English is difficult, their views are divided into two categories. First, there are those (30%) who elicited the language skills as being the source of their difficulties specifically the productive ones (speaking and writing); second, there are those (20%) who pointed out the learning strategies that they have found lacking in their own learning process.

5.4.2. Students' Level in the Spoken English

For the second question, 40% of the participants believe that their level in English language is good; the rest think that their level is very good in the sense that they can speak and write correct English as well as understanding spoken and/or written texts without difficulty. In fact, to identify their level, the participants were asked about their marks in oral exams, grammar and in phonetics exams.

As can be noticed in the table below, which represents the mean of the participants' grades of the two semesters, the participants have their marks dropped from good to average in the three modules; in phonetics, the lowest mark is 06/20 and the highest is 15/20; in oral expression the marks range from 10/20 to 15/20; and in grammar between 7/20 to 18.5/20. As to the difference between males and females, the table illustrates the percentage of the academic achievement (>10/20) of each gender per subject.

Table 5.4.Gender Differences of Academic Achievement in Phonetics and Oral Expression.

Participants	Phonetics	Oral Expression	Grammar	
Males	10.5/20	13.5/20	11.5/20	
Females	13.2/20	15.5/20	15.5/20	

According to the table above, females seem to perform better in phonetics, grammar and oral expression. Moreover, phonetics grades appear as the lowest of all three subjects.

5.4.3. Language Skills

In the third question, the participants were asked about the most important skill to master in order to improve their English. 10% (one female participant) believe that listening is essential; the participant's view is that in order to get the correct pronunciation of words you need to listen to how native speakers produce these words. Beside, the participant thinks that reading is important; for her, through reading a student can enrich his vocabulary which s/he will need in communication. The rest were divided, 40% chose speaking and the other 40% select writing.

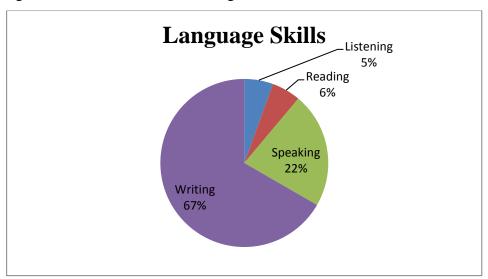


Figure 5.19. Language Skills.

5.4.4. Students' Fear of Classroom Participation

In the fourth question, the participants were asked about their fear about speaking or participating in the classroom. Based on the results below, females have no fear to speak in the classroom; they said that they are confident enough to participate and only one male

participant share the same view; the other males in the study, i.e., 40% said that they feel afraid to speak in the classroom. For them, the reason behind this fear is the reaction of some teachers against the students' mistakes. Thus, they are afraid to speak in the classroom because they did not want to be embarrassed when making mistakes.

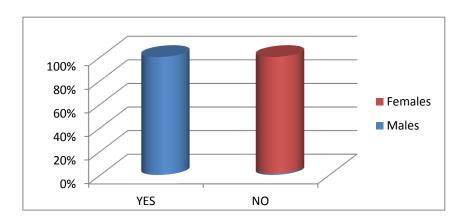


Figure 5.20. Students' Fear to Participate in the Classroom.

5.4.5. Pronunciation Activities Practice

In the fifth question, the participants were asked about the frequency of practicing pronunciation activities outside the classroom. Based on this question, 40% said that they practice pronunciation activities from time to time and only one male participant said he never practice pronunciation activities outside the classroom.

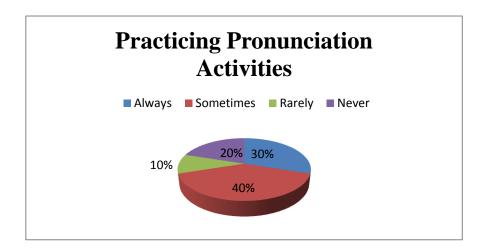


Figure 5.21. Practicing Pronunciation Activities

Based on the results in the figure above, it seems that students practice pronunciation outside the classroom. When they were asked for details about how and where they practice pronunciation, the majority of the participants said that since they are members in the American Shelf of English at TMUB. They already have a chance to speak English to other members; they play games; and they can also have an open discussion about a given topic once a weak.

5.4.6. Teachers' Error Correction and Feedback

For the sixth question, they were asked about whether their teachers correct their mistakes and give feedback about the correct pronunciation. Here the answers were equal; 50% said yes and 50% said no.

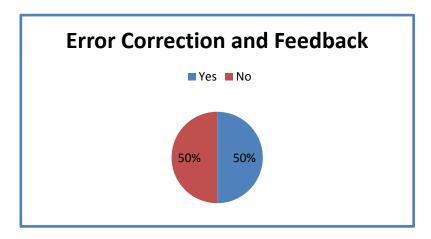


Figure 5.22. Teachers' Error Correction and Feedback

The participants added that the correction and feedback are related to the topic taught; that is to say, teachers of oral expression, phonetics and linguistics in general correct their students' pronunciation mistakes and give feedback since they are interested in pronunciation teaching.

5.4.7. The Use of the Dictionary in Pronunciation

Question number seven was about the use of the dictionary and whether the teachers ask their students to check the dictionary for the correct pronunciation of words. All the participants said "yes". They all agreed on the point that teachers always ask them to read the transcription of new words.

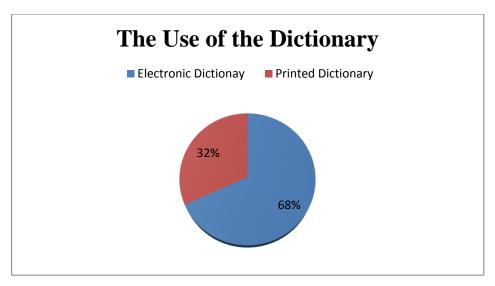


Figure 5.23. The Use of the Dictionary

However, the majority (68%) of the participants prefer electronic dictionaries rather than printed ones simply because they face problems in reading the phonetic transcription of some words. For them, it is better to listen to how the word is pronounced by native speakers.

5.4.8. French Language Effect on English Pronunciation

The eighth question was about the French language and whether they believe that French has an effect on their pronunciation. In fact, 70% of the participants, mainly all the males in the study and two females said "no".

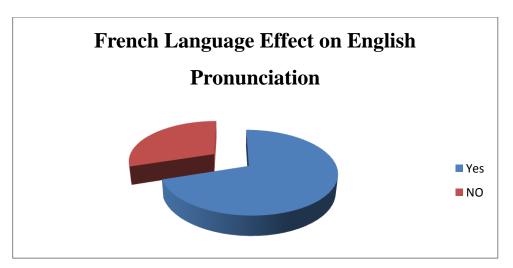


Figure 5.24. French Language Effect on English Pronunciation

The reason behind the participants' reply "No" is that their French language package is weak when compared to English; consequently, there is no effect of French pronunciation on English. Whereas, 30% said "yes" because they believe that there are similarities between both languages and since they master both languages well, they sometime pronounce an English word with French way especially the words that exist in both languages.

5.4.9. Suggestions for Better Pronunciation

In the last question, the participants were asked to give suggestions for other EFL students for a better pronunciation. They all agreed on the idea that practicing a language leads to perfection and that in order to practice English, a student needs to participate in the classroom, communicate with native speakers through social media besides reading books, watching movies and listening to English songs.

The students show dissatisfaction with the way they are taught Oral Expression and Phonetics which is mainly theoretical and that their teachers only provide definitions and theories without giving them the chance to practice or even communicate their views. They state that they prefer activities where they interact and speak during the Oral Expression class and practice some rules of connected speech during the phonetics class. Besides, they said that they need a more guided program of learning and practicing pronunciation. They need more practice rather than knowledge since all of them state that they are tired of transcription and written exercises, which is not always effective for improving pronunciation.

5.5. Discussion of the Students' Interview

In the university library's shelf, the interview took place in May 10th, 2018, from 9:30 to 12:30 AM with ten (10) students: five (05) males and five (05) females from the English language specialty. The students sat in a horse shoe shape where the researcher was in the center of it. The main purpose of the interview was to get the students perspectives on the process of learning the English language and the way that the teachers deal with pronunciation mistakes in the classroom. A number of questions were to the students to get their points of view on them.

Q1: Do you find the English language difficult to learn specifically pronunciation?

The first question was whether the students find the English language difficult to learn or not. When the researcher asked this question, all of the students agreed upon the idea that it is not hard at all. In fact, it is very easy to learn and comprehend. Some of the students find it difficult to master the pronunciation of the English language whilst others said that it is not hard as long as the student is engaging with the language. With the first question it was obvious that the English language students found neither the language nor the pronunciation difficult, in fact some of them thought that it was very easy.

Q2: How would you describe your level in spoken English?

The second question asked was on how do students find their level in the spoken English language. The majority of the students thought that their levels are somewhat fine. And the minority believes that their level is quite good. The students were split between those who believe that their level is fine and those who think that their level is great. Some claim that this goes back to their practice of the language, how often they use the language, and how important the engagement of the language in the daily life is to them. And the others said that it is solely about the practice of the language. However, when asked about their grades in the three modules: phonetics, oral expression and grammar, females seem to have a better level in all three modules.

Q3: Which skill do you believe is the most important to master?

The third question was about the skill which they believe is the most essential to master. The answers to this question were very divergent as the majority of students (67%) think that it is the writing skill since both exams and test require the use of this skill, others (22%) believe that it is speaking because the main point in every language is communication. Therefore, it is the most important one, and the rest of the students believe that the essential skill to master is the listening one simply because through the process of listening one can speak. When the students listen to native speakers, they will be able to imitate their accents and thus learn how to speak the English language fluently.

Moreover, based on the results above, males focus more on the writing skill whereas females concentrate on speaking. For the female participants, speaking requires the most complex understanding of the language. They believe that when speaking a language, you have to know the vocabulary to use, the structure to put the vocabulary in and the way that it is pronounced. This view is in accordance with Lindsay and Knight

(2006, p. 7) who states: "Speaking in a second or foreign language has often been viewed as the most demanding of the four skills".

Lindsay and Knight (2006) add that speaking is an activity requiring the integration of many subsystems; all these factors combine to make speaking a second or foreign language a daunting task for language learners. Yet, for many people, speaking is seen as the central skill. In addition, Harmer (2007) explains that when speaking, we construct words and phrases with individual sounds, and we also use pitch change, intonation, and stress to convey different meanings.

After a long discussion about this question which was a bit difficult for the students to agree upon a certain answer, they reached a conclusion that all the skills are essential in learning any language and each one of them is enhanced by the other. For them, the four skills are the pinnacles of language which will take you to greater heights. They are separate yet bound together with an inseparable bond.

Throughout the analysis of the third question, the researcher witnessed that according to each student, there is a certain skill which they consider as more important than the others. About 40% of the students think that the writing skill is essential to master whilst learning English since in tests, exams, and any formal document, the written language is way more valid. The other 40% think that the most important skill is speaking and that is because the main reason of using the language is to have an easier access to communication.

The language is therefore to provide better ways of understanding one another as it helps people in having a good communication and therefore it will reduce the situations of misunderstanding the main purpose. The remaining 20% of the students think that there is no better skill than the listening one since it is in general the most essential part, without listening one can never speak, for this reason they believe that it is important and it matters more than the other skills.

Q4: Do you feel afraid to talk in the classroom? If yes, what are the reasons behind such a fear?

The fourth question was whether the students feel afraid to talk in the classroom. Generally, most of the answers were based upon the idea that this depends on the teachers because some of them are rude, as they embarrass the student or make fun of him/her. Whilst the minority of the students were divided between those who thought that they are not afraid and those who said that they are just shy. Another question revolved from the forth one and it sheds light on the reasons behind such a fear. All of the students agreed

upon one main reason which is the treatment of the teachers to the students since some of them are harsh towards the student who mispronounces a word or makes a certain mistake.

The researcher observed that the answers of the fourth question were based on the fact that the students feel shy or scared to participate in the classroom. The majority of the students said that it is because of the teachers that they are afraid to raise their hands and submit their answers, or communicate or even ask a question. Most students do not even say 'we did not understand this certain matter' because they are scared of the teachers' response, since some teachers seem to embarrass their students when they ask a question or even make a mistake. These results are in accordance with Raja's (2017) study about students' anxiety in public speaking.

According to Raja (2017), the lack of confidence was the most common reason of fear of public speaking because many students have a meek nature and they tend to feel uncomfortable while speaking in front of others. Burgess (2013) reports that according to a survey on common phobias, fear of public speaking was found to be a more pressing concern than death. For them, students who had a good command over debates and speeches performed better in presentations. Even if a student fears public speaking, s/he can perform well by practicing and rehearsing quite rigorously. They added that the instructors play a vital role in giving support and confidence to the students and can help them overcome public speaking anxiety.

Q5: How often do you practice pronunciation activities in the classroom?

The fifth question was about how often the students practice pronunciation activities in the classroom. The answer to this question differed from one student to another as some students said that they practice the pronunciation activities pretty frequently. Others said that they do it rarely, whereas the rest said that they never do. According to the rest of the students, the reason behind the teachers neglecting the pronunciation activities is because the majority of them do not seem to give a huge importance to pronunciation in general. They only project light on the grammar rules and the correction of the activities in the basic class communications.

The answer of the fifth question opened a huge road of discussion. This division of the opinion of the students is based upon the fact that each teacher has his/her own method in teaching where some use the pronunciation activities and others do not. Also the students are different, where some of them enjoy checking the pronunciation and getting its correction if mistaken where others could care less.

Q6: Do your teachers correct your pronunciation mistakes and give feedback?

The sixth question addressed to the students was whether their teachers correct the pronunciation mistakes and give feedback or not. The answers to this question were quite equal as 50% of the students said that their teachers correct their pronunciation mistakes and give a feedback and the other 50% of students said that they do not correct their errors or care to give a response. The reason behind the teachers not giving sufficient attention to the pronunciation is that the curriculum focuses more on the written rather than the spoken language. Gower, Phillips and Walters (1995) share the same view; they report that the correction depends on the aim of activities. If the focus is on accuracy, the teacher's control and correction will be tight and if the focus is on more fluency then the teacher's direct control and correction will be less.

Accordingly, the majority of the students agreed upon the idea that even in PhD contests, the participants are asked to write an essay so that pronunciation is not involved. This point of view created a kind of disagreement between the students because some students believe in the idea that being a good and skillful teacher of English or any other foreign language, you should speak the language correctly and sound as much as you can as a native speaker in order to attract your students and motivate them as well.

In the sixth question, the students were equally divided between those who said that their teachers do correct their pronunciation mistakes and others who said that no matter how many pronunciation mistakes they do, their teachers would never even try to correct them. This is simply because they pay more attention to the grammatical mistakes.

Q7: Do your teachers ask you to check words in the dictionary to read their phonetic transcription?

The seventh question was whether the teachers ask the students to check words in the dictionary to read their phonetic transcription or not. The majority of them agreed on the idea that most teachers do ask them to look up in the dictionary for the transcription of a certain word. That is mainly because teachers seek to prove the fact that the dictionary embodies most of the essential components of the language, and this is why teachers always want their students to have it as their best companion. However, some of the students claim that they prefer listening to the correct pronunciation rather than reading the transcription simply because they still face some difficulty in reading the phonological transcription of words.

In the same vein, Singleton (2016) states that electronic dictionaries appear to be a useful tool for practicing and improving pronunciation:

"An electronic dictionary has the potential to provide an instant access from within a given entry to a key to the symbols used in the relevant phonological transcription and also, at the click of a button, to model the pronunciation of any given word in audio mode" (Singleton, 2016, p. 208).

Therefore, English learners can actually see, listen, and model the pronunciation of any word within seconds, when working with electronic and online editions of modern dictionaries. Moreover, Alfallaj (2013) indicates that an electronic dictionary is one of the media which helps students with pronunciation as nearly 60% of the subjects claimed that they use electronic dictionaries for pronunciation.

Through the answer of the seventh question, the researcher saw that the majority teachers tend to rely on the dictionary as the first and major resource for knowledge. That is why they always tell their students to check the dictionary when they need to know the accurate pronunciation of a certain word through its transcription. Only about 10% of the students said that their teachers do not ask them to check the dictionary and that explains everything said above.

Q8: Do you believe that your pronunciation is affected by French to a certain extent?

For the eighth question, which was about the effects of French on English pronunciation, the answers differed from one another, while less than half the students agreed upon the idea that the pronunciation of some English sounds is affected by the French language since it is the first foreign language in Algeria. Some students said that this is due to Algeria's history 'French colonization'; others stated that it is because most Algerian people are exposed to the French language from infancy. Therefore, their English pronunciation would be affected by their first foreign language. Negadi (2015) shared the same view by stating that the knowledge of French as L2 will facilitate the students' comprehension and processing of cognate vocabulary (English words that are similar in form to French) such as, "restaurant", "page", or "hotel".

Negadi (2015) reports positive effects of knowing French on the comprehension and the ability of translating English texts into French by Algerian EFL learners. However, this knowledge can also negatively affect their acquisition and increase their errors. Moreover, Hanafi (2014) reports errors made by Algerian learners of English with French: these errors include orthographic interference errors where the spelling of some words is changed under the influence of French such as "groupe" spelled with additional

"e" rather than "group", and lexical interference errors like the word "langues" used instead of "languages".

What seem to be more problematic are phonetic and phonological errors that derive from French-English interference. Research done by Ghazali and Bouchhioua (2003) showed that Tunisian EFL learners use French stress rules to assign stress to English French cognates such as ('passport, produced as pass'port). The orthographic and semantic similarity between English-French cognates makes Tunisian EFL learners who have already acquired French before resort to French stress rules and provide wrong rendition of lexical stress. They would consequently confuse the listener and reduce their comprehensibility since French and English have completely different phonological rules for word stress placement.

However, the majority of the students disagreed with the idea and their answers were as follows: some of them believe that their English pronunciation is not affected by the French one and that there is a huge gap between the pronunciations of the two languages. Others said that nowadays many people are affected by the English language; therefore, they neither mispronounce it nor it is affected by French or Arabic.

Thus, for the eighth question which was about the effects of French on English pronunciation, the students believe that neither French nor Arabic has a certain affect on their pronunciation since the majority of the students face difficulty in mastering or pronouncing French correctly.

Q9: What would you suggest for EFL students to do in order to have a better pronunciation?

The ninth and final question was about the students' suggestions for others to have a better pronunciation. Through in this question a number of answers have been given under the umbrella term of native speakers as most of the students said that the key to having a good pronunciation in the English language is through listening to native speakers or even contacting them if possible. Many students suggested listening to English songs and watching movies on the daily basis and they said that it was the reason that they have learnt to speak accurate English. Other students proposed watching YouTube videos more specifically 'vlogs' where people film the sequence of tasks that they do daily, whilst speaking the English language. Some of them suggested reading books as an easier source for acquiring the language and then getting the correct pronunciation of the words. Although the majority of students proposed practicing English whilst using it in their everyday life, and they said that through this process they have learnt how to speak

correct English, to do less mistakes, and to stat understanding the terms or in another words to get a lot of vocabulary stored in their lexicon.

Through this interview, the researcher found that approximately about 60% of the English language students have no problem speaking the language. However, about 40% of them think that its pronunciation is difficult. Also they think that they can never speak as native speakers so to them there is always a certain gap between speaking the language and mispronouncing some words. The researcher also noticed the students' confidence when it comes to their spoken language. Through all of their answers, one can see how they have absolutely no problem with speaking the English language. They confessed that the written one is way more complicated and the majority of them have troubles writing as opposed to speaking.

In the bottom line, throughout the entire process of interviewing the students, the researcher noticed that the majority of the teachers do not pay much attention to the pronunciation mistakes; they focus more on grammar and vocabulary rather than on the pronunciation itself. Mostly, the only teachers who care about the pronunciation of the students are the teachers of phonetics where the students focus on the pronunciation since they aspire to speak like native speakers.

5.6. Conclusion

This chapter provided findings and results of the methods used in the study for the students. It also shed some light on the pronunciation difficulties faced by the students at TMUB and their teachers' view in this regard. The results of the recordings and the interview in this chapter are important because they give significance to pronunciation teaching and instructions. Consequently, there are various techniques and activities to be employed by teachers during their classes in order to give a better chance for students to practice. Teachers need to take into consideration their actual case, and the backgrounds of their students. It is always useful to design a simple and fun activity to keep students motivated. In the following chapter, the results and interpretation of teachers' questionnaire and the classroom observation will be provided, besides comparing them with other studies. In addition to that, some recommendations for teachers and students and suggestions for further research will be presented.

Chapter VI

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Chapter Six

Data Findings and Analysis:

Observation and the Questionnaire

6.1. Introduction

Pronunciation is a very important element for EFL students at the department of English. Pronunciation practice and correction are keys to overcome pronunciation difficulties and problems, and to improve students' pronunciation. When students are not given chances and appropriate contexts to practice and they are corrected, they become less aware of their pronunciation, and hence they do not focus on their pronunciation errors. This fact was not recognized until recently because academic research in linguistics did not pay much attention to Phonetics and how to acquire pronunciation. Thus, teachers did not have much theory about how to teach it until recently.

This chapter presents the results related to teachers, i.e., the classroom observation and the questionnaire and discusses them; it compares the findings of this research with some previous studies that have been conducted on the same issue. The purpose of this chapter is to highlight the major statistical findings from the results and interpret them in light of what was already known about the research problem being investigated. Moreover, based on the analysis and interpretation of the findings, recommendations and suggestions for further research will be provided.

6.2. The Main Findings of the Classroom Observation

As mentioned earlier in chapter four, observation has been done under 'natural' conditions. That is, we have observed the participants without interfering in their normal activities nor introducing some criteria so as to get a given reaction. The main aim behind the observation sessions was to observe the interactions of the teachers in their class and more precisely to check if they give importance to their pronunciation and also to their students' pronunciation. Besides, checking whether the teachers correct their students'

errors and provide some help or not. Classroom observation results are shown in table 6.1 below.

Table 6.1.

Classroom Observation Results.

Session	Date	Level	Module	Pronunciation Error
				Correction
1	03/03/2017	1 st year	Phonetics	-Only grammatical mistakes
				were corrected
				- Self-correction and peer
				correction were applied
2	16/02/2018	M2 Lit	Oral Communication	-Pronunciation errors were
				corrected
3	20/02/2018	3 rd year	Psycholinguistics	-No error correction.
				-The focus was on the topic
4	10/11/2018	2 nd year	Research	-No error correction.
			Methodology	-The focus was on the topic
5	17/01/2019	3 rd year	Listening/Speaking	-Pronunciation errors were
				corrected.
				- Feedback was provided
				(some rules to avoide errors)
				-Grammatical errors were
				corrected
6	19/01/2019	M1 Lit	Intro. To Lit.	-No error correction.
				-The focus was on the topic

Based on the table above, the researcher attended six (6) sessions to see whether the teachers focus on their students' pronunciation and try to correct their errors or not. The first session was on March 3rd, 2017, from 11.00 to 12:30 AM, with the first year English students and the module of Phonetics, specifically the vowel sounds of English 'the diphthongs.' The researcher sat at the back of the classroom to observe everything clearly.

At the beginning of the lecture, the male teacher divided the handouts on the students who were about 24. The teacher asked them to read in silence whilst he wrote some examples on the whiteboard. After 15 minutes, he asked a girl to read the first sentence on the handout out load to the class. He stopped her each time at every word she pronounced, and asked for the correction. She was able to correct two words whilst the teacher helped her with the rest. Then, he asked a student to read and did the exact same thing. The teacher pointed out at the smallest errors in the student's speech; he continued doing that for half an hour later and then he started explaining the lesson on the board with the examples that he had written. After that, he highlighted the exercises that need to be done which require the students to write a sentence and indicate the vowel sound to the teacher, and gave them about fifteen (15) minutes to do it.

The teacher started assigning the students one by one to read the answers. He assigned a student to read his sentence which was short and his pronunciation was good but the teacher corrected the grammatical mistakes. The researcher was able to notice the student's discomfort and embarrassment. Also the teacher focused more on the grammatical mistakes rather than on pronunciation. The students were not engaging; barely two (2) or three (3) were confident and showed more interest and were raising their hands to provide answers. For the last fifteen (15) minutes, the teacher provided the students with various remarks on their grammatical mistakes.

The second session was on February 16th, 2018, from 08:00 to 09:30 AM with the second year Master English Literature, the students in the oral communication proficiency class. The topic discussed was the importance of morals. Once the researcher got to the classroom, the teacher had already started outlining the basis of the lecture or to be more specific she started the process of communication. She lied out the most essential points of the discussion then gave the floor to one of the students to continue. The student started talking about the topic from her own perspective. Although she had a number of errors in her pronunciation, the teacher neither stopped her nor did she try to correct her right away. However, after she finished, she corrected both her grammatical and pronunciation mistakes; she also transcribed some of the words. The teacher stopped assigning the students to talk. They took parts within the communication. When someone mentioned a new idea, she talked about it then gave the chance to another one to continue. The class was organized and the teacher seemed to get along with all of the students. They all seemed to have fun and at the same time learnt about the topic.

They spent an hour on discussion and sharing their different opinions. On the left half hour, the teacher gave the students exercises concerning the subject. Some were of the true or false genre, the others were about correcting the error within the sentence, and the last ones were dealing with the students' production where one word is provided and the student is asked to write a sentence that fits its meaning. The teacher gave them about twenty (20) minutes to do the activity. A while had gone by, the students told the teacher that they had finished, and then they started the process of the correction. She assigned a student to correct the first exercise whilst engaging the rest of the students in doing so. The correction of the three exercises took the remaining 10 minutes. The researcher noticed that the teacher had a good relation with their students and that they were comfortable; they worked and did whatever they were asked to do. She paid attention to their pronunciation mistakes and corrected them, but without embarrassing the student and making them uncomfortable.

The third session took place on February 20th, 2018, from 14:00 to 15:30 AM in third year English class on the module of psycholinguistics in the topic of the first language acquisition. The researcher once again took a seat at the back of the classroom for a better observation. The teacher was fifteen (15) minutes late but when he came in, he apologized and began the lecture. The teacher started explaining the topic although the student seemed to have no background knowledge about the subject. He distributed the handouts to the students and assigned a student to read the first paragraph, then another student to read the other one and so on. Both students did multiple pronunciation mistakes but the teacher did not correct their errors.

The students were noisy as they had no interest whatsoever in the lecture. The teacher had good background knowledge about the topic, yet there was no message transfer since the students were not paying attention to what he was saying. For the remaining half an hour, the teacher divided the students into groups of three, four, and five students and gave them topics which were based upon the five stages of the language acquisition device. He gave them about fifteen (15) minutes to gather and collect their information and then each group began presenting the topic that they were assigned to do.

For the remaining time, the teacher made certain remarks on the information provided by the students in their presentations whilst trying to correct the misconceptions and provide a clear outlet for the students' information. The researcher observed that even though the students were third graders, their pronunciation was invalid and messed up. However, no correction was provided.

The fourth session was on November 10th, 2018, from 9:30 to 11:00 AM with the second grade English students on the module of research methodology, specifically on the topic of how to write an abstract. The researcher set in the back of the classroom which was slightly empty; many students seemed to be absent. The female teacher came early; she distributed the handouts to the students and began reading them.

Then she started writing the main points of the topic in the whiteboard. After fifteen (15) minutes, she explained what was written on the board to the students; and then she went back to the handouts, this time reading paragraph by paragraph whilst stopping at each one and explaining it. The students were not engaging whatsoever. The teacher was the only one who spoke all the time. An hour later, she finished the explanation of every single detail on the handout and she gave the students an exercise which was to write an abstract in ten (10) minutes whilst she kept pacing back and forth over the tables and observes what each student was doing.

The teacher ordered the students to stop and read what they have written. This took about ten (10) other minutes because she corrected each grammatical mistake that the student made whilst giving them the reason behind the right conjugation and the correct word choice. However, she did not pay attention to the pronunciation of the students in the process of their reading. For the last ten (10) minutes from the lecture, she gave the students a homework which was about writing an abstract about the global warming. She also gave them examples about the main points that they can use to achieve a better outcome and write a strong abstract.

The researcher noticed the lack of connection between the teacher and the students as well as the lack of communication since the teacher was the only one who speaks except when correcting the exercise. In fact, there was no interference with the students; also the teacher did not pay any attention to the pronunciation mistakes made by the majority of the students. Some of them were extremely messed up and needed immediate correction and only she paid attention to their ideas.

The fifth session took place in January 17th, 2019, from 11:00 to 12:30 AM with the third year English students in a listening and speaking module. The lecture was based on a Ted Talk where the main topic was revolving around 'insecurity'. The researcher sat at the back of the laboratory desk to have a better view. The female teacher came early and switched on the computers with the help of the laboratory workers. They connected all of the computers to the main one in the teacher's desk. Then she called the students to come in. They set on their places and the teacher started talking to them. She asked them about

insecurity, its meaning, and what do they know about it. The students raised their hands to answer and the teacher kept assigning each one to answer. She was very careful to correct all of their pronunciation errors; she did not pass any mistake without pointing at it and correcting it.

After about ten (10) minutes, she told the students to put on the headphones as she turned on the video which was a Ted Talk on insecurity. She let them watch the video without interrupting them or pause the video. When the video was over, she started asking them about what was going on in the video, what did the person in the video say, and what is the main idea. After that, she distributed handouts to the students which had a number of questions dealing with the general understanding of the video mainly and the topic specifically. Then, the teacher played the video again, and when it was over she gave them about twenty (20) minutes to answer the questions. Right after, she started assigning students for the correction of the exercise.

For the remaining time she gave them the control over playing the video and asked them to write what they have heard. This process took about half an hour. The teacher assigned a boy to read what he had written whilst she corrected both the grammatical and the pronunciation errors that he made. The teacher did that for the rest of the students and thus, she gave time to each student and corrected all of the mistakes. The researcher noticed the explicit way of the teacher who was too sure to provide the students with correct language, especially their constant efforts with the selection of the videos made by the native speakers.

The Sixth session was on January 19th, 2019, from 09:30 to 11:00 AM with the first year Master English literature students, an introduction to literature, on the topic of how to analyze a novel. The researcher was present at the back of the classroom as the teacher and the students entered the class. The teacher used the computer to give the students an overview about the topic. She took about twenty (20) minutes to explain the general ideas of novel analysis. Then, she gave them handouts of the short story "Cat in the Rain" and ordered them to read it as she gave them ten (10) minutes to do so. And then, she started reading the story to the students whilst pointing out the theme, the genre, the mood, the tone, the writing style and the structure of the story. Every time that the teacher pointed at a certain idea, she told the students to highlight it. She explained the reason behind the choice of each word and each term she told them to shed light on.

The teacher asked the students whether they understood or not every time, whether she should repeat something or if it was clear. She assigned students to form groups and

analyze the story as she did but this time she gave them another story entitled "Two Gallants" to analyze in twenty (20) minutes and after that she started asking each group for the answers. She paid absolutely no attention to their pronunciation mistakes. The teacher's main focus was on the ideas and the analysis of the novel. For the remaining time, the teacher started dictating the lesson to the students and the very last five (5) minutes she gave them a home work. The researcher observed the lack of connection between the teacher and the students as well as the lack of the correction of errors which made the students do more of them.

In summary, it can be noticed from the six observation sessions that most of the teachers at TMUB do not put much attention on their students' pronunciation errors. For them, pronunciation is the responsibility of teachers of phonetics and phonology and those who teach oral expression. Besides, the majority of the teachers at TMUB believe that teaching grammar and vocabulary to students make them master the language well.

6.3. Discussion of the Classroom Observation

The teaching and learning of a second or foreign language are complex processes for both teachers and students alike. However, every teacher has his/her own way of teaching based on the teaching methodology s/he decides to adopt. Moreover, teachers at TMUB, where the present study was conducted, are free to adopt more than one approach in their teaching that they enjoy at the university. That is, some of them may choose to emphasize or focus more on specific aspects of the target language (TL) rather than on others based on the curriculum. As a result of this choice, they may be neglecting the teaching of certain language skills or aspects of the TL that some students deemed more necessary.

Learning a new language requires the understanding of many aspects of the target language that happen at the same time. Students have to acquire new words, new structures, and new grammar rules and even cultural aspects of the target language The ultimate goal of EFL students is to be able to produce it with proficiency in both the written and spoken modes. We all want to become competent users of the foreign or second language in order to be able to interact and be understood by native speakers and proficient users of that language. In order to be understood, not only grammar rules and appropriate lexis come into play but, more importantly, pronunciation is of the utmost importance. To ignore or neglect the explicit teaching of pronunciation would be to ignore

the basis for language acquisition (Pennington, 1996). Furthermore, students who have serious pronunciation errors without treating them from the very start will face problems of intelligibility which will not allow them to achieve the main goal of language learning: to use it for communication purposes in real contexts.

As mentioned earlier in chapter four, teachers at TMUB were selected for this study and thus six sessions were observed. Accordingly, and to avoid observer bias (towards pronunciation instruction), the teachers were not informed of the true intention of the observation. Instead they were told that the observer wished to study student interaction. In fact, it was noticed that the majority of teachers at TMUB do not put much attention on their students' pronunciation errors. They only focus more on the topic of the lesson from the curriculum without paying attention to their students' pronunciation problems. In addition to that, the researcher observed that the teachers correct only the grammatical mistakes of their students; for them, grammar is more important that correct pronunciation.

This result is in agreement with some studies on pronunciation in Malaysia. Pillay and North (1997) reported that the teaching of pronunciation is not being given enough attention by teachers. They found that topics and themes were the main focus in the syllabus and textbooks. Unfortunately, the pronunciation skill in the English syllabus and the examination are sidelined. Hence, the skills that are mostly focused in the ESL classrooms tend to centre on the components that are tested in the examination.

For Gilakjani (2012), another factor that causes the neglect over the teaching of pronunciation in Malaysian ESL classroom is teachers' lack of competence in conducting lessons on pronunciation. Gilakjani (2012) reported that ESL teachers justified their negligence towards pronunciation with their limited knowledge of techniques to teach pronunciation. Derwing, Munro and Wiebe (1998) argue that the method of instructions used in the classroom has a lot of influence on the success rate of learning pronunciation. Hence, there is a need for EFL teachers to equip themselves with the knowledge of the sound system and to be familiarized with variety of pedagogical techniques to teach pronunciation as well as to be communicatively oriented in their teaching approaches and techniques (Celce-Murcia, Brinton, & Goodwin, 1996).

Seidlhofer (2004) believes that teaching pronunciation communicatively is a challenge, and this seems to be true for teachers at TMUB as well. As stated in the findings, the minority of teachers correct their students' pronunciation errors. This finding is opposed to Tergujeff's (2012) study about Finnish EFL teachers. She demonstrates the

high frequency of teachers correcting students' pronunciation. Correcting students, however, should not cause negative feelings in students, and they should not feel as if they were punished, as stated by Morley (1991) who adds that it is always the learner who corrects (or modifies) the pronunciation, whereas the teacher's task is to give cues on how to do that.

Lane (2010) shares the same opinion that the learners should be offered an opportunity to self-correct and suggest an instant cue to notify the learner of the mispronunciation without correcting him/her. In fact, this was usually not what the EFL teachers at TMUB did. They neither correct their students' errors nor suggest a cue.

6.4. Results of the Teachers' Questionnaire

As explained in the fourth chapter, in this research study, a mailed questionnaire was used. The questionnaire was directed to the English teachers at TMUB; it was sent to 20 English teachers' e-mails, but unfortunately, only sixteen answers were received. The questionnaire was used to find out (1) the common pronunciation problems that students at TMUB face, (2) the effects of the dominant Language, Arabic, on the acquisition of English sounds by TMUB's students, (3) the effects of the first foreign Language, French, on EFL learners at TMUB, and (4) the attitudes of EFL teachers at TMUB towards their students' pronunciation, i.e, VOT and vowel duration. Besides, the questionnaire is divided into three sections namely: background information, the importance of pronunciation in EFL teaching and teachers' attitudes towards students' pronunciation.

6.4.1. Section One: Background Information

Section one which is entitled, background information, includes three (3) questions, mainly the participants' gender, the degree held and their teaching experience. The aim behind these questions is to know some background information about the teachers and whether their gender and teaching experience have a certain effect on their way of teaching and focusing on pronunciation. For the first question, and based on the responses shown in figure (6.1) below, there are nine female teachers (56.3%) and seven male teachers (43.8%).

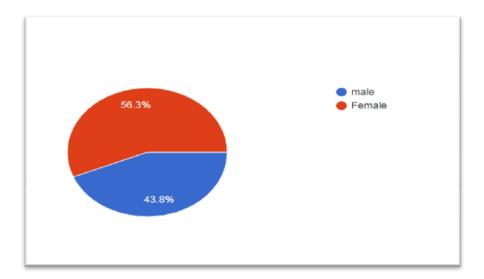


Figure 6.1. Teachers' Gender

For the degree held, the answers were equal. 50% of the teachers said that they have Magister degree and 50% said that they have Doctorate degree.

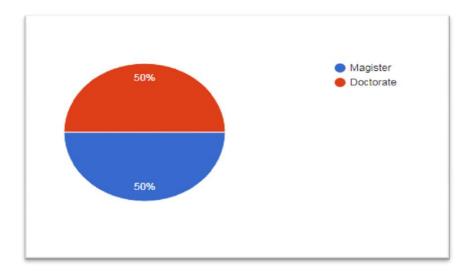


Figure 6.2. Teachers' Degree

Q3: How long have you been teaching English?

For the last question in section one, as shown in the table below, the majority of the teachers at TMUB had a teaching experience that ranges from ten to fifteen years with a percentage 43.75%. Then, 18.57% of the teachers taught English for six years. The rest was divided into three equal categories, the first groups' experience (12.5%) ranges from one to five years, the second group (12.5%) from fifteen (15) to twenty (20), and the last group, actually, two teachers said they have 22 years of teaching experience.

 Table 6.2.

 The Teachers' Years of Experience.

Teaching Period	Number	Percentage
From 1 to 5 years	2	12.5%
From 5 to 10 years	3	18.75%
From 10 to 15 years	7	43.75%
From 15 to 20 years	2	12.5%
More than 20 years	2	12.5%

6.4.2. Section Two: The Importance of Pronunciation in EFL Teaching

The second section aims at examining the importance of pronunciation in EFL teaching; it includes six (6) multiple choice questions, three of them were composed of two parts to get more information.

Q1: Is pronunciation an important component of students' language competence?

For the first question, which seeks to know whether the EFL teachers believe in the importance of pronunciation in the students' language competence, 92.9% of the teachers replied 'YES' and only 7.9% said 'NO'. Furthermore, pronunciation is an essential thing in good communication because the wrong pronunciation will lead to misunderstanding and negative impression with the other person.

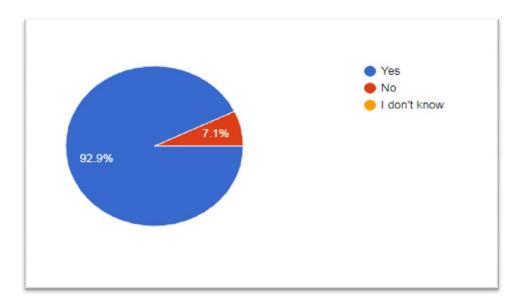


Figure 6.3. The Importance of Pronunciation in the Students' Language Competence

Q2: Do you think it is useful to focus on pronunciation in the classroom (regardless the subject you are teaching)?

In this question, the participants were asked about whether they focus on pronunciation in their lessons and the reason behind this focus; 92.9% of the teachers replied 'Yes' and only 7.1% said 'No'.

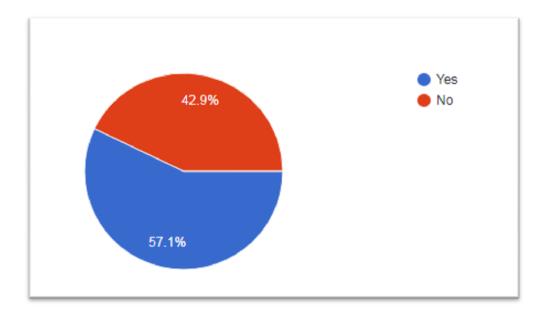


Figure 6.4. The Usefulness of Focusing on Pronunciation in Teaching

When the participants were asked about their view concerning pronunciation and whether they believe in the usefulness of focusing on pronunciation in the classroom, 57.1% of the teachers said that they focus on pronunciation and that pronunciation is essential in EFL teaching whereas 42.9% said 'No'.

In order to understand the participants' view, they were asked to justify their answer. Thus, those who said 'Yes' believe that good pronunciation means a clearer message, whatever the subject taught. Hence, it is primordial for understanding and acquisition. Moreover, some participants claimed that pronunciation is important for good language accuracy and that teachers should focus on some aspects of good pronunciation. Furthermore, good communication needs good pronunciation and thus mispronunciation sometimes leads to misunderstanding. In fact, they believe that the teacher should be a role model of pronunciation and incite students to pronounce correctly regardless of the subject s/he teaches.

Whereas, those who replied 'No' believe that the subject is more important that pronunciation and that it would take lots of time if they focus on pronunciation. For them, students have to acquire new words, new structures and new grammar rules and even cultural aspects not just pronunciation, because the students need to study English with proficiency in both the written and the spoken modes. Besides, some of them said that the subject determines whether to give importance to pronunciation or not. If it is a subject related to listening and speaking, then pronunciation is important. For other subjects, more focus is to be put on the content.

Q3: Do you integrate pronunciation in your courses (regardless the subject you are teaching)?

In this question, the participants were asked about integrating some pronunciation tips during other lessons and here, in addition to the reason behind integrating pronunciation in any lesson. The results of this question were equal 50% said 'Yes' and 50% said 'No' as shown in the figure below.

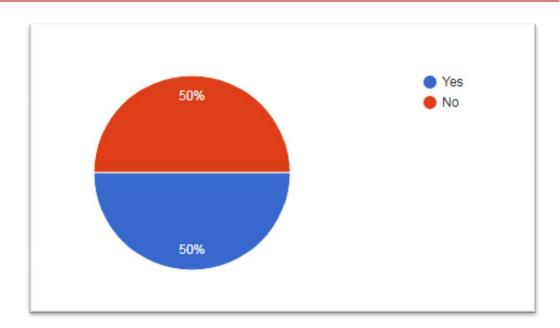


Figure 6.5. Integrating Pronunciation Tips in the Courses

When the participants were asked about the reasons behind integrating pronunciation in the classroom, they all agreed on the idea that pronunciation is integrated throughout the occasional teacher's correction of some mispronounced words. Thus, integrating pronunciation is only a matter of error correction. In addition, one of the participants said that s/he instructs the students on how to pronounce a sound correctly, and that s/he suggests that the students find some examples of their own and share them in the classroom. Besides, they claim that integrating pronunciation should be done in an informal and unofficial way through either direct or indirect remarks and eventual correction.

Q4: How often do you correct the students' pronunciation errors?

In this question, the teachers were asked about the frequency of correcting the students' errors; 85.7% of the participants answered that they sometimes correct the errors and only 14.3% said that they always do it.

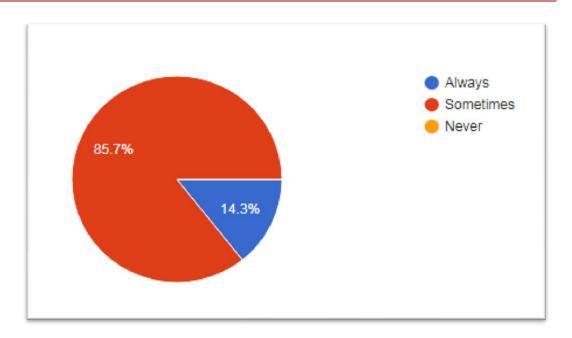


Figure 6.6. Pronunciation Errors' Correction

Q5: Do you look for reasons for pronunciation errors?

In this question, the teachers were asked whether they look for the reasons behind the students' errors or mispronunciations. Here, some choices were provided such as: lack of practice, the disability to read phonetic transcription, the interference of French language and other; thus, 57.1% replies 'Yes' and 42.9% answered 'No'.

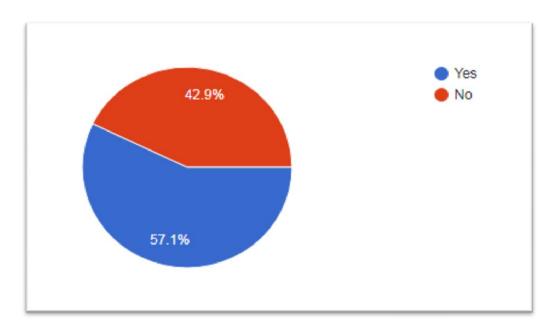


Figure 6.6. Looking for Reasons of Pronunciation Errors

In the second part of the question, the participants were inquired to give reasons for their positive choice. In fact, the 57.1% who answered 'Yes' provided their reasons as shown in the figure below. 50% of them believe that the main reason for pronunciation errors is the lack of practice; and the rest were divided equally into four groups. The first group (12.5%), believe that students mispronounce some words because of their disability to read phonetic transcription. The second 12.5% said that errors are considered as a case of French language interference. The third 12.5% consider motivation as a major factor for pronunciation errors. For them, the majority of the students are less motivated and thus they face difficulties in pronunciation. The last group said that those who produce errors are not aware of the importance of pronunciation.

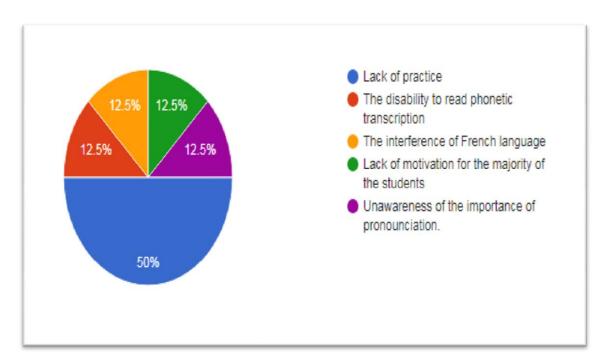


Figure 6.7. The Reason behind Students' Pronunciation Errors

Q6: What kind of help do you provide for improving your students' pronunciation?

This question seeks to know the strategies or the techniques that the teachers use in the classroom to help their students improve their pronunciation. Thus some choices were provided like: teaching students how to use the dictionary, using listening tracks or videos in classroom, and teaching them phonetics and phonology (see the table below).

Table 6.3.Methods of Improving Students' Pronunciation

Participants' Choice	Percentage
Use listening tracks/videos in class	35,7%
Teach them Phonetics/ Phonology	21,4%
Teach them how to use the dictionary	14,3%
Correcting their pronunciation	7,1%
By encouraging them to check autonomously	7,1%
I pronounce correctly, but without injurious comment, i.e. indirectly	7,1%
Tell them how to use the dictionary, to watch movies without subtitles, and often by pronouncing the word several times	7,1%

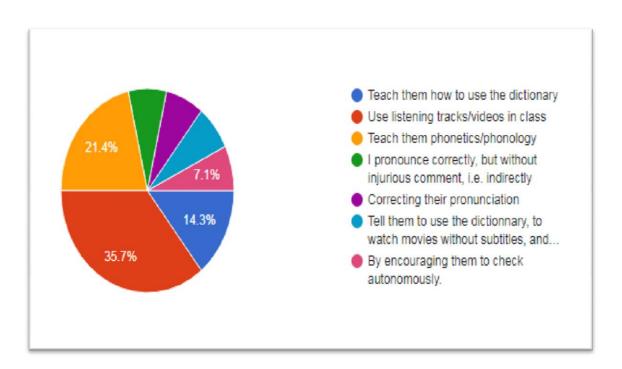


Figure 6.8. Methods of Improving Students' Pronunciation

As shown in the figure above, 35.7% of the participants said that they use listening tracks/videos in the classroom. 21.4% said that they teach the students phonetics and phonology. 14.3% said that they teach the students how to use the dictionary. The rest were divided into four equal groups, each group consist of 7.1%. Some said that they tell the students to use the dictionary, watch movies without subtitles and listen to English songs besides encouraging them to check autonomously. Others claimed that they pronounce correctly but without injurious comment; that is to say, correct students in an indirect way.

6.4.3. Section Three: Teachers' Attitudes towards Students' Pronunciation

The third section also consists of six (6) multiple choice questions that are concerned with the attitudes of EFL teachers at TMUB towards their students' pronunciation; in addition to the effects of the dominant Language, Arabic, and the second Language, French, on the acquisition of English sounds by TMUB's students.

Q1: Are you satisfied with your students' pronunciation level?

This question which was is about whether the teachers are satisfied with their students' level in pronunciation, 64.3% replied 'Neutral'; 21.4% said 'Dissatisfied' and 14.3% said 'Satisfied'.

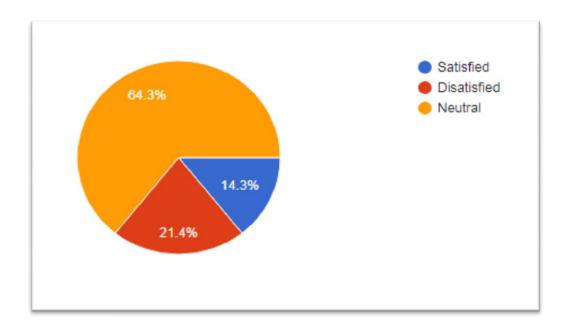


Figure 6.9. Teachers' View about their Students' Level

Q2: Do you spend a significant amount of time in providing instruction to improve their pronunciation?

In this question, they were asked about the amount of time they spend in improving their students' pronunciation in addition to the way they do this either by asking the students to check the phonetic transcription of new words or by giving them some rules of connected speech such as assimilation, elision and linking. Thus, as shown in figure (5.24) below, 64.3% of the participants said that they spend a good amount of time in improving their students' pronunciation and only 35.7% replied 'No'.

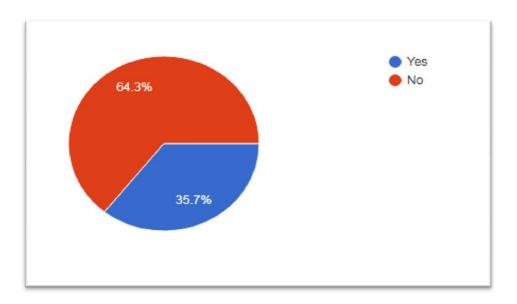


Figure 6.10. Spending Some Classroom Time in Improving the Students' Pronunciation

Those who replied 'Yes' where asked for the way the use in improving their students' pronunciation; 71.4% of the participants said that they give their students some rules of connected speech such as: assimilation, elision and linking. The rest was divided into two groups: 14.3% said they ask the students to check the phonetic transcription of new words and the other 14.3% answered they ask the students to read texts aloud in the classroom.

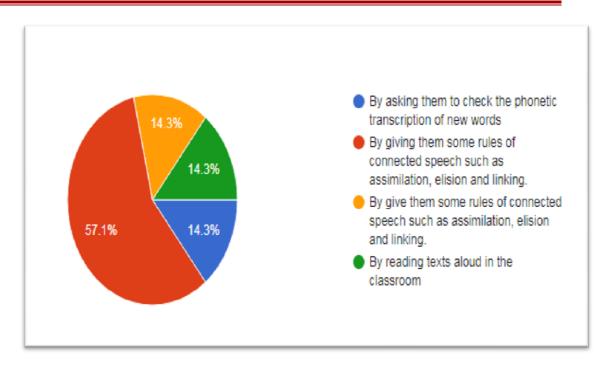


Figure 6.11. The Way Teachers Improve their Students' Pronunciation

Q3: What are the problems you face in teaching pronunciation?

This question is meant to know the problems that the teachers face when teaching pronunciation, thus some choices were provided like: the disability to understand the students for their poor pronunciation, and the students' pronunciation is highly influenced by Arabic or French. 50% of the participants believe that their students' pronunciation is highly influenced by their mother tongue 'Algerian Arabic'. 21.4% claim that their students' pronunciation is affected by the French language. 14.3% argue that they are not able to understand their students due to their poor pronunciation. The rest was divided into two groups: 7.1% see that the students merely remain indifferent and 7.1% argue that the problem is the lack of the necessary prerequisites.

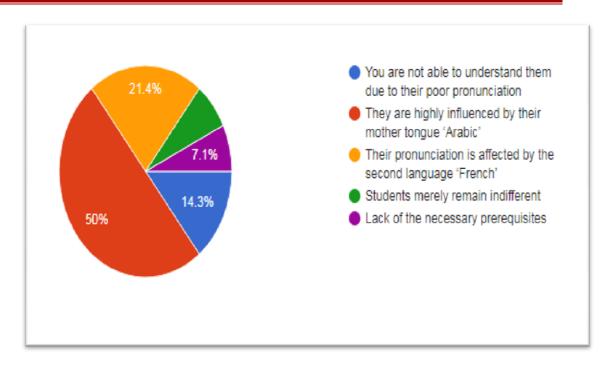


Figure 6.12. The Problems Teachers Face When Teaching Pronunciation

Q4: Do you think that your students are motivated to pronounce correctly/well?

This question is about the students' motivation to pronounce correctly. As shown in figure (6.13) below, 71.4% of the participants believe that their students are highly motivated to pronounce correctly and only 28.6% replied 'No'.

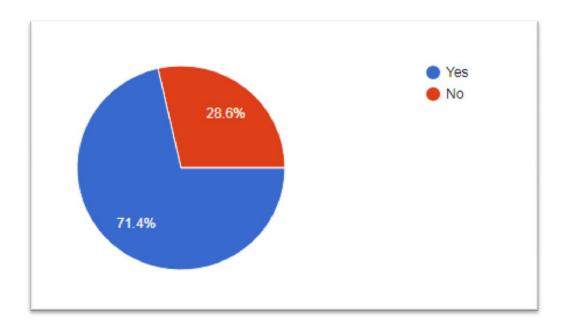


Figure 6.13. The Students' Motivation to Correct Pronunciation

Q5: On what do you focus the most, accuracy (pronunciation) or fluency (communication) when giving your students the chance to speak? Please specify your reasons.

This question is about whether they focus on accuracy or fluency in teaching and the reason behind their choice. 44% of the participants believe that fluency is more important than accuracy. They argue on the fact that they prefer the communicative target because the student can, by time, correct his/her accuracy. 32% of the participants believe that both accuracy and fluency are essential for an effective EFL learning and that they work in parallel.

Whereas 12% of the participants argued that accuracy is important in the sense that it leads to fluency. In fact, one of the participants replied by the following statement: "If the purpose of the teacher is pronunciation, then s/he should focus on accuracy; in other cases, it is communication that matters, that is, how well is the student able to convey meaning". That is to say, accuracy is important only for teachers of phonetics and phonology; for other teachers, the main focus should be on how to convey a certain message; in other words, what matters is to be understood.

Table 6.4.Accuracy vs Fluency in Teaching

Participants' answers	Percentage
Fluency is more important than accuracy	44%
Both are important and work in parallel	32%
Accuracy is important and it leads to fluency	12%
Accuracy is important only for teachers of Phonetics/ phonology	12%

Q6: In brief, what techniques/ methods would you suggest for EFL teachers to use in order to improve their students' pronunciation?

This question was about the methods or techniques used by teachers in the classroom to improve their students' pronunciation. Moreover, the participants were asked to provide suggestions for other teachers concerning pronunciation in classroom. The majority of the participants believe that the best way to improve students' pronunciation is through providing audio or video materials. For them, through listening to native speakers

(news, songs, or movies without subtitles), the student can get the correct pronunciation of words and structures; i.e., stress and intonation patterns.

Furthermore, the participants also agreed on the fact that the dictionary is a very helpful tool for the students' pronunciation either by reading the transcription or listening to the correct pronunciation using an electronic dictionary. In addition, some teachers believe that the best methods of pronunciation teaching are engaging the students into conversations; i.e., integrating discussions and tasks that require creating conversations in class; pronouncing some words for them; i.e., being a good model; correcting their errors regularly.

Finally, one of the participants suggested that the students need to get feedback from native speakers; besides, they should enroll themselves in an intensive English study program which offers pronunciation as part of its curriculum. He added that many websites offer excellent online learning materials related to pronunciation, from theoretical aspects to practical applications.

6.5. Discussion of the Teachers' Questionnaire

Pronunciation is an essential part in language, for the nature of language is spoken. Pronunciation is the most important and difficult problem that non-native English speakers have to face when studying English. Most EFL students and teachers underestimate the importance of pronunciation because they consider that pronunciation is less important than other English aspects such as grammar and vocabulary. However, most of people do not care about the correct pronunciation; in fact, peaking with incorrect pronunciation will lead to misunderstanding. Teachers play an important role in pronunciation learning because delivering or explaining the material with incorrect pronunciation will lead the students to incorrect pronunciation too. In teaching-learning process, the teacher should have some strategies and techniques concerning pronunciation instruction. Thus, in this study, the teachers at TMUB were asked about their students' pronunciation, their attitudes and strategies.

The interpretation of the questionnaire's results were provided in the previous part. Now, it is better to discuss its results and see whether these results are in accordance with the previous studies related to the topic of this study or not. As mentioned earlier, the questionnaire was composed of three sections.

Concerning the first section, the results of the three questions do not have a certain effect in the discussion. It was used only to guide the researcher to know whether the teachers' experience and level of education have a role in pronunciation teaching. Since the majority of the teachers taught English for more than six (6) years, their views about the importance of pronunciation and the methods they use to teach pronunciation were somehow similar.

Section two, as mentioned earlier is composed of six questions and it aims at examining the importance of pronunciation in EFL teaching. The first question which seeks to know whether the EFL teachers believe in the importance of pronunciation in the students' language competence, the majority of the teachers believe that pronunciation is important. Thus, pronunciation is the most important aspect of language. According to Tahereen (2015), pronunciation is considered as an integrated and integral component of EFL learning, as it influences learners' communicative competence and performance. She adds that teaching pronunciation is not important for achieving a perfect pronunciation model; but rather it is significant for developing better communicative skills. In addition, Howlader (2011) believe that it is not feasible to expect that a non-native speaker will achieve the native like English. Rather, they should be expected to communicate appropriately by producing comprehensible and intelligible pronunciation sounds.

Furthermore, Morley (1991) emphasizes on meaningful communication claiming that intelligible pronunciation is an essential component of communication competence. Teachers should include pronunciation in their courses and expect their learners to do well in them. He adds that the goal of pronunciation should be changed from the attainment of 'perfect' pronunciation to the more realistic goals of developing functional intelligibility, communicability, increased self-confidence, the development of speech monitoring abilities and speech modification strategies for use beyond the classroom.

In the second question, the participants were asked about whether they focus on pronunciation in their lessons and the reason behind their focus. The majority here said that they focus on pronunciation since they believe that it is essential. This result is in accordance with Rahmhani's (2016) study about Indonisian teachers and students. The participants in his study believe that pronunciation has an important role as it has become the literal product of English learning itself. Rahmhani (ibid) adds that we cannot only pronounce an English word correctly from its spelling. English spelling is only a poor reflection of pronunciation, although it must be admitted that there is much regularity between sound and written symbol. On the other hand, pronunciation has to be integrated

with other skills, and other aspects of language. In addition, pronunciation has to be isolated for practice of specific items and problems.

The rest of the participants, i.e., those who believe that pronunciation is not important and that what matters for them is the topic they are teaching and not the way the students pronounce some words, argue that students have to acquire new words, new structures and new grammar rules and even cultural aspects not just pronunciation, because the students need to study English with proficiency in both the written and the spoken modes.

This is in accordance with Elliot's (1995) study about "Foreign Language Phonology". He argues teachers tend to view pronunciation as the least useful of the basic language skills and therefore they generally sacrifice teaching pronunciation in order to spend valuable class time on other areas of language; or maybe, teachers feel justified neglecting pronunciation believing that for adult foreign language learners, it is more difficult to attain target language pronunciation skills than other facets of second language acquisition. Possibly, teachers just do not have the background or tools to properly teach pronunciation and therefore it is disregarded.

In fact, Fraser (2000, p. 7) disagrees with this idea by claiming: "Being able to speak English of course includes a number of sub-skills, involving vocabulary, grammar, pragmatics, etc." However, by far, the most important of these skills pronunciation; with good pronunciation, a speaker is intelligible despite other errors; with poor pronunciation, a speaker can be very difficult to understand despite accuracy in other areas. Pronunciation is the aspect that most affects how the speaker is judged by others, and how they are formally assessed in other skills.

In the third question, the teachers were asked about whether they integrate some pronunciation tips during other lessons. The participants were divided equally into two groups; thus, those who said "Yes" were asked about the reason behind integrating pronunciation in any lesson. Moreover, they all agreed on the idea that pronunciation is integrated throughout the occasional teacher's correction of some mispronounced words. Thus, integrating pronunciation is only a matter of error correction. The participants argued that they have too much to do and pronunciation instruction is just wastes their time. Some teachers believe that their students can learn correct pronunciation without particular pronunciation instruction. In fact, according to Harmer (2001), a lot of teachers do not pay enough attention to English pronunciation; there are different reasons for this negligence.

For Harmer (2001), many learners state that they do not need to learn pronunciation and learning pronunciation is a waste of time. They also state that just communication in English is enough and when they are understood, nothing else is important. Harmer (*ibid*) emphasized that the main aim of teaching and learning in any language is to enable students to communicate in the target language. Communication, in this sense, means to understand and be understood. Many learners think that because they can talk to their teachers and other students, they can easily communicate in English.

In the fourth question, the teachers were asked about the frequency of correcting their students' errors; the majority of the participants said that they sometimes correct the errors. Two teachers answer that they always correct their students' pronunciation errors; this means that they do not tolerate pronunciation errors; thus, their students are supposed to be more aware about their utterances in order to speak correctly. The rest of the teachers state that they sometimes correct pronunciation errors, which means that they care about speaking correctly but they do not take it as a priority. They probably favor other aspects, as some teachers stated that one of the objectives of their classes is to speak without hesitation and to be able to argue in the topic under study.

According to Carranza (2007), for most language teachers, there is a controversy regarding the best ways to handle students' errors. There are EFL teachers who attempt to correct all of their students' errors, while others only focus on correcting errors that are directly related to the topic being addressed in a particular lesson, or errors that inhibit communication. Besides, Allwright and Bailey (1991) believe that errors are an essential part in teaching a second language because they are a way of determining the learners' progress throughout the language acquisition process. Furthermore, they claim that errors should be corrected and that learners expect to be corrected more than teachers think. In addition, when meeting the students' error, a teacher should find the causes of the errors. Teachers usually find some unbelievable errors which occur in students' spoken English. Because students cannot master the whole knowledge that teacher introduced. They must go through a long process to master the whole knowledge; this fact led to the fifth question.

In the fifth question, the teachers were asked whether they look for the reasons that lead their students to errors or mispronunciations. The answers here were somehow close: 57.1% replies 'Yes' and 42.9% answered 'No'. Thus, for the positive replies, some choices were provided such as: lack of practice, the disability to read phonetic transcription, the interference of French language and other. Moreover, the majority of the

participants consider the lack of practice as the primary reason for pronunciation errors while some participants think that when students do not practice, they forget about the rules and they tend to make errors. Several studies (Erdogan, 2005; Fang & Mei, 2007) found that EFL students' pronunciation errors are the result of the lack of practice. They suggested that the students are expected to learn more about English consonant and vowel sounds and to do more exercise and practice about the pronunciation to train their ability.

The last question in section two was a w/h question that seeks to know the strategies or the techniques that the teachers use in the classroom to help their students improve their pronunciation. Thus some choices were provided like: teaching students how to use the dictionary, using listening tracks or videos in classroom, and teaching them phonetics and phonology. The answers for this question vary; however, the majority of the participants believe in the use of listening video/audio tracks along with teaching phonetics and phonology.

It is widely advised by the scholars that the improvement of students' pronunciation needs to be supported by listening such as recorded materials, postcasts, and online listening activities. In foreign language teaching process, learners are mostly required to spend their times on listening to the materials outside the classes due to the limited time in the class. Listening is a very active and integrative language skill, involving a grasp of phonological, lexical, grammatical, and ideological complexities as well as performance factors typical only of speech such as rate of speech, clarity of intonation and pronunciation, hesitations, pauses (Snow & Perkins, 1979).

No doubt, listening is the most common communicative activity in daily life. According to Morley (1991, p. 84), "We can expect to listen twice as much as we speak, four times more than we read, and five times more than we write." So, listening, as a skill, is assuming more and more weight in SL or FL classrooms than ever before. Rost (1990) points out that listening is vital in the language classroom because it provides input for the learner. Without understanding input at the right level, any learning simply cannot begin.

The third section also consists of six (6) questions that are concerned with the attitudes of EFL teachers at TMUB towards their students' pronunciation; in addition to the effects of the dominant Language, Arabic, and the second Language, French, on the acquisition of English sounds by TMUB's students. In the first question about whether the teachers are satisfied with their students' level in pronunciation, the majority of the participants were neutral, i.e., they could not decide on their students' level concerning pronunciation. Consequently, this question did not impact the study's results.

In the second question, they were asked about the amount of time they spend in improving their students' pronunciation. The majority of the participants claimed that they provide a good amount of time to pronunciation instruction. In addition to that, they were asked about the way or the method they use in improving the students' pronunciation. Moreover, 71.4% of the participants answered that they give their students some rules of connected speech such as: assimilation, elision and linking because of their impact on speech intelligibility. For them, the main concern is the practice of the phonological rules in a way that makes students aware about what they are being taught and thus practice the pronunciation aspects in a meaningful way rather than in a mechanic way.

In fact, some pronunciation studies focus specifically on the instruction of suprasegmentals. Derwing, Munro and Murray (1997) conducted research in which ESL learners who were studying for an average of ten (10) years, participated in a speaking improvement course that focused on the suprasegmental features of pronunciation (e.g. stress, rhythm, intonation). Thirty-seven native listeners transcribed speech samples (true/false sentences) taken at the beginning of a 12-week course in order to assess the learners' intelligibility. Each sample was rated in order of comprehensibility and degree of accentedness. In the end, there was a significant improvement in the intelligibility, and better ratings over time of comprehensibility and accentedness. They showed that long 30 term language learners could alter their pronunciation in a reading task (Derwing & Rossiter, 2003).

In another study by Hall (1997), he stated that Japanese learners benefited from suprasegmental practice through marking texts for thought groups, shifting emphasis in sentences, and changing the moods of scripts by exploring different intonational patterns. Lambacher (1999, p. 138) adds to this point and submits that with communicative ability (and not native-like pronunciation) as the main goal of learning, "the prevailing view is that improvement in the prosodic features has a closer correlation with improved intelligibility of L2 learners."

The rest of the participants claimed that they focus on the transcription and the use of the dictionary. Several studies on pronunciation in regard to dictionaries have been carried out, largely indicating that EFL learners do not feel highly enthusiastic about using electronic dictionaries for pronunciation. Alfallaj (2013) indicates that an electronic dictionary is one of the media which helps students with pronunciation as nearly 60% of the subjects claimed that they use electronic dictionaries also for pronunciation.

According to Kent (2001), half of the respondents in his study claimed that audio pronunciation was the most useful feature of electronic dictionaries.

The third question was meant to know the problems that the teachers face when teaching pronunciation, thus some choices were provided like: the disability to understand the students for their poor pronunciation, and the students' pronunciation is highly influenced by Arabic or French. Half of the participants believe that their students' pronunciation is highly influenced by their mother tongue 'Algerian Arabic' specifically the Bechari dialect. They argued that some sounds are difficult for Bechari students to pronounce and this leads to misunderstanding. The rest of the participants believe that their students' pronunciation is affected by the French language and that they are not able to understand their students due to their poor pronunciation.

This result is in accordance with Mourad (2008) study about 'Pronunciation Practice and Students' Oral Performances: A Case Study of Second Year English Students at the University of Constantine'. In her study, teachers state that students tend to have a lot of problems with the pronunciation of some sounds, like /3/ and /43/, $/\int$ / and $/4\int$ /, and this is mainly because they rely heavily on the French pronunciation; they tend to pronounce $/4\int$ /; / as $/\int$ /, for example. Teachers also stated that they face a huge problem with students when it comes to accent and intonation. Students tend to maintain either their local accent or in the best cases the French accent, taking into account that French is the second language almost all of them have studied before English.

The fourth question was about the students' motivation to pronounce correctly. The majority of the participants believe that their students are highly motivated to pronounce correctly and only 28.6% replied 'No'. Thus, the participants in this study believe that motivation is an important factor in pronunciation. For them, the majority of the students are less motivated and thus they face difficulties in pronunciation. In fact, when a student is not motivated, s/he will not pay attention to the language skills, specifically pronunciation. Scholars and psychologists maintain that motivation is one of the key factors that influence the students' success or failure in learning English as a foreign language, because it leads or drive the individual to achieve his/her goals. In the recent years, many psychologists (Dörnyei, 1994; Gardner, 1985) discussed the role of this factor on students learning especially in the field of learning second language or foreign language because they observed the effect of motivation on students' learning.

Nunan (1999) maintains that motivation is important to notice that it can affect students' reluctance to speak in English. In this sense, learner's motivation in this skill is very important because if s/he is motivated s/he will speak fluently and try to do his/her best to speak as native speakers by talking with native speakers in social media or speaking as much as possible in English language but if s/he is not motivated s/he will be always shy and uncomfortable while speaking.

The fifth question was about whether they focus on accuracy or fluency in teaching and the reason behind their choice. Here the answers vary; some of the participants believe that fluency is more important that accuracy; they argued that they prefer the communicative target because the student can, by time, correct his accuracy. Others believe that both accuracy and fluency are essential for an effective EFL learning and that they work in parallel. The last group argued that accuracy is important in the sense that it leads to fluency.

In fact, one of the participants replied by the following statement: "If the purpose of the teacher is pronunciation, then s/he should focus on accuracy; in other cases, it is communication that matters, that is, how well is the student able to convey meaning". That is to say, accuracy is important only for teachers of phonetics and phonology; for other teachers, the main focus should be on how to convey a certain message; in other words, what matters is to be understood.

Harmer (2001) expressed that the first thing that native speakers notice during a conversation is pronunciation. Grammar and vocabulary are important elements of language and they can be useless if the speakers cannot pronounce those elements or words accurately. Native speakers can understand people, despite their grammatical errors, if they use accurate pronunciation. Communicative efficiency can be guaranteed by correct pronunciation. The latter is an essential part of communication and without correct pronunciation nobody can say that s/he knows the English language perfectly.

The sixth and last question in the questionnaire was about the methods and techniques used by teachers in the classroom to improve their students' pronunciation. Moreover, the participants were asked to provide suggestions for other teachers concerning pronunciation in classroom. The majority of the participants believe that the best way to improve students' pronunciation is through providing audio or video materials. For them, listening to native speakers, the student can get the correct pronunciation of words and structures; i.e., stress and intonation patterns.

Some researchers agree on the fact that listening effects pronunciation. Morely (1991); for instance, stated that the students improve their speaking skill by listening activities both inside and outside the classroom. He added that the students find out listening activities easier to understand, especially the speech of native speakers. At the same time, the students' progress awareness of English pronunciation may help them in their own output. Moreover, the efficient way of learning pronunciation is to listen carefully and to imitate.

Furthermore, Yates (2001) noted that pronunciation relates to the generation of sounds that we use to form meaning. Listening, speaking, reading, and writing are the main skills we need to communicate in any languages; each skill relates to other skills. Listening can effect on speaking, reading, writing, and grammar. Before the learners can speak, they need to be able to listen. Pronunciation and listening comprehension are connected together by a unified system within which individual sounds are regularly related. Bennett (2007) mentioned that the key to develop students' pronunciation is listening; learners should be exposed to various voices and through different style of delivery.

The participants also agreed on the fact that the dictionary is a very helpful tool for the students' pronunciation either by reading the transcription or listening to the correct pronunciation if it is an electronic dictionary. The dictionaries typically offer pronunciation of the two most widely taught pronunciation varieties: BBC pronunciation (RP) and General American (US). Thus, EFL learners can listen to how the words and phrases are pronounced in the language they speak (or wish to speak) themselves, and they also have an opportunity to notice the essential difference between the BBC and GA accents.

In addition, some teachers believe that the best methods of pronunciation teaching are engaging the students in conversations; i.e., integrating discussions and tasks that require making conversations in class; pronouncing some words for them; i.e., being a good model; correcting their errors regularly. Finally, one of the participants suggested that the students need to get feedback from native speakers. Besides, they should enroll themselves in an intensive English study program which offers pronunciation as part of its curriculum.

This is in accordance with Al-Ghazo, Al-Sobh and Momani (2018) study about "Ways Used by EFL Learners to improve their English Pronunciation". Their findings showed that the ways most often used by the EFL learners in this study were making

friends with native speakers of English, listening to sounds through lectures, radio or TV shows, movies and improving English words pronunciation used. They also suggested the Ministry of Education should take into consideration that teaching pronunciation is a major component in the any foreign language program. EFL students should not just restrict their study on academic curricula; they should read books and use social media to learn how to pronounce words effectively and speak accur tely and fluently.

6.6. Summary of the Main Findings

This research study discussed the pronunciation problems faced by EFL students at TMUB focusing mainly on the production of English plosives in initial and final positions in addition to the importance of correct pronunciation in speaking English as a foreign language, the teachers' views about pronunciation teaching and the strategies of teaching pronunciation. To do so, several methods were used to collect data as well as data analysis.

Based on the results of the methods used, it was found that when EFL students at TMUB produce sounds, they make mistakes or errors. Thus, it can be concluded that error is a result of the lack of knowledge of pronunciation rules. They make a failure of it because they did not have enough knowledge about some rules of pronunciation in addition to the fact that they lack practice.

The EFL students' production of the plosive sounds in English can also be summarized as follows:

- First, the production of the bilabial plosives /p/ and /b/ is not difficult for students at TMUB because both sounds exist in the students' mother tongue (Bechari dialect).
- The production of sounds /t/ and /d/ for Bechari students from many cases is still a major problem; i.e., how students can position their vocal chords and breath force in addition to the differences between the production of /t/ in English and Arabic (Bechari dialect). The /t/ in the Bechari dialect is dental; besides, some students, those who speak Ksouria dialect, face some difficulties in pronouncing the /t/ as a voiceless dental plosive; they produced it as a voiceless post-alveolar affricate / tʃ/.
- The pronunciation of /k/ and /g/ for TMUB students may also be a problem. The way of corporation of their organs of speech especially the soft palate, the vocal chords and the breath force can be the major matter in producing these sounds.

Although the /g/ sound exists in the Bechari dialect, students face difficulty in voicing the sound; they sometimes produce the words ending in /g/ in the same way as /k/.

- In fact, age has no significance to this study because all of the subjects began their learning of English after the critical period. Nevertheless, the role of age in learning languages has long been debated. It was worthy of referring to the effects of age on second language learning.
- Additionally, based on the interview and the questionnaire results, French and
 Arabic have an effect on English pronunciation; both teachers and students argued
 that the pronunciation of some English sounds is affected by the French language
 to some extent. Some teachers added that their students' pronunciation is highly
 influenced by their mother tongue 'the Bechari dialect'.

6.7. Some Suggestions and Recommandations

Though there is a lot of controversy regarding the inclusion of explicit pronunciation teaching in the curriculum, the significance of teaching pronunciation for teaching effective communicative skills is undoubtedly accepted everywhere. Due to this controversy, pronunciation is a less practiced skill inside and outside the classroom in many countries. This negligence is prominently observed in foreign language context because of some reasons: lower possibility of achieving native like pronunciation, less opportunity of interacting with native speakers (Fraser, 1999), and very little chance in classrooms to teach pronunciation. The reluctance among teachers to teach pronunciation is also a reason for this negligence. However, these reasons do not rationalize the negligence for teaching pronunciation, as teaching itself is obligatory for achieving intelligible and comprehensible speech production (Fraser, ibid).

According to the result of this study, the researcher would like to give some suggestions for both the teachers and the students. In a learning process of English, teachers have their responsibility in guiding the students. All teachers are supposed to give the appropriate example of how words should be pronounced by correcting their mistakes and asking them to check the dictionary whenever needed. They should be the good model because students learn how to pronounce English words not only through a dictionary, but also from their teachers who should have a correct if not a good ability in pronouncing English sounds and words.

For EFL teachers, the researcher suggests that, in pronouncing the English words, they have to consider the good pronunciation, since different pronunciations will cause difference in meaning. This can be done by frequently listening to the original sounds or pronunciation of the native speaker from offline dictionary as Cambridge Oxford Dictionary and imitate the correct pronunciation. This will not only improve the teacher's pronunciation but also give a good model to the students. Besides, the teachers should learn to recognize interference and interlangual errors in the target language from L1 of the students, and be able to analyze the issues, and be competent to correct the errors and provide solutions for their students as to how to pronounce English words, phrases and sentences correctly.

For the students, it is believed that they should be highly motivated to learn and pronounce the new vocabulary found in the reading text or other sources. They should pay more attention to the pronunciation practices and they have to check the correct pronunciation from online or offline dictionaries. The students also should read the words with correct phonetic transcription. Besides learning from their teachers, they can learn through watching some videos on Youtube, listening to some English songs or other materials providing guidance to learn English sounds. Moreover, it is important for them to practice the English sounds, for example reading aloud and talking with a friend in English. They can imitate how the native speakers speak from TV, songs, the internet or movies. In learning English, there are no border lines, it can be done anywhere and everywhere from any source we can find. By studying and practicing, eventually they can improve their pronunciation.

In light of all that has been mentioned about the students' weakness in pronunciation, we all, as teachers, should reassess our teaching methodologies and restructure our priorities in teaching, so that we can guarantee a better proficiency in pronunciation. Of course, we are not seeking perfect native-like pronunciation, but at least comfortably-intelligible pronunciation. Therefore, we should base our teaching of pronunciation on the following principles that are adopted from Fraser (2001):

 Teaching pronunciation works better if the focus is laid on larger chunks of speech, such as words, tone groups and tonic syllables. This does not mean neglecting individual sounds and patterns. In addition to that, it is advisable to use the phonetic transcription which can be particularly helpful in getting the correct pronunciation of words.

- Pronunciation lectures work best if they involve the students in actually speaking rather than just learning facts or rules of pronunciation. In this respect, rules can be taught but the focus should not be laid on learning what but on learning how. Thus, learning pronunciation requires an enormous amount of practice.
- Teachers should be given more courses to enhance teacher expertise in teaching pronunciation. Such courses can upgrade teachers' skills in pronunciation and raise confidence as to how to teach pronunciation. Moreover, facilities and equipments necessary for teaching pronunciation should be provided. This involves providing self-access to listening tapes, other multi-modal audiovisual aids and software programs and electronic dictionaries. Such aids can be used for individual work, whole class work and group or pair work. Although they require training and effortful work on the part of teachers, they can potentially motivate students and raise their awareness and confidence of authentic spoken English.
- When teaching reading comprehension, for instance, teachers employ silent reading and avoid reading aloud. In this regard, good pronunciation is not acquired, and errors keep emerging. To avoid this, students should be given opportunities to practice their pronunciation skills. This is coupled by the need for reading aloud and recitation. (Celce-Murcia, Brinton, & Goodwin, 1996). This substantial practice requires scheduling classes and devoting more time for activities geared for the improvement of pronunciation.

In order to apply Fraser's (2001) principles, teachers have to create a suitable curriculum. It is always important to offer learners help at a level appropriate to their needs. This means having a rough curriculum for pronunciation teaching in the teachers' minds so that they can access material relevant to particular situations such as focusing on 'common problems' related to some consonant pairs like /t, d/ and /k, g/ or vowel length. In this context, Fraser (ibid) states:

In the communicative approach, the order in which pronunciation needs are addressed is based on the needs of the people who will be listening to the learners (ie. Ordinary native speakers of English), and the curriculum involves helping learners acquire the concepts most relevant to making themselves understood in English. In other words, the 'curriculum' for pronunciation is based on the relative importance

of different aspects of pronunciation in terms of how they affect listener comprehension.

In other words, teachers should go on helping learners to improve their pronunciation for as long as they are interested in doing this. The point is that to be effective, they must organise their pronunciation teaching curriculum in the most effective order.

Second, teachers must strive to communicate information about speech in a way learners can use effectively to improve their pronunciation. This is the key to good metalinguistic communication³¹. Moreover, teachers should always test their learners' understanding of everything they say about English pronunciation by asking questions and observing whether they can actually use what was said to change their pronunciation. That is to say, when teaching intonation, for instance, teachers have to check whether their students apply the intonation rules in their speech; if not, they must provide more exercizes about it.

Third, the material discussed in class should be as close as possible to the material found in natural communication outside the classroom, i.e., pronunciation lessons should focus on, and be based around, words, phrases and sentences that learners can actually use outside the classroom. To do so, teachers have to ask their students to bring sentences that they will be using outside class: this makes the best practice material of all.

This research is a first step towards describing and accounting for the pronunciation errors of English consonants specifically plosives in initial and final positions by EFL students at TMUB. Errors in realizing English vowels, intonation and stress are all important issues which need further research.

For future researchers who are going to conduct a research with the same topic or material, it is suggested that they should develop this study more into a broader level of complexity or range. Probably they can conduct a research with different type of manner of articulation such as the fricative, affricate, and nasal. Hopefully, this research can be one of the references for the researchers who are going to conduct a research in the same type of field.

³¹ "Metalinguistic communication is the communication that takes place between teachers and learners about pronunciation itself, for example, when a teacher points out learners' errors and suggests how they might improve their pronunciation" (Fraser, 2001, p. 35).

However, it is true to express that this study has its limitations in various aspects. First of all, this study focuses on the pronunciation of English plosives focusing on the VOT, i.e., plosives in initial position and the vowel lengthening effect of the English plosives in final position. Besides, the participants all come from the same university in Bechar, Algeria and may not be representative of all the English language teaching. In selecting the participants of the study, the only criterion was students irrespective of their language proficiency. As no random selection was possible, student groups were intact groups. Thus, the findings of this study cannot be generalized or applied to other teachers of English in general, but perhaps, to some extent, to other university teachers. The sample of teachers was, however, small and the amount of lessons observed were only six (6) session, i.e., one hour and a half per teacher in addition to the researcher's experience as a teacher at TMUB.

From the data analyzed by the researcher, there are problems related to phonological difficulties in consonant sounds specifically English plosives. In this study, while conducting this research, there are findings which show that errors made by the students are caused by their linguistic backgrounds. The issue should be left for further discussion, partly because the aim of this research was purely finding the difficulties the students faced and partly because a more comprehensive and thorough study is needed in order to reach at a strong conclusion about it. It is strongly suggested, however, that these phonological difficulties should be pointed to in the EFL teaching learning process.

6.8. Conclusion

This chapter provided findings, discussions and explanations of the classroom observation and the teachers' questionnaire. Although the literature suggested some pronunciation problems which were predictable regarding Arab learners of English in relation to some sounds, the main objective of the present study was to find out if the English plosives were a source of pronunciation problems to Bechari students at TMUB.

This study, then, demonstrated the effectiveness of using listening in the pronunciation correction process and while more research is needed, there is now some objective evidence that listening does work. It is now evidently understood that pronunciation should be taught correctly in foreign language teaching, which may develop native-like pronunciation, and help students to feel less anxious about speaking. Learners might be more motivated to actively take part in speaking to native speakers.

Additionally, it needs to be noted that the learners' communicative competence as well as performance is dependent on their command of all the basic skills of the target language encompassing listening and speaking (Celce-Muria, 1987). Though pronunciation is overlooked in the syllabus, material and even classroom activities, it does have an inseparable link to communication through listening and speaking. It can be concluded that this study has provided a vision regarding the pronunciation difficulties encountered by EFL students at TMUB.

General Conclusion

General Conclusion

After analyzing the data, conclusions can be made. It is hoped that they can be useful for the teachers and the students as well. Moreover, they can give many contributions to improve students' mastery in producing English plosive consonant sounds.

This dissertation was composed of six chapters, three (3) theoretical chapters, one chapter for the methodology and two (2) analytical chapters. The first chapter dealt with the basic themes in the study, namely voice onset time and vowel lengthening effects of vowels. Besides, an overview about the English sound system was provided.

The second chapter focused on error analysis and since the study was about Arabic-accented English, the researcher drew a comparison between Arabic and English sound systems. Moreover, a comparison between French and English sound system was provided for the former is a second language in Algeria. In order to clarify this fact, the third chapter was designed. It was entitled the sociolinguistic situation in Algeria dealing with the languages and varieties in the Algerian speech community, the education system in Algeria, and the use of English in Algeria. Furthermore, an overview about Bechar speech community was provided since the study was conducted in the Department of Letters and Foreign Languages, the English Section, at at Tahri Mohamed University in Bechar.

The fourth chapter was about the methods used in data collection. In fact, four (4) methods were used; students' recordings and interview as well as classroom observation and teachers' questionnaire. In this chapter, the researcher provided a brief description of the English plosives in addition to the problems that Arab EFL learners face in order to see whether Algerian students face the same pronunciation difficulties.

The analytical part in this dissertation was composed of two chapters. Chapter five dealt with the results and analysis if the students' recordings using PRAAT and the findings and discussion of the students' interview. Chapter six was designed for the analysis of classroom observation and the teachers' questionnaire. In addition, some recommendations and suggestions for future research were provided.

Since this work focused on the pronunciation problems faced by EFL students at Tahri Mohamed University - Bechar, specifically the production of English plosives in initial and final positions as well as the importance of correct pronunciation in speaking English as a foreign language, four (4) questions were asked: the first question looked for the way EFL students pronounce plosive consonants in initial position and whether they lengthen the vowel preceding plosives in final position; the second question looked for the plosive sounds that cause Voice Onset Time and vowel duration differences between a native speaker's English and the Arabic-Accented English of students at Tahri Mohamed University - Bechar; the third question dealt with the effects of the mother tongue, Bechari Arabic, and the first foreign language, French on the production of English plosives by Tahri Mohamed University's students; and the fourth question aimed at knowing the attitudes of EFL teachers towards their students' pronunciation errors as well as their suggestions to improve pronunciation teaching and learning.

Consequently, it was hypothesized that EFL students at Tahri Mohamed University Bechar cannot differentiate between the production of voiced and voiceless plosives in initial as well as final positions. Thus, reducing the amount of time between the release of the stop closure and the onset of vocal-fold vibration and shortening the vowel length when it is followed by a voiced plosive. Moreover, English voiceless plosives /p, t, k/ cause some problems for EFL students in initial as well as final position. Furthermore, EFL students at Tahri Mohamed University Bechar face pronunciation problems due to mother tongue interference; besides their pronunciation is highly affected by the French language since it is their first foreign language. Finally, EFL teachers at Tahri Mohamed University Bechar do not pay attention to pronunciation teaching in general and to pronunciation errors specifically.

To answer the above questions asked and to check the validity of the proposed hypotheses, four research (4) methods were used for data collection namely: Acoustic recordings, students' interview, classroom observation, and teachers' questionnaire and two (2) tools were employed for data analysis: PRAAT and the Microsoft Excel software.

In order to check the Voice Onset Time and the vowel lengthening effect of English plosives /p, t, k, b, d, g/ in initial and final positions, a list of minimal pairs was designed and ten (10) EFL students at Tahri Mohamed University - Bechar were recorded along with a native speaker. Thus, the recorded data was analyzed by the PRAAT. In fact, acoustic analysis was divided into two parts.

The first part was about the Voice Onset Time values of plosive consonants in initial positions. Concerning the Voice Onset Time values and based on the results of the acoustic

analysis, it was noticed that there is a difference in the mean of Voice Onset Time of voiceless consonants /p, t, k/ and their voiced counterpart /b, d, g/. Thus, when the participants' production was compared to the native speaker's production, it was found that all the participants produced the voiceless bilabial plosive /p/ in a correct way along with the voiced bilabial plosive /b/; the reason behind this correct pronunciation is that the participants are familiar with both sounds since they exist in the Bechari dialect.

It was also noticed that some of the participants could not differentiate between voiced and voiceless plosives in their production. Accordingly, for some speakers, there was a slight difference between voiced and voiceless consonants. Moreover, the mean Voice Onset Time value for /t/ was slightly higher than that for /p/, which conforms to the general agreement that the further back the place of articulation, the longer the Voice Onset Time.

Furthermore, it was found that the majority of the participants produce the voiceless alveolar plosive /t/ in a more dental way; this is mainly because the /t/ in Modern Standard Arabic as well as in Bechari Arabic is a dental consonant. In fact, when it comes to the production of the velar plosives /k/ and /g/, the majority of the participants failed in distinguishing between both sounds, in spite of the fact that the /g/ sound exists in the Bechari dialect. The average mean of Voice Onset Time in the production of /g/ for the participants was aound 30 ms. whereas for the native speaker it was only 09 ms. Thus, Voice Onset Time values of the velar plosive /g/ is significantly different on the basis of comparison between the EFL students' production and the native speaker.

Concerning the effect of gender on the production of plosives in initial position, the participants produced a significantly different Voice Onset Time's in aspirated voiceless plosives due to their gender; that is to say, males' Voice Onset Time of aspirated plosives was higher than that of females. Besides, the Voice Onset Time of voiced, unaspirated plosives produced by females were smaller than in the male productions. Moreover, male speakers produced voiced plosives with somehow a longer Voice Onset Time interval than female speakers but with no significant difference.

The second part of the acoustic analysis was about the vowel duration variation of voiced and voiceless plosives. It was noticed that some speakers fail in lengthening the vowel preceding a voiced consonant. There is only a slight difference in the mean of vowel length when it is followed by the voiced plosive or its voiceless counterpart. Moreover, the majority of the speakers lengthened the vowel before the voiceless plosive more than its voiced counterpart.

In fact, it was noticed that the participants faced difficulties in distinguishing between /t/ and /d/ concerning the effect of the plosive on the vowel length. For some speakers, the vowel is even longer when followed by a voiceless alveolar plosive /t/ than its voiced counterpart /d/. When it comes to gender differences, vowels produced by female EFL students were always longer than vowels produced by male EFL students, and the difference was significant for all vowels leading to the conclusion that females used greater durational contrast when compared to males.

According to the outcomes of the acoustic analysis, the words that consist of the velar plosives in both positions, i.e., in intial position for Voice Onset Time and in final position for vowel lengthening effect have the higher degree of errors that 60% of the participants in this study have failed to overcome this difficulty. Though the participants are familiar with the /g/ sound since it exists in the Bechari dialect, they still produce it with difficulty leading to errors. Consequently, our first hypothesis was confirmed.

Additionally, this study presented the findings which showed that the sounds /t/ and /d/ caused some problems for the participants in final position. In fact, the sound /d/ is present in English and Arabic (Modern Standard Arabic and Bechari dialect). However, its manner of articulation was different. In English, the consonant /d/ at the end of words is often unreleased but retains its voicing. However, in Arabic language, the /d/ is always released in word final position and it is voiceless in this position. Thus, our second hypothesis was plausible.

The second method used in data collection was the observation. The researcher attended six (6) sessions randomly. In fact, it was noticed that most of the teachers at Tahri Mohamed University Bechar do not pay much attention on their students' pronunciation errors. For them, pronunciation is the responsibility of teachers of phonetics and phonology and sometimes those who teach oral expression. Besides, the majority of them believe that teaching grammar and vocabulary to students make them master the language well.

In order to get a clear overview about the problems EFL students face in pronunciation, an interview for students was designed as well as a questionnaire for teachers was delivered. Both teachers and students at Tahri Mohamed University Bechar were asked about pronunciation difficulties and error correction and feedback besides their suggestion for better pronunciation.

Consequently, they agreed on the fact that it is difficult to master the pronunciation of the English language and that the essential skill to master is the listening skill simply because through the process of listening one can speak. When the students listen to native speakers, they will be able to imitate their accents and thus learn how to speak the English language correctly.

Speaking in an incorrect pronunciation is one of the biggest fears of the EFL students. The latter insisted on the idea that teachers should correct their pronunciation errors and provide feedback because being a good and skillful teacher of English or any other foreign language, they should speak the language correctly and sound as much as you can as a native speaker in order to attract their students and motivate them as well.

One of the best ways to correct the students' pronunciation errors is to check in the dictionary. Based on the results of the interview and the questionnaire, some of the participants stated that they focus on the transcription and the use of the dictionary because the latter embodies most of the essential components of the language. However, as hypothesized, the majority of the participants do not give much attention to pronunciation teaching and pronunciation errors correction.

Concerning the effect of French or Arabic on English pronunciation, both teachers and students agree that the pronunciation of some English sounds is affected by the French language to some extent since it is the second language in Algeria and because most Algerian people are exposed to the French language from infancy. In addition, some teachers believe that their students' pronunciation is highly influenced by their mother tongue 'Algerian Arabic' specifically the Bechari dialect. They argued that some sounds are difficult for Bechari students to pronounce and this leads to misunderstanding. This was clearly shown in the students' interview as well as the classroom observation sessions.

For instance, during the interview, it was noticed that the participants have other pronunciation errors. The data found and analyzed by the researcher showed that the learners also had problems with voiced dental fricative / ð /. For this sound, among other variations that appeared in the data, there are two common pronunciation errors they made. The first type of error they made is by assuming that the sound / ð / is pronounced like voiced alveolar plosive sound /d/. This type is called misformation under the category of archi-forms, as explained in the second chapter. This can be seen from how the students pronounced the words 'although' and 'bother' and compared them with their standard pronunciation.

The students also found it difficult to produce the voiceless dental fricative $/\theta$ /. Compared to the previous kind discussed above, this sound is much more difficult for them. They pronounce 'three' as /tree/ and thus changing the meaning of the sentence. This is noticed from the interview held and from the fact that they sometimes made it right in

pronouncing voiced dental fricative sound but they hardly made it right when articulating the voiceless dental fricative sound.

Another example in this context, as the researcher observed the students. She realized that they were not really good at pronouncing words in some texts. For example, when the participants were asked to read some minimal pairs like 'bag' or 'pack', they pronounced them with [bæk] and [pæk]. The correct pronunciation for both of them is [bæg] and [pæk] with plosions, which means blocking the flow of air completely through the mouth, in consonants [b] and [g] in the word 'bag' and [p] and [k] in the word 'pack'. This type of error was the most common thing that was done by the participants during the recording session.

From that kind of existence, it is pointed out that most of the participants had problems with pronouncing similar and plosive sounds. The mispronunciation of sounds may be caused by a lot of things. One of them is the difference or the non-existence of sounds in learner's mother tongue where the sound systems they use are not compatible with the English sound system. This kind of difference makes a gap between the learner's language and the target language.

In this context, Ramelan (2003) states that the degree of difficulty in learning is determined by the degree of difference between the two languages. Accordingly, the greater the similarity between them, the less difficult it will be for the student to learn the foreign language. Pronunciation is really important in speaking. Even the slight lack of pronunciation makes gap to the information that the speaker tries to convey. The failure of information makes a misunderstanding between the speaker and listener.

In fact, the majority of the students believe that French has no affect on their pronunciation since the majority of the students face difficulty in mastering or pronouncing French correctly. Based on this result, the third hypotheses was rejected. Besides, they focus on the fact that motivation is an important factor in pronunciation and that motivation can affect students' reluctance to speak in English. In addition to that, it was noticed that both teachers and students focus on fluency rather than accuracy. They argued that they prefer the communicative target because the student can, by time, correct his/her accuracy.

In sum, the results provided evidence that the designated sounds, i.e., English plosives, do pose some difficulty to the participants, regardless of the environment or position. These results support predictions made through the Contrastive Analysis Hypothesis. It suggested that the absence of sounds in a first language could result in the difficulty of acquisition of these sounds in a new language. In other words, cross-language phonetic interference is evident in Arabic-accented English. Native speakers of Arabic produce smaller voicing

effects in English words than native speakers because there is very little if any effect of stop voicing on preceding vowel duration in Arabic (Flege & Port, 1981; Mitleb, 2009).

In fact, while some of the English consonant sounds are not present in the Modern Standard Arabic inventory of phonemes, they are present in the Bechari dialect. However, they have a different phonetic realization. The failure to realize that English consonant phonemes have a particular phonetic realization can be the cause of the foreign accent. Consequently, based on the data analysis in the previous chapters, the researcher found that the students made some errors concerning the production of the plosives in initial and in final positions.

For this result, it is recommended that EFL teachers should focus more on pronunciation teaching through making their students involved in speaking rather than just providing rules of pronunciation. In this respect, rules can be taught but the focus should not be laid on learning what but on learning how. Besides, EFL teachers should be provided with the equipments necessary for teaching pronunciation such as: listening tapes, multi-modal audiovisual aids, software programs and electronic dictionaries. Such aids can be used for individual work, whole class work and group or pair work. Although they require training and effortful work on the part of teachers, they can potentially motivate students and raise their awareness and confidence of authentic spoken English.

For further researches, it is suggested to focus on other consonant sounds such as fricatives; otherwise, to study the English plosives as used by other students in other universities where another language or variety is used. For instance, the English spoken by Berber students can be studied for such a purpose. It is also suggested that future researchers will use other tools for data analysis like MATLAB platform.

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List of Appendices

Appendix A: Teachers' Questionnaire

Appendix B: Classroom Observation Form

Appendix C: PRAAT Acoustic Analysis

Appendix A: Teachers' Questionnaire

Dear teachers,

We would be very grateful if you could take time to share your experience by answering the following questions concerning the problems that your EFL students face in pronunciation. Your collaboration is very important because the completion of our work is based on the data collected from this questionnaire. Please, tick $(\sqrt{})$ the choice that corresponds to your answer.

Thank you very much in advance.

I.	Background Information
	Gender
_,	a. Male
	b. Female
2.	Degree (s) held
	a. Master/Magister
	b. Doctorate
3.	How long have you been teaching English?
II.	The Importance of Pronunciation in EFL Teaching
	Is pronunciation an important component of students' language
1.	competence?
	a. Yes
	b. No
	c. I don't know
2.	Do you think it is useful to focus on pronunciation in the classroom
	(regardless the subject you are teaching)?
	a. Yes
	b. No
	Why?
	······································
3.	Do you integrate pronunciation in your courses (regardless the subject you
	are teaching)?
	a. Yes
	b. No
	If yes, please state how?

4.	How often do you correct the students' pronunciation errors?
	a. Always
	b. Sometimes
	c. Never
5.	Do you look for reasons for pronunciation errors?
	a. Yes
	b. No
	If yes, because of
	a. Lack of practice
	b. The disability to read phonetic transcription
	c. The interference of French language
	d. Other
6.	What kind of help do you provide for improving your students'
	pronunciation?
	a. Teach them how to use the dictionary
	b. Use audio/video tapes in the classroom
	c. Teach them phonetics/phonology in detail
	d. Other
III.	Teachers' Attitudes Towards the Students' Pronunciation
1.	Are you satisfied with your students' pronunciation level?
	a. Satisfied
	b. Neutral
	c. Dissatisfied
2.	Do you spend a significant amount of time in providing instruction to
	improve their pronunciation?
	a. Yes
	b. No
	How?
	a. By asking them to check the phonetic transcription of new words
	b. By giving them some rules of connected speech
	c. Other
3.	What are the problems you face in teaching pronunciation?
	a. You are not able to understand them for their poor pronunciation
	b. They are highly influenced by their mother tongue 'Arabic'
	c. Their pronunciation is affected by the second language 'French'
	d. Other
4.	Do you think that your students are motivated to pronounce
	correctly/well?
	a. Yes

	b. No
5.	On what do you focus the most, accuracy (pronunciation) or fluency
	(communication) when giving your students the chance to speak? Please specify your reasons.
6.	In brief, what techniques/ methods would you suggest for EFL teachers to
	use in order to improve their students' pronunciation?
7.	

Thank you very much for your collaboration

Time:

Appendix B: Classroom Observation Form

OBSERVER: 1st Session

Level:			
Module:			
The lesson: Place: The Materials Used:			
The Materials Used:			
OBSERVED FACTORS LESSON			
EXTERNAL FACTORS			
-Interruptions from outside class:			
-Unusual weather:			
-Equipment problems:			
TTUDENTS FACTORS			
-Students' experiences affect lesson			
-Students interruptions:			
TEACHER FACTORS			
-Teacher experience affect lesson:			
-Variation from lesson plan:			
-Use of active participation:			
Attendance in the class:			

Date:

Observer:

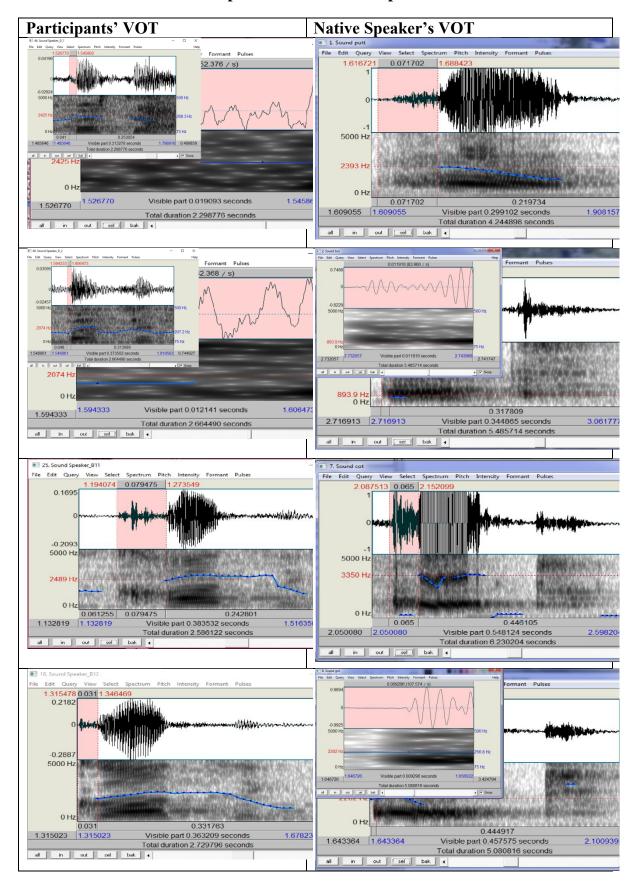
Teacher: /

COMMENTS:

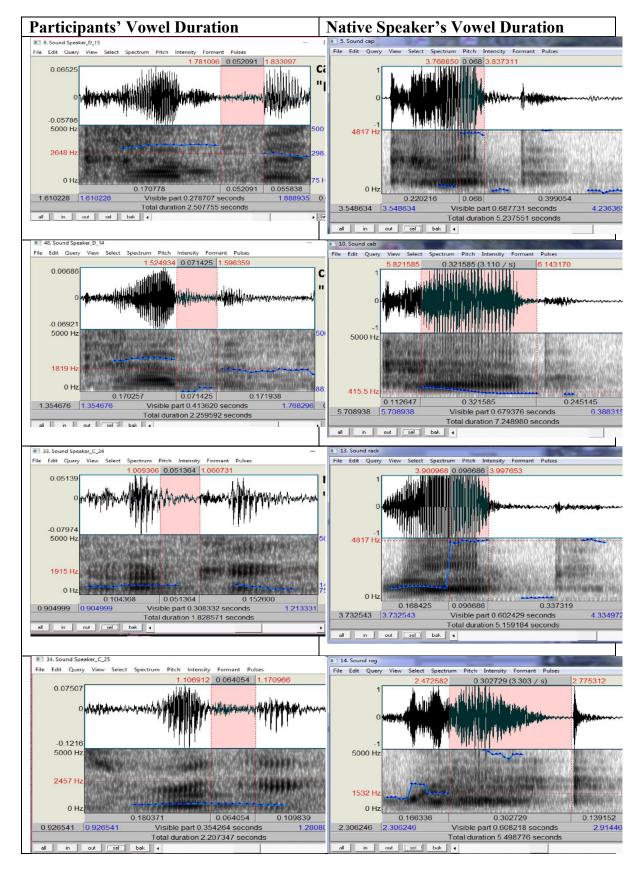
- -Teacher's attention for students' pronunciation errors:
- -The use of dictionary to teach pronunciation:
- -Pronunciation error correction and feedback:
- -Providing some pronunciation tips:

Appendix C: PRAAT Acoustic Analysis

Some VOT Values of Participants and the Native Speaker



Some Vowel Duration Values of Participants and the Native Speaker



Résumé

Le VOT (ou temps de début de la voix) et la Durée de la Voyelle des Voix en Anglais par les Etudiants : une étude sur les étudiants de l'université d'Béchar

En Algérie, l'anglais jouit d'un statut de langue étrangère; ainsi, les étudiants algériens apprenant l'anglais à l'université comme spécialité se heurtent à des difficultés en terme de prononciation, de grammaire et de vocabulaire. En ce qui concerne la prononciation, l'accent étranger est souvent considéré comme le résultat d'une diminution de leur capacité d'apprendre à prononcer des langues qui leurs sont inconnues, ceci étant souvent liée à l'âge. La présente étude porte sur les difficultés de prononciation rencontrées par les étudiants d'anglais à l'Université Tahri Mohammed - Bechar, et plus principalement sur deux thèmes : le temps de début de la voix et la variation de la durée de la voyelle des voix en anglais. On y examine le temps de début de la voix pour des plosives verbales sans voix en Anglais; le but de cette recherche est de déterminer dans quelle mesure les apprenants d'anglais algériens sont capables de produire des valeurs de temps de début de la voix similaires aux natifs pour les plosives sans voix, par le biais d'une analyse acoustique quantitative de la parole native et non non-native. Le présent travail examine l'effet de la variation de la durée de la voyelle précédente sur la production de plosives finales dans une phrase en anglais. L'étude comprend la mesure du temps de début de la voix (à l'aide du programme PRAAT) des plosives vocales et sans voix dans la position initiale, ainsi que l'effet d'allongement des voyelles des plosives vocales et sans voix en position finale. De plus, cette étude se concentre sur les erreurs de prononciation des étudiants et sur les attitudes des enseignants à l'égard de la mauvaise prononciation de leurs étudiants par le biais d'une entrevue avec les dix (10) étudiants (mâles et femelles) de tous les niveaux et spécialités et un questionnaire administré à vingt (20) enseignants. Les données recueillies auprès de la population cible ont été analysées et discutées dans le cadre de ce travail de recherche qui a montré que les plosives anglaises posent certaines difficultés aux participants, quels que soient leur environnement ou leur position. Pour cette raison, il est recommandé que les enseignants créent un programme approprié basé sur les besoins de leurs étudiants en se concentrant sur des problèmes communs tels que la mauvaise prononciation de /t, d/ et /k, g/.

Mots-clés : analyse acoustique; analyse des erreurs; accent étranger; consonnes plosives; prononciation; durée d'activation vocale; variation de la durée de la voyelle.

Arabic Abstract 242

ملخص

وقت بداية الصوت و مدة حرف العلة في نطق الإنجليزية: دراسة حول طلبة جامعة بشار

الكلمات المفتاحية: التحليل الصوتي؛ تحليل الخطأ؛ لهجة أجنبية؛ الحروف الساكنة؛ وقت بداية الصوت؛ تغير مدة حرف العلة.

Summary

This dissertation investigates pronunciation difficulties regarding EFL students at Tahri Mohamed University in Bechar, mainly the mispronunciation of plosives in order to identify the pronunciation errors made by the EFL students; look for the causes of the errors; and see the teachers' attitudes about their students' pronunciation in order to find out some efficient techniques to improve their students' pronunciation. Four methods were used for data collection namely: acoustic analysis using PRAAT, students' interview, classroom observation, and teachers' questionnaire. Based on the results of the methods used, it was found that when EFL students make errors when produing plosive sounds. These errors are a result of the lack of knowledge of pronunciation rules and lack of practice. Thus, it is suggested that teachers should reassess their teaching methodologies and restructure their priorities in teaching, so that they can guarantee a better proficiency in pronunciation.

Résumé

Cette thèse examine les erreurs de prononciation concernant les étudiants de l'Anglais comme langue étrangère à l'Université Tahri Mohamed de Béchar, principalement la mauvaise prononciation des oclusives afin d'identifier les erreurs de prononciation commises par les étudiants; rechercher les causes ou les sources des erreurs; et voir l'attitude des enseignants à l'égard de la prononciation de leurs étudiants afin de découvrir des techniques efficaces pour améliorer la prononciation de leurs étudiants. Quatre méthodes ont été utilisées pour la collecte de données, notamment : l'analyse acoustique à l'aide du PRAAT, l'entrevue des étudiants, l'observation en classe et le questionnaire des enseignants. Sur la base des résultats des méthodes utilisées, il a été constaté que lorsque les étudiants de l'EFL produisent des sons oclusives, ils font des erreurs. Ces erreurs sont le résultat du manque de connaissance des règles de prononciation et du manque de pratique. Il est donc suggéré que les enseignants réévaluent leurs méthodologies d'enseignement et restructurent leurs priorités en matière d'enseignement, afin qu'ils puissent garantir une meilleure maîtrise de la prononciation.

ملخص

هذه الأطروحة تدرس أخطاء النطق فيما يتعلق طلاب تخصص اللغة الانجليزية في جامعة الطاهري محمد بشار، مركزة على النطق الخاطئ للحروف الساكنة من أجل تحديد أخطاء النطق التي ارتكبها طلاب؛ البحث عن أسباب أو مصادر الأخطاء؛ ورؤية مواقف الأساتذة حول نطق طلابهم من أجل معرفة بعض التقنيات الفعالة لتحسين نطق طلابهم. لقد تم استخدام أربع طرق لجمع البيانات وهي: التحليل الصوتي باستخدام البرات، مقابلة بعض الطلاب، مراقبة الفصول الدراسية، واستبيان المعلمين. استنادا إلى نتائج الأساليب المستخدمة، وجد أنه عندما ينطق الطلاب الحروف الساكنة ، فإنهم يرتكبون أخطاء. وهذه الأخطاء ناتجة عن عدم معرفة قواعد النطق والافتقار إلى الممارسة. ومن ثم، يُقترح أن يعيد المعلمون تقييم منهجيات التدريس لديهم وأن يعيدوا هيكلة أولوياتهم في التدريس، حتى يتمكنوا من ضمان كفاءة أفضل في النطق.