

Error Analysis of the Pronunciation of Arabic Consonants by
Egyptian Learners

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Abstract— This paper presents some of the most recurrent pronunciation errors made by Egyptian learners of Tajweed. The study mainly investigates the production of Arabic consonants during the recitation of Qur'an. Participants read and recite verses of Qur'an in front of Sheikha (teacher) who teaches them rules of Tajweed. The study adopts a descriptive qualitative approach and the analysis is based on the reading and recitation of Qur'an by three informants who are of different ages; 70, 42 and 34 years old. The study shows their progress after three years of learning Tajweed and reciting Qur'an. The first results represent their pronunciation errors during an early stage of learning Tajweed, while the second results represent their pronunciation errors after three years of learning. It is found that at an early stage of learning, there are some common errors in the pronunciation of Arabic consonants such as velarization of some consonants that are not originally velarized and attenuation of some consonants that are originally emphatic and other processes such as substitution. In later stage of learning, results show progress in the pronunciation of consonants. The results, moreover, show that certain social factors can help in accelerating the progress of learning as seen through the improvement of the three informants.

Keywords— Consonant articulations, Egyptian learners of Qur'an, descriptive study, error analysis, pronunciation problems.

الملخص العربي

يقوم هذا البحث علي دراسة أخطاء النطق الأكثر تكرارًا والتي يرتكبها دارسو التجويد المصريون. تبحث الدراسة بشكل أساسي نطق الحروف الساكنة العربية أثناء تلاوة القرآن. تقوم الدراسات بقراءة وتلاوة آيات من القرآن أمام الشيخة (المعلمة) التي تعلمهم قواعد التجويد. تتبنى الدراسة منهجًا وصفيًا نوعيًا، ويستند التحليل على الأخطاء الناتجة عن قراءة وتلاوة القرآن من قبل ثلاثة دارسات من مختلف الأعمار: 70 و 42 و 34 سنة. تتابع الدراسة تقدمهم بعد ثلاث سنوات من تعلم التجويد وتلاوة القرآن. تمثل النتائج الأولية أخطاء النطق الخاصة بهم خلال مرحلة مبكرة من تعلم التجويد ، بينما تمثل النتائج الثانية أخطاء النطق الخاصة بهم بعد ثلاث سنوات من التعلم. وقد وجد أنه في مرحلة مبكرة من التعلم ، هناك بعض الأخطاء الشائعة في نطق الحروف الساكنة ، مثل تفخيم بعض الحروف التي لم تكن في الأصل مفخمة ترفيق بعض الحروف التي هي في الأصل مفخمة. كما تتناول الدراسة عمليات أخرى مثل الاستبدال. كذلك تظهر النتائج في مرحلة لاحقة من التعلم، تقدمًا في نطق الحروف الساكنة. علاوة على ذلك، توضح النتائج أن هناك بعض العوامل الاجتماعية التي يمكن ان تساعد في سرعة التقدم في تعلم النطق الصحيح للحروف الساكنة كما يتضح من خلال تحسن تلاوة الدارسات الثلاثة. الكلمات الدالة: نطق الحروف الساكنة، دارسو القرآن المصريين، المنهج الوصفي، تحليل الأخطاء، مشاكل نطق الحروف.

I. INTRODUCTION

Any language in the whole world is composed of linguistic components that made up the system of this language. These linguistic components involve phonetic, phonological, morphological, syntactic and semantic components. However, each one of these components that build up the system of one language will certainly be different from the components of another language. Considering, for example, Arabic, it has a distinguished phonetic system that discriminate it from other languages.

Accurate pronunciation is an important part of learning any language. However, it is not an easy task since each language has its own phonetic and phonological system. It is very common to have pronunciation errors in one's speech during learning a certain language. Accordingly, this study discusses the errors in pronunciation committed by learners who learn the Arabic version of Qur'an and to trace the progress after learning the rules of Tajweed. Moreover, the study highlights some of the social factors that help learners to reach an advanced level in reciting and articulating Qur'an correctly during the process of learning.

Any language in the world is characterized by some features which distinguish it and make it different from other languages. These features may vary according to some social, cultural, or religious factors. Arabic is a Semitic language that is spoken by around 422 million speakers (native and non-native) worldwide making it one of the five most spoken languages in the world (Simons, Gary F and Charles D. Fenning, 2018). Arabic is a language that it is characterized and distinguished by a feature which gives it uniqueness and differentiates it from other languages, that is, the Qur'anic Phonology (The Science of Tajweed) system. Arabic is the language of Qur'an which has been sent from Allah to Prophet Mohammed (PBUH) through the angel Gabriel (Jibril). Arabic is classified into different varieties; Classical Arabic, Modern Standard Arabic and Colloquial Arabic and many dialects. The focus of attention in this study is on Classical Arabic which is also known as 'Qur'anic Arabic'. The Holy Qur'an was written as early as the 6th century A.D., the language is slightly different from the Arabic of today.

Arab phonologists agree that Qur'anic Phonology in its basic meaning would mean to articulate exactly and correctly the verses of the Holy Qur'an taking into consideration all the Qur'anic phonological rules and features, (Nassr, 1349 AH, pp. 4-7). The systems of Qur'anic Arabic

and Standard Arabic are much alike in many aspects, yet Bakalla (1982) points out that there are some differences between the Arabic phonological and phonetic systems and the Qur'anic phonological and phonetic systems. Qur'anic phonological and phonetic systems discuss topics such as: place of articulation, manner of articulation in the same way as Arabic phonological and phonetic system (1982, pp.39-211). This paper presents some of the most recurrent pronunciation errors made by Egyptian learners of Tajweed (how to recite Qur'an correctly). The study mainly investigates the production of Arabic consonants during the recitation of Qur'an. The following section reviews some preliminaries about contrastive analysis and error analysis for their relevance to the present study.

II. BACKGROUND

A. *Contrastive Analysis*

Contrastive analysis is a branch of linguistics that involves two languages, and it is based on the assumption that languages can be compared, as stated by James (1980, p.3). It can also involve the vernacular and the standard language as there can be sometimes differences between the two. Lado's *Linguistics Across Cultures* (1957) sets the corner stone of contrastive analysis and in particular the idea that the degree of differences between the two languages associates with that of difficulty. Following Lado, the study adopts a contrastive analysis of Standard Arabic and its Vernacular language. Contrastive analysis is considered the fundamental solution to all language teaching problems. A series of contrastive studies were conducted both in America and Europe that aimed at predicting and solving learners' errors and difficulties (e.g., Celce-Murcia, 1985; Corder, S, Pit, 1967; Eckman, F.R, 1977; James, C, 1980; Sridhar, S. N, 1981).

There are two main types of contrastive studies: theoretical and applied. On the one hand, theoretical contrastive studies "give an exhaustive account of the differences and similarities between two or more languages, provide an adequate model for their comparison, and determine how and which elements are comparable (Fisiak, 1985, p. 2). On the other hand, applied contrastive analysis is part of applied linguistics. It was first introduced by Robert Lado in the 1950's in an attempt to solve practical problems. According to Fries (1971), these basic problems "arise not only out of any essential difficulty in the features of the new language themselves but primarily out of the special "set" created

by the first language habits” (Lado, 1971, p. v). Lado (1971) succeeds in understanding the significance of these basic facts for the construction of efficient valid measures of accomplishment and progress in mastering a foreign language.

The main objective of applied contrastive studies is to explain why some features of the target language are more difficult to acquire than others. Moreover, contrastive linguistic studies can also be applied to the description of one or more varieties within a language, such as dialects, registers, and styles (Connor, 1996). This study discusses via applied contrastive analysis interlingual as well as varieties of the same language.

B. Contrastive Analysis Hypothesis

Language interference is one of the important factors that emerged from contrastive analysis. It is a phenomenon that occurs when learning another language. According to James (1980, p.23) “Interference theory predicts that if a learner is called upon to produce some L2 form which he has not learnt, he will tend to produce an erroneous [=mistaken/wrong/incorrect] form having its origin in his L1”. The interference theory dates back to (1957), as Lado (1957, p.2) considers that language interference is the way in which learners of a second language transfer “the forms and meanings, and the distribution of forms and meanings of their native language and culture both productively when attempting to speak the language and to act in the culture, and respectively when attempting to grasp and understand the language and the culture as practiced by native”. Accordingly, Lado (1957) proposes a hypothesis that is known as ‘Contrastive Analysis Hypothesis’ (CAH), in which he states that it is possible to predict learners’ errors by comparing the native language (L1) and the target language (TL). He hypothesizes that structures in the TL that are different from the L1 are more difficult to acquire. Lado claims that "the key to ease or difficulty in foreign language learning lies in the comparison between native and foreign language" (Lado, 1957, p.1). He also states that:

The student who comes in contact with a foreign language will find features of it quite easy and others extremely difficult. Those elements that are similar to his native language will be simple for him, and those elements that are different will be difficult (1957, p.2).

Similarly, it can be said that the ease or difficulty to acquire a standard language of a first language lies in the comparison between the standard and the vernacular language of that language.

However, this CAH was criticized and it proved to be inaccurate in some of its predictions as it either underestimates errors, that is, it fails to predict some errors, or it exaggerates errors, that is, it predicts some errors that fails to occur, while in other cases, it gets some true predictions. Accordingly, error analysis, as a study, emerges from the oppositions of the CAH. The aim of error analysis is not to predict errors, but to analyze errors that occur in the interlanguage (IL) system.

Selinker (1972) defines interlanguage, as the learner's progress of their second language (L2) knowledge. Studies of ILs has shown that they surface characteristics of L1s, or other languages previously learned, as well as characteristics of L2s (Celce- Murcia, Briton, & Goodwin, 1996). Other criticism of CA is that it focuses on one type of error, that is, interference. Generally speaking, the source of errors cannot be limited to interference; there are many other errors that are caused by overgeneralization and in some cases errors are not of a linguistic origin but of a psychological one. However, it can be said that any solution for errors that are perceived as caused by interference, can be in the form of the mother tongue interference.

C. Interlanguage and Error Analysis

As a result of the restrictions of CAH to explain many aspects of first/second-language learners' language suitably, some researchers began to search for another approach for the study of errors that would be theoretically more accurate. This new approach, that is based on theories of first and second language acquisition and possible similarities between them, became known as Error Analysis (EA). Error Analysis, as a study, emerges as a response to the idea of second language learning proposed by contrastive analysis theory, which regards language transfer as the process involved in second and foreign language learning.

A major aim of error analysis is to examine the unacceptable forms produced by second or foreign language learners. Learning any language comprises making errors. This view is asserted by Dulay, Burt & Krashen (1982) who proclaim that people cannot learn language without first committing systematic errors. However, in this study, error analysis is applied on first language acquisition and its varieties.

Error analysis has gained different perceptions, as the learners' errors have been interpreted according to different viewpoints. One view that perceives errors as the learners' failure or laziness to produce the target

language was avoided. Instead, Corder (1967), for example, points out that the learners' errors can be explained according to testing hypotheses of second language (L2) knowledge. Corder (1974) highlights the significance of EA as "Systematically analyzing errors made by language learners makes it possible to determine areas that need reinforcement in teaching". Moreover, learners benefit from their errors as they gain feedback to test and modify their knowledge about the target language. In other words, error analysis provides learners with some evidences about the nature of their knowledge of the target language at a certain point in the learning process and discover what they still have to obtain. This method of testing hypotheses, according to Lightbown & Spada (2006), has various sources of knowledge, for example, phonological errors can be interpreted as the learner's attempt to apply phonological rules from his/her L1 in the L2 or that the learner overgeneralizes phonological rules of L2. By describing and classifying the learner's errors in linguistic terms, one can build a comprehensive picture of the features of the language which cause learning problems.

Error analysis, unlike contrastive analysis, provides real data on actual problems rather than hypothetical problems that would be presented by contrastive analysis. In other words, error analysis is more reliable and more efficient in the learning process. Like contrastive analysis, error analysis is divided into two branches: (i) theoretical, and (ii) applied. Theoretical error analysis, on the one hand, is concerned with the processes and strategies of second-language learning and its possible similarities with first language acquisition. Moreover, it is used to conclude that language learners employ strategies in dealing with the second language, e.g., overgeneralization and simplification strategies. One more theoretical implication of error analysis, as stated by Corder (1973), is to contribute to the notion of universality. Corder (1973) adds that the study of the learning of second languages, like child language studies and general linguistic studies, aims to discover universal processes.

Applied error analysis, on the other hand, is purely pragmatic and pedagogical, hence it is used to found remedial systems and develop suitable materials and strategies of teaching based on the findings of error analysis. Sridhar (1981, pp. 221-2) lists the different objectives of applied error analysis. To him, applied linguistics aims at (i) deciding the sequence of the presentation of target language items in textbooks and classrooms, with the difficult items succeeding the easier ones; (ii)

determining the relative degree of emphasis, explanation, and practice required in explaining various items in the target language; (iii) developing remedial lessons and exercises; and finally (iv) selecting items for testing the learner's proficiency.

Although theoretical and applied error analyses share the main procedures of identification of errors and their classification into different linguistic categories, yet, the two fields of error analysis deviate from one another. The applied error analyst, on the one hand, tries to find a therapy for the learners' difficulties in the target language by developing remedial materials. On the other hand, the main aim of the theoretical error analyst is to pay attention to the psychological reality of errors. In other words, he attempts to explain why and how errors occur. In this way, the analyst will be acquainted with the causes of errors. Accordingly, the current study uses both theoretical and applied error analysis to identify the errors committed by some learners of Qur'an, classify them, in addition to explaining why they commit these errors.

Early works in EA dealing with L2 data were taxonomic in the sense that they focused on collecting and classifying errors (James, 1998). It is noted in literature that many works in EA tried to prove the existence of numerous errors some caused by mother tongue interference and others by other causes.

III. THEORETICAL FRAMEWORK

During the process of learning a target language, Richards (1974) points out that learners try to hypothesize the target rules and so, they fall in an approximate system of language, which is neither the L1 nor the L2. This system is referred to as "interlanguage". One of these hypotheses is that L1 is dependent and it leads to errors caused by first language transfer. These errors differ from one learner to another due to various factors, as for example "...learning strategies, different training procedures, individual differences of teachers, text books..." (Jain, 1974, p. 189).

Interlanguage theory is generally credited to Larry Selinker (1972). This interlanguage phase is temporary until the learner improves his performance which is inevitably based on his improved competence of the TL. The following figure represents this approximate system of language that is known as "interlanguage".

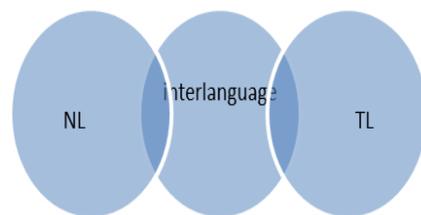


Figure 1: Interlanguage. adopted from (Corder, 1971)

Selinker (1972) considers different processes essential to second language acquisition. These resources are categorized as follows:

1. Language transfer
2. Transfer of training
3. Strategies of second language learning
4. Strategies of second language communication
5. Overgeneralization of TL linguistic material.

For the purpose of this study, focus is dawn on the first source of Selinker's categorization; language transfer. However, the transfer is from the vernacular language to the standard language of the Arabic language.

A. First Language Transfer

First language transfer, (also known as first language interference and interlanguage), refers to the phase achieved by learner so far and the learning strategies of that stage that are probably may or may not be caused by interference of the first language. First language transfer is the reproduction of rules from the first language (L1) to the second language (L2). Based on the definitions proposed by Selinker (1992) and Lado (1957), language transfer is regarded as the transfer of the forms and meanings of the native language and culture when attempting to speak and grasp the target language as practiced by natives.

It is also referred to as “a psycholinguistic process whereby L2 learners activate their previous linguistic knowledge in developing or using their interlanguage” (Faerch and Kasper, 1987). The aim of the study is to investigate and examine pronunciation errors of Egyptian learners of English and Qur'an and decide whether they are caused by first language transfer or other reasons. The study explores why learners resort to first language in general and why they resort to it for

pronunciation in particular. Errors, according to Odlin (1997, p.114), are two types; segmental errors and suprasegmental errors.

A. Segmental errors

Segmental errors are those errors that are related to the pronunciation of consonants and vowels (Odlin, 1997, p.114). To narrow down the scope of this study to pronunciation errors, the researcher finds it necessary to demonstrate the factors that contribute to either facilitating learning or making it a hard task for the learner and, thus, leading to errors. Hence, the researcher provides a comparison between the two sound systems of Arabic (the standard and the vernacular) focusing on the areas of difficulty for the native speakers of Arabic who are learning Classical Arabic as the language of Qur'an and their everyday colloquial language.

The other type of error is suprasegmental patterns which involve suprasegmental features such as stress, tone, rhythm, intonation and other factors (Odlin, 1997, p.118). For the limitation in this study, only segmental errors are examined here.

B. Vernacular Dialects

All languages have a standard version and a colloquial one, i.e., Arabic is an example. The standard version is usually taught in schools, used by the mass media, and is used for all communications of an official nature (Swan and Smith, 2007, p. 195). However, this variety is not the spoken everyday variety. "Within each country, often in quite small areas, a wide variety of colloquial dialects have developed, differing one from another not only in pronunciation, but also in common lexical items and, to some extent, in structure" (2007, p.195). This is referred to as 'diglossia' (Ferguson, 1959). Sometimes, these differences might cause intelligibility problems, as the diversion is vast especially in terms of stress, intonation and lexical item. Diglossia exists in Egypt as there is standard Arabic which is taught at schools and used in mass media and for official purposes, but this is not the language used by people everyday. It is Egyptian Arabic that is commonly used among people in daily communications. In this study, the role of Egyptian Arabic in the pronunciation of English as well as Qur'anic Arabic is investigated.

C. Repair Strategies

To facilitate the pronunciation of the words they are learning, learners resort to some strategies that can help them pronounce words correctly. These repair strategies describe the mechanism of how they avoid target phonemes that are difficult and hard to pronounce correctly. This involves making some phonological changes that lead to changes in pronunciation and, hence, causing errors. In this section, a brief description of these repair strategies is shown below:

1. **Vowel insertion/ Prothesis** is one strategy used by learners in which a vowel is inserted between consonant clusters (either in one word or across boundary between two words in connected speech) to facilitate the pronunciation of consonant cluster which is an absent phonological feature in Arabic. The word ‘documents’ is a good example. The proper pronunciation is /'dɒkjumənts/, while some speakers pronounce it as /'dɒkjumintis/ adding the vowel /i/ to split the final consonant clusters. Another example of a lexical chunk, in which a word ends with a consonant and the following word begins with a consonant, is the combination of ice cream as it is pronounced as /ais ekri:m/ instead of /ais kri:m/.
2. **Substitution** is another strategy which involves the substitution of sounds that do not exist in their native language. The word ‘gentle’ is usually pronounced as /'ʒent(ə)l/ in many Arabic dialects, instead of the correct form /'dʒent(ə)l/. The affricate /dʒ/ is replaced by the fricative phoneme /ʒ/.
3. **Metathesis** is a strategy in which the position of the phonemes is reordered, as in the word ‘ask’ when it is pronounced as *aks.
4. **Voice alternation** is a commonly used strategy among learners, because Arabic does not have the phonemes /v/ or /p/. Some learners change the pronunciation of /p/ to be /b/, as the case is in the word ‘pen’ /pen/ when it is pronounced as /ben/. Devoicing occurs when the /v/ is replaced by /f/ as in the word ‘video’ /vidiəʊ/, it is pronounced as /fidiəʊ/. In the first case, misunderstanding takes place as the listener might think of a ben instead of a pen, but in the second case, the speaker invented a word that does not exist in English.

Having reviewing theories that are related to language acquisition, the present study adopts these theories to examine the production of Arabic consonants by Egyptian learners to show the errors committed by the learners when pronouncing words in Qur'an. It also attempts to highlight the most common errors done by the learners while reading or reading (or reciting) Qur'an by adopting the interlanguage theory.

IV. LITERATURE REVIEW

This section is divided into two parts. The first part, on the one hand, deals with previous studies on language acquisition with a special focus on second language acquisition. The second part, on the other hand, deals studies on Tajweed errors in Qur'anic recitation.

I. Language acquisition studies

According to the previous studies that have been gathered about contrastive and error analysis, it is found that there are several studies that have been conducted to compare and contrast English and Arabic phonological systems. The issue has been discussed from different perspectives. As a consequence of these comparisons, the problematic areas that are responsible for pronunciation difficulties of learners of English have been identified. One of the aims of these studies is to understand the role of the first language in the phonological acquisition of the second language. Other studies aim at determining the types of pronunciation difficulties that face the learners and identifying what phonological characteristics of the native language interfere when producing English sounds (Ababneh (2018) and Al-Saidat).

All languages are unique in terms of their consonant and vowel systems. In linguistics, these distinctive characteristics have been divided into segmental and suprasegmental features. The segmental features of a language relate to consonants and vowels, whereas suprasegmental aspects of a language are involved with word stress, intonation, and rhythm. Some studies focus their attention on segmental features, whereas other studies concentrate on suprasegmental features. (Celce-Marcia, Brinton, & Goodwin, 1996, p. 35). Most of the previous studies relate their results to teaching and pedagogical purposes (James (1998); Al-Hosary (2016). Unlike the previous studies, the present study attempts to examine errors in pronunciation in first language (represented in the learning of Qur'an). The present study is considered a contrastive as well as an error analysis study as it compares the phonetic inventory of standard Arabic with the phonetic inventory of colloquial Arabic to demonstrate the similarities and differences between the phonological

systems of the varieties of the Arabic language. Observation of pronunciation errors in L1 and one of its varieties is considered a new topic that predicts the concurrence of pronunciation errors that may occur as a result of the interference of the vernacular language with the standard language.

II. Studies on Tajweed errors in Qur'anic recitation

After surveying some of the studies conducted on the phonological errors of second language acquisition, it is important also to display some of the studies conducted on Tajweed errors. Studies on Qur'anic recitation errors focus on the various types of Tajweed errors made by learners while they read or recite Qur'an in order to suggest more effective methods of teaching the correct recitation of Qur'an. These studies stress on the importance of the practical aspects of Tajweed knowledge (Surul Shahbudin Bin Hassan, Dr. Muhammad Azhar Bin Zailaini).

Since Qur'anic Arabic has its own phonological system that differentiates it from other languages, researchers adopt old theories and studies of leading reciters throughout the ages (e.g., Al-Jazari (833H); Al-Jamzuri (1198H); and other sources). These theories are important to the study as they demonstrate the phonological rules of the Qur'an that should be followed while reciting Qur'an and accordingly, they are of a great help to the researcher to identify the errors committed by the learners while reciting Qur'an.

a. Rules of Tajweed according to Al-Jazari (833h)

Al-Jazari (833H), through his verses, has explained the rules of Tajweed in the following areas:

- 1) Manner of correctly pronouncing the Makhraj (place of articulation) of a sound.
- 2) Manner of correctly pronouncing the Sifat (characteristic) of a sound.
- 3) Errors in the implementation of al-Tarqeeq (attenuation or thinning) and al-Tafkheem (velarization or thickening).
- 4) Errors in the pronunciation of the letters during recitation.
- 5) The Mutamathilan (Analogous Pair), Mutaqariban (Proximate Pair) and Mutajanisan (Homogeneous Pair)
- 6) Pronunciation of al-Ghunnah (nasalization) and al-Izhar (without nasalization)
- 7) Degrees of Lengthening - Mad (long) or Qasr (short).

- 8) Manner of stopping (Waqaf) and restarting (Ibtida')
- 9) Readings involving certain peculiarities of al-Rasm al-Uthmani (the Uthmani orthography).

B. Rules of Tajweed according to Al-Jamzuri (1198h)

Through his verses, Al-Jamzuri (1198H) clarified the rules of Tajweed in the following areas:

- 1) Rules of the pronunciation of jussive /n/ (Nun Sakinah) & narcotization (Tanween),
- 2) Rules of the Doubled /n/ (Nun) & /m/ (Mim),
- 3) Rules of jussive /m/ (Mim Sakinah),
- 4) Rules of Moon and Sun letters (Qamariyyah and Shamsiyyah),
- 5) Identical sounds (Mutamathilan), approximate sounds (Mutaqariban), homogeneous sounds (Mutajanisan),
- 6) Rules of Natural Lengthening (Mad Asli),
- 7) Rules of Secondary Lengthening (Mad Fari'e) caused by the glottal stop (hamzah),
- 8) Rules of Compulsory Lengthening (Mad Lazim).
- 9) Rules of Lengthening of Isolated Letters at the beginning of certain Suras.

V. AIM OF STUDY

This current study aims at investigating the pronunciation errors committed by learners when reciting Qur'an. It also attempts to highlight some of the social factors that help learners to improve their pronunciation in reciting and reading Qur'an. Moreover, it examines the application of the interference theory on both varieties of the Arabic language (the standard and the vernacular).

VI. RESEARCH QUESTIONS

Applying the error analysis on the acquisition of Qur'anic Arabic,(1) is it applicable to use error analysis to investigate the errors committed by learners of the Qur'an using the interference theory? In other words, does error analysis theory apply to Qur'anic phonology?

By investigating the types of errors in Qur'anic Arabic, (2) what are the types of errors committed by Egyptian learners of Qur'an?

(3) How are the Arabic consonants realized by the informants?

(4) In what way does the vernacular dialect (Egyptian Arabic) affect the pronunciation of Qur'anic Arabic?

VII. METHODOLOGY AND DATA COLLECTION

This present study is a descriptive study that adopts a qualitative method. Since this research is mainly concerned with the Qur'anic Arabic,

so all the examples which are mentioned in the study are quoted from the Holy Qur'an. The researcher herself has endeavored to learn Qur'anic recitation based on learning the rules of Tajweed. Some of the errors mentioned in the study she committed at an early stage of learning Qur'an. Moreover, the consonants under study are examined based on the researcher's experience of teaching English phonetics and phonology courses to university students at Women's college, English department.

A. Participants

Three Egyptian learners of the rules of Tajweed at a mosque are the participants in this study. Their ages varied as one of them is 70 years old, while the second is 42 and the third is 34 years old. All the informants are Egyptians who decided to learn Tajweed to improve their recitation of Qur'an. The vernacular language under study represents the Cairene dialect as the three informants are living in Cairo. None of the informants has hearing or speech problems. The informants meet once a week for three years learning Tajweed and reciting Qur'an to their teacher. The participants represent different ages. They are all women. One of them is (Azza) 70 years old, the other two are (Rasha) 34 and (Marwa) 42. The three participants learned the rules of Tajweed for one year and during this period they started memorizing surahs from the last part in Qur'an (30th Juz'). They apply the rules they learned on what they memorize. Each week they recite quarter of Juz'. Rasha beside learning the rules she listened to the recitation of the Qur'an from Sheikh El Hosary. Marwa counted on learning the rules and applying them without listening to any records of the Qur'an. Azza learned the rules and she listened to Qur'an from time to time not on regular basis. After three years Rasha was able to acquire the rules of Tajweed and her recitation was excellent as it was closer to the recitation of Sheikh El Hosary. Marwa was also able to acquire the rules of Tajweed, however, her recitation included some mistakes and that's because she didn't listen to Qur'an and she depended on learning the rules only. Azza, because of her old age, her progress was less than the other two participants and her recitation of Qur'an was full of mistakes as it was so difficult to change the wrong pronunciation she used to do during her past years. Errors were fossilized and she couldn't easily get rid of her wrong recitation of Qur'an before learning the rules of Tajweed. From the observation of the three participants, it is to be concluded that learning the rules of Tajweed only is not an enough way of learning the perfect recitation of the Qur'an, besides the rules of Tajweed, it is important to listen to recitation from a sheikh. It is also observed that old age finds it difficult to learn the perfect recitation of the Qur'an as

many of the errors in pronunciation are fossilized and they were not be able to be changed by the correct pronunciation. Qur'an has been revealed to Prophet Mohammed through Jabriel orally. To recite the Qur'an correctly one should learn both the rules and listen more to recitation of Qur'an from A Sheikh. It is better to learn Qur'an at early ages as learning at an older age becomes difficult as it is harder

B. Data collection

According to Ellis (1997), the initial step for the analysis of errors requires the selection of a corpus of language followed by the identification of errors.

Each week learners should prepare verses of Qur'an and recite them in front of their teacher who corrects their errors immediately during their recitation. The researcher takes notes of the pronunciation errors made by the informants including the researcher's pronunciation errors too. The data chosen are the words wrongly pronounced by the informants and are corrected by the teacher. These words include the consonants under study. All the words pronounced incorrectly by the informants are written by the researcher and beside each word the correct pronunciation as being corrected by the teacher.

The errors, then, found during recitation are classified according to the type of error made and according to how consonants are realized phonologically. Two records were collected; the first record of pronunciation errors was made in the first year of learning. The second record was taken after three years of learning Qur'an. The researcher, later on, compared the two records in an attempt to show the progress made by the informants after three years of learning. The next step, after giving an analysis of each error, involves an explanation of various types of errors. In addition, an investigation of the factors that help the learners to improve their pronunciation of Qur'an.

C. Selection of Verses for Recitation

The researcher chooses the most suitable verses for recitation - verses that would include all Arabic consonants; Surah al-Fateha and the last juz' in Qur'an (30th part of the Qur'an).

D. Recording the Recitation

The researcher records the recitations of the three learners of the Holy Qur'an. Then, a checklist of all the Arabic consonants is prepared in

which the wrong words pronounced by the informants are placed according to the error found and according to how the consonant is realized. The researcher prepares a list of all the rules of Qur'anic recitation that are concerned with the pronunciation of consonants and reproduces it in the form of a checklist that includes the three important characteristics of consonants. This checklist includes:

1. Letter (consonant) (Harf) and Vowel sign/diacritic (Shakl)
2. Place of articulation (Makhraj) and Manner of articulation (Sifat)
3. Attenuation/Thinness (Tarqeeq) and Velarization/Thickness (Tafkheem)

The researcher has to give full attention to review one by one the errors detected when the learners recite the Qur'an in front of the teacher. Each error is classified according to the realization of the consonant and according to the type of error made. The data are transcribed according to the recitation of the participants and, then, reviewed to identify the type of error committed.

VIII. DISCUSSION

Before discussing the various types of errors committed by participants of this study, it is necessary to have a quick look at the consonantal system of the Arabic language.

A. The Consonantal System of Classical Arabic

Classical Arabic has twenty-eight consonantal phonemes in nine places of articulation (Watson, 2007, p.15). Like English, Arabic consonants can be categorized according to their manner of articulation and place of articulation. Some sounds in Arabic have the same place of articulation which made it difficult to differentiate between sounds, therefore, consonants in Arabic can be grouped according to their manner of articulation into stops, fricatives, affricate, nasal, lateral, trill and glide sounds. Arabic stop consonants are produced due to a complete obstruction at some point in the mouth. In Arabic there are **seven stops**, i.e., (/b/= ب), (/t/= ت), (/T/= ط), (/d/= د), (/D/= ض), (/k/= ك), (/q/= ق). Arabic stops are not arranged into pairs since each sound has a different **place of articulation**. /b/ is a **bilabial stop** as the sound is made by the two lips, /t, d, D/ are **dentals** as they are produced by the tip of the tongue behind the upper front teeth. /T/ and /D/ are the **emphatic** counterparts of /t/ and /d/, respectively. Like English, /k/ is a **velar** sound in which the back of the tongue is against the velum. /q/ is a unique sound that is not found in English. It is the only **uvular** sound in Arabic. It is produced by the back of the tongue with the uvula.

There are thirteen **fricative** sounds in Arabic. They are produced involving blocking the airflow and having the air released through the narrow opening. These include (/f/= ف), (/θ/= ث), (/ð^s /= ظ), (/ð/= ذ), (/s/= س), (/ʃ/= ص), (/z/= ز), (/ʃ/= ش), (/x/= خ), (/ʕ/= غ), (/ħ/= ح), (/h/= ه), (/ʔ/= ء). /f/ is a **labiodental fricative** made by the upper teeth touch the lower lip, /θ, ð^s, ð/ are **interdental fricatives**, /s, ʃ, z/ are **dental fricatives**, /ʃ/ is a **palatal** sound, /x, ʕ/ are **velar** sounds made at the soft palate, and /ħ, h/ are **glottal** fricatives that are produced at the glottis.

Arabic has only one **alveolo-palatal** affricate (/dʒ/= ج). This sound is made by stopping the airflow with an obstructed release, which causes some friction.

All Arabic phonemes are oral, that is, the air is released through the mouth, except two sounds: (/m/= م) which is a **bilabial nasal** sound made by the two lips and (/n/= ن) which is an **alveolar nasal** sound made by the tip of the tongue touches the alveolar ridge.

Arabic has an **alveolar lateral** consonant (/l/= ل). It 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 flow releases freely on the sides of the tongue.

The (/r/= ر) in Arabic is produced by tapping the tongue repeatedly against a point of contact. It is an alveolar trill /r/.

The last two sounds in Arabic are the semi-vowels (or glides) (/j/= ي), and (/w/= و). /j/ is a **palatal glide** and /w/ is a **bilabial glide**. The following table shows the letters in Arabic and their corresponding phonetic symbol as well as a description of the sound according to the manner of articulation and place of articulation. It demonstrates emphatic consonants as well.

Table (2) shows the phonetic inventory of Classical Arabic and their manner of articulation and place of articulation.

Letter	Symbol	Manner of articulation	Place of articulation
ب	b	Stop	Bilabial
ت	t	Stop	Dental
ط	T	Stop	Emphatic Dental
د	d	Stop	Dental
ذ	D	Stop	Emphatic Dental
ك	k	Stop	Velar
ق	q	Stop	Uvular
ء	ʔ	Stop	Glottal
ظ	dʒ	Affricate	Alveolopalatal
ف	f	Fricative	Labiodental
س	s	Fricative	Dental
ص	S	Fricative	Emphatic Dental
ث	θ	Fricative	Interdental
د	ð	Fricative	Interdental
ظ	ʃ	Fricative	Palatal
ز	z	Fricative	Dental
ظ	ð ^ʕ	Fricative	Emphatic Interdental
ح	χ	Fricative	Velar
ع	ʕ	Fricative	Velar
هـ	H	Fricative	Pharyngeal
هـ	ħ	Fricative	Pharyngeal
هـ	h	Fricative	Glottal
ر	r	Trill	Alveolar
م	m	Nasal	Bilabial
ن	n	Continuant	Alveolar
ل	l	Nasal	Alveolar
و	w	Lateral	Alveolar
ي	j	Continuant	Alveolar
		Semi-vowel	Bilabial
		Semi-vowel	Palatal

Table (1) The Phonetic symbols of Arabic Consonants

B. The Consonantal System of Colloquial Arabic

Colloquial Arabic has twenty-four consonants in seven places of articulation including eight marginal phonemes. The marginal phonemes /p/ and /v/ are restricted to the speech of educated speakers. The most common and most phonemic-like of the marginal phonemes is the pharyngealized dental–alveolar tap / ɾ/. Watson (2007, p.21) states that

marginal phonemes shown in the dialect (Cairene) or among certain speakers of the dialect include:

- /q/ **voiceless uvular** stop. Restricted to religious and Standard Arabic lexemes, e.g. il-qurʔān ‘the Qur’an’, il-qāhira ‘Cairo’.
- /r̥/ **pharyngealized dental–alveolar tap** (emphatic counterpart of /r/). Found predominantly in European loans and in native words with guttural vowels, e.g. baʔafutt ‘parachute’ versus baʔari ‘bovine’.
- /b̥/ **pharyngealized bilabial** stop (emphatic counterpart of /b/). A few minimal pairs are shown, including /b̥āba/ ‘pope, pontiff, patriarch’ versus /bāba/ ‘second month of Coptic year (mid-October to mid-November)’.
- /m̥/ **pharyngealized bilabial nasal** stop (emphatic counterpart of /m/). Harrell provides a small number of near-minimal contrasts and one true minimal contrast with /m/as in /m̥ajjā/ ‘water’ versus /majjit/ ‘dead (one)’ (Harrell 1957, p. 75).
- /l̥/ **pharyngealized lateral** (emphatic counterpart of /l/). Found almost exclusively in the word /allā/ ‘God’.
- /p/ **voiceless bilabial** stop. Found in a few loan words among educated speakers, e.g. Paris /paris/.
- /ʒ/ **voiced palate-alveolar** fricative. Found in a few loan words, e.g. /zakitta/ ‘jacket’, /biʒāma/ ‘pair of pyjamas’.
- /v/ **voiced labio-dental** fricative. Found in a few loan words among educated speakers, e.g. Villa /vila/.

The rest of phonemes are the same phonemes mentioned above of Classical Arabic. Only slight differences in the pronunciation of some phonemes due to differences in the place of articulation.

C. Classical and Colloquial Arabic contrasted sounds

There is a slight difference in the pronunciation of consonants between classical Arabic and colloquial Arabic. Some consonants in classical Arabic do not exist in colloquial Arabic (e.g., /ðʕ/ = ط) or they are substituted by other phonemes: for example,

- /θ/ is substituted for /t/;
- /ʒ/ is substituted for /g/;
- /q/ is substituted for /ʔ /;
- /ð/ is substituted for /d/ or /z/

One distinctive difference between classical and colloquial Arabic is that /p/ and /v/ occur in colloquial Arabic and not in classical Arabic. These two sounds are borrowed from loan words taken from foreign languages and become part of colloquial Arabic. They are used especially by educated people or high-class.

There are some emphatic sounds in colloquial Arabic that do not exist in classical Arabic, such as / b̄/, /m̄/. There is also emphatic /n̄/ that occurs in colloquial Arabic but not in classical Arabic.

Emphatic /r̄/ occurs differently in classical and colloquial Arabic. In colloquial Arabic, /r̄/ is a loan sound that is taken from foreign languages, while in classical Arabic and according to Tajweed rules, /r/ has two cases; either it is emphatic (mufakhama) or non-emphatic (morāqāqa). Further details about the cases of pronouncing /r/ in Qur'an are mentioned in a later section.

D. Error analysis of Arabic consonants

First, it is important to say that error analysis made while reciting Qur'an falls into two categories (Shalabi, 2007, p.11):

1. Major Errors (لحن جليّ)
2. Minor Errors (لحن خفيّ)

According to Tajweed rules, major errors are five, presented as follows:

- 1- To recite one sound in place of another.

For example: (a) **pronouncing the pharyngeal fricative /h/= ح (as the glottal fricative /h/=ه)), as in:**

Word	Transcription	Wrong pronunciation	Transcription
الْحَمْدُ	/al-ḥamdu/	الْهَمْدُ	/al- hamdu/
الْحُطْمَةُ	/al-ḥuṭamah/	الْهَطْمَةُ	/al-huṭamah/

(b) **pronouncing interdental fricative /θ/= ث as dental fricative /s/= س) as in:**

Word	Transcription	Wrong pronunciation	Transcription
ثُمَّ	/θumma/	سَمَّ	/summa/
المبثوث	/al-mabθuθ/	المبسوس	/al-mabsus/
تُحَدِّثُ	/tuḥaddiθu/	تُحَدِّسُ	/tuḥaddisu/

Or pronouncing dental fricative emphatic /T/ = (ط) as dental fricative /t/= (ت) as in:

Word	Transcription	Wrong pronunciation	Transcription
طَيْرًا	/Tayran/	تيرا	/tayran/
المُسْتَقِيم	/al-mustaqiim/	المُسَطِّيم	/al-musTaqiim/
فَطْرَضِي	/fataṛDa/	فَطْرَضِي	/faTarDa/

2- **To add a letter to a word, when lengthening the vowels.**

For example, (a) the reader adds (واو) = /w/ instead of the diacritic ‘dummah’ as in:

Word	Transcription	Wrong pronunciation	Transcription
الْحَمْدُ	/al-ḥamdu/	الْحَمْدُو	/al-ḥamduu/
أَعُوذُ	/ʔaʕuuðu/	أَعُوذُو	/ʔaʕuuðu/

(b) (ياء) = /j/ after instead of the diacritic ‘kasrah’ as in:

Word	Transcription	Wrong pronunciation	Transcription
الْحَمْدُ لِلَّهِ	/al-ḥamdu lillah/	الْحَمْدُو لِلَّهِ	/al-ḥamduu lillahi/
لِإِيلَافِ قُرَيْشٍ	/liʔilafi quṛaiʃ/	لِإِيلَافِي قُرَيْشٍ	/liʔilafii quṛaiʃ/

3- **To delete a letter from a word when the letter is shorten:** e.g., ignoring the recitation of the letter (واو) = /w/ as in:

Word	Transcription	Wrong pronunciation	Transcription
لَمْ يُؤَلِّدْ	/lam juulad/	لَمْ يُلِّدْ	/lam julad/

4- **To recite one diacritic (harakah) in place of another:** e.g., to recite the glottal stop (hamzah) = /ʔ/ with a fat’hah instead of a kasrah as in:

Word	Transcription	Wrong pronunciation	transcription
أَهْدِنَا	/ʔihdina	أَهْدِنَا	/aʔhdina/

5-To recite a diacritic (harakah) in place of a jussive mood (unmarked mood) (sukoon or Jazm): e.g., to read a fat'hah on the ن = /n/ as in:

Word	Transcription	Wrong pronunciation	transcription
أَنْعَمْتَ	/aʔnʕamt/	أَنْعَمْتَ	/aʔnaʕamt/

It is to be noted that committing any of the above mentioned errors is a major sin and it is necessary to correct these errors immediately.

Minor errors are those errors that affect the reading but do not affect the meaning or it can be said that they affect the pronunciation of the letters. Such errors include violation of the rules of Tajweed such as assimilation, elision, attenuation, velarization, lenition of Nun (Ikhfaa), pronunciation of Nun (Izhaar), and dissimilation of Nun (Iqlaab), ...so on. Many of these errors are unknown to many people. The current study attempts to classify the pronunciation errors made by the informants into major and minor errors.

IX. DATA ANALYSIS AND RESULTS

This section is devoted to the practical aspects of error analysis of the selected data. First, an identification of the errors found in the current study. Then, an explanation of the reasons of these errors according to the interference theory. Finally, the section ends with mentioning some of the factors that affect the learning process.

The language of Qur'an is a very unique language that is distinctive from other languages although it shares many sounds with other languages. But the uniqueness of the Qur'an, comes from the fact that Allah orders people to recite Qur'an in the same way as it is sent by Gabriel (Jibril). Allah asks Prophet Muhammed (peace be upon him) to recite the Qur'an with tarteel "و رتل القرآن ترتيلا". Tarteel means Tajweed. i.e. To recite every letter with Tajweed and to know where to stop and where not to stop. Tajweed is - the tradition of the Holy Qur'an's recitation. The Greatness and Mercy of Allah is shown in the Holy Qur'an. Allah knows that reciting Qur'an is not an easy task that's why HE rewards those who learn how to recite Qur'an.

عن عائشة رضي الله عنها قالت-قال رسول الله صلى الله عليه و سلم "الماهر بالقرآن مع السفارة الكرام البررة و الذي يقرأ القرآن و يتعتع فيه و هو عليه شاق له أجران". (متفق عليه)

Aishah (May Allah be pleased with her) reported: The Messenger of Allah (peace be upon him) said, "The one who is proficient in the

recitation of the Qur'an will be with the honorable and obedient scribes (angels) and he who recites the Qur'an and finds it difficult to recite, doing his best to recite it in the best way possible, will have a double reward". (Al-Bukhari and Muslim).

The present study investigates the pronunciation errors in Qur'an made by three Egyptian learners. The focus is on the pronunciation of Arabic consonants. The findings of the data analysis are presented below in four sections, accordingly.

a) Substitution of Phonemes:

The consonants / θ, ð, ð^ɕ, dʒ/ are found pronounced wrongly as they are substituted with /s, z, z, g or ʒ/ respectively.

Table (2) shows the Arabic consonants and how they are wrongly pronounced in different examples. Both the correct pronunciation and the wrong pronunciation are given in the table.

Conso- nant	Example	Correct pronunciation	The substituted consonant	Wrong pronunciation
θ	غشاء انثرت	/ʏuθaʔ/ /iʔintaθarat/	S	/ʏusaʔ/ /iʔintasarat/
ð	فذوقوا	/faðuuquu/	Z	/fazuuquu/
ð ^ɕ	العظيم	/al-ʔa ð ^ɕ iim/	Z	/al-ʔaziim/
dʒ	يجعل	/jadʒʔal/	g/ ʒ	/jagʕal/or /jaʒʕal/

Table (2) *Substitution of Arabic consonants*

The strategy of substituting phonemes in place of another phonemes is seen in consonants that are pronounced differently in the vernacular dialect such as /θ/= ث , /ð/= ذ , /ð^ɕ /= ظ . These sounds are pronounced as /s/, /z/, /z/, respectively. For example, the word غشاء is pronounced as /ʏusaʔ/ instead of /ʏuθaʔ/, and the word انثرت pronounced as /iʔintasarat/ instead of /iʔintaθarat/. Also, the word فذوقوا is pronounced as /fazuuquu/ instead of /faðuuquu/. The word العظيم is pronounced as /al-ʔaziim/ instead of /al-ʔa ð^ɕiim/. Substitution of consonants also occur with the velar stop ج which should be pronounced as /dʒ/, but learners fail to produce the affricate /dʒ/ and they replace it by /g/ or /ʒ/. Some pronounce a word such as يجعل as /jagʕal/ or /jaʒʕal/ instead of /jadʒʔal/.

Substitution of phonemes is also seen in substituting emphatic consonants with non-emphatic consonants. This process is known as attenuation.

(b) Attenuation of emphatic consonants

It is noticed that the major error in pronunciation of some learners is the substitution of phonemes with other sounds. This is clearly seen with emphatic consonants that include /χ, ʂ, D, T, q, ʔ^s / = (ظ، ق، ط، ض، ص، خ)، respectively. Although these sounds exist in the vernacular dialect as well as classical Arabic, yet it is observed that learners do not pronounce these emphatic sounds correctly. There is a shift in the place of articulation of these sounds which causes sounds to be different from the original pronunciation.

Table (3) shows the substitution of emphatic consonants with non-emphatic ones through examples from the Qur'an. Both the correct pronunciation and the wrong pronunciation are given in the table.

Consonant	Example	Correct pronunciation	The substituted consonant	Wrong pronunciation
T	خاطئة مطهره	/χaaTiʔah/ /muTahaʔrah/	t	/χaatiʔah/ /mutaharah
χ ^s	خير	/χ ^s air/	χ	/χair/
ʂ ^s	غير	/ʂ ^s air/	ʂ	/ʂair/
D	أحضرت	/aʔhDar ^s at/	D	/aʔhdarat/

Table (3) Substitution of emphatic consonants with non-emphatic consonants

Substituting an emphatic consonant with non-emphatic one is known as 'attenuation' or 'Tarqeeq'. This is a common error among learners of Qur'an. For example, some students substitute the emphatic dental stop /T/ with its non-emphatic counterpart /t/, thus producing an error in words such as خاطئة, which is pronounced as /χaatiʔah/ instead of /χaaTiʔah/, and مطهره is pronounced as /mutaharah/ instead of /muTahaʔrah/. Other examples, such as خير is pronounced as /χair/ instead of /χ^sair/, أحضرت is pronounced as /aʔhdarat/ instead of /aʔhDar^sat/. Similarly, the velar fricative /ʂ/ غ is mispronounced by some learners as they pronounce it as non-emphatic in a word such as غير /ʂair/ instead of /ʂ^sair/. Learners also commit errors in pronouncing the emphatic consonant /D/, as they pronounce it as alveolar stop /d/. For example, the word فترضي /fatarDa/

is pronounced as /fatarda/. Learners should make focus on the place of articulation of such sounds in order to pronounce it correctly.

(c) Velarization of non-emphatic consonants

The third type of error committed by the informants in this study is pronouncing non-emphatic consonants as emphatic, that is they velarized non-emphatic consonants. Velarization is the articulation of consonants in which the tongue is drawn far up and back in the mouth toward the velum as if to pronounce a back vowel such as /u/ or /ɔ/.

Table (4) shows the velarization of non-emphatic consonants to be pronounced as emphatic.

Consonant	Example	Correct pronunciation	The substituted consonant	Wrong pronunciation
T	مستقيم	/mustaqiim/	T	/musTaqiim
S	مستقيم	/mustaqiim	S	/muStaqiim
B	أخبارها بصير باسط	/aʔχbaɾaha/ /baʃiir/ /baasiT/	b̥	/aʔχbaɾaha/ /baʃiir/ /baasiT /
N	نار	/naar ^s /	n ^s	/n ^s aar/
ʃ	شر	/ʃar ^s /	ʃ ^s	/ʃ ^s ar/

Table (4) The velarization of non-emphatic consonants

In contrast to attenuation, some learners substitute non-emphatic consonants with emphatic ones. For example, they substitute the dental stop /t/ with the emphatic counterpart /T/. Thus, the word مستقيم is pronounced as /musTaqiim/ instead of /mustaqiim/. Thus, a substitution of emphatic sound instead of a non-emphatic sound. This feature is known as ‘tafkheem (velarization) and tarqeeq (attenuation)’ in which a sound is being used in an emphatic way or the opposite way around.

Affected by the vernacular dialect, some learners pronounce non-emphatic consonants as emphatic. Another example, is the substitution of the bilabial stop /b/ with emphatic /b̥/. A bilabial stop /b/ is pharyngealized when it is adjacent to back vowels (e.g., u, o, a), thus resulting in a pharyngeal bilabial sound / b̥ /. This error is clearly seen in words such as أخبارها is pronounced as /aʔχb̥araha/ instead of /aʔχbaɾaha/. In this example, the learner velarized the sound /b/ which should be thin. This is a common error among Egyptians as the emphatic b̥ is taken from loan words that are borrowed from foreign languages. More examples of the mispronunciation of /b/ can be seen in the word

باصير, which is pronounced as /baʃiir/ instead of /baʃiir/, and the word باسط which is pronounced as /baasiT / instead of /baasiT/. The velar /n/ is also mispronounced as learners tend to velarize it as in the word نار /nʕaar/, whereas the correct pronunciation does not involve velarization, thus, it should be pronounced as /naarʕ/ with emphatic /r/. /ʃ/ is also mispronounced as this sound is velarized causing an error in pronunciation. For example, the word شر is pronounced as /ʃʕar/ instead of /ʃʕarʕ/.

One more recurrent error that is made by the informants concerning the pronunciation of the dental stop /t/ with a strong puff of air.

(d) Aspiration of dental stop /t/

According to Tajweed, the dental stop /t/ in Arabic unlike the alveolar stop /t/ in English, should not be pronounced with strong aspiration. Some learners tend to pronounce dental /t/ with puff of air especially when it has kasrah.

Table (5) shows the correct and wrong pronunciation of the dental stop /t/ in Qur'an:

Consonant	Example	Correct pronunciation	The substituted phoneme	Wrong pronunciation
t ^h	والنازعات	wannaziʔat ^h i	t ^h	wannaaziʕaat ^h i
	النفثات	annafaaʕaat ^h i		annafaaʕaat ^h i

Table (5) The correct and wrong pronunciation of the dental stop

Thus, a word such as والنازعات is pronounced as [wannaaziʕaat^hi] instead of [wannaziʔat^hi]. Another example is النفثات, which is pronounced as [annafaaʕaat^hi] instead of [annafaaʕaat^hi].

X. DISCUSSION

In this section the results will be commented on in the order of the research questions.

Applying the error analysis on the acquisition of Qur'anic Arabic, is it applicable to use error analysis to investigate the errors committed by learners of the Qur'an using the interference theory? In other words, in what way does the vernacular dialect (Egyptian Arabic) affect the pronunciation of Qur'anic Arabic?

By investigating the types of errors in Qur'anic Arabic, what are the types of errors committed by Egyptian learners of Qur'an?

How are the Arabic consonants realized by the informants?

The study applies both a contrastive and error analysis to the collected data. The researcher compares and contrasts between the vernacular language (colloquial language) and the standard language (The Classical Arabic). The results of the comparison show that there are some common consonants between the two varieties of the Arabic language such as /t, d, k, f, s, z, ʃ, h, ħ, m, n, l, r, ʕ, ɣ, ʁ, / and some consonants occur in the standard language but do not occur in the vernacular language such as / θ, ð, ð^s, dʒ, q/. There are also some common consonants in both varieties of Arabic, however, they are pronounced differently as they have different place of articulation. By this contrastive analysis, it can be deduced that learners of Qur'an are expected to commit some pronunciation errors due to the differences between the two varieties.

By applying the error analysis and applying the interference theory, it is found that the vernacular language has a great effect on the pronunciation of the learners during recitation of Qur'an. This is clearly shown in the substitution of some consonants in the Classical language with consonants in the vernacular language. This is attributed to the absence of some consonants in the vernacular language and accordingly, readers of the Qur'an substitute, for example, the dental fricative / θ/ with alveolar fricative /s/ and both the dental fricative / ð/ and / ð^s/ with the alveolar fricative /z/. Moreover, the affricate /dʒ/ is substituted with either /ʒ/ or /g/ as shown in the previous section.

Due to the influence of foreign languages on the vernacular language, it is also found that some consonants are pronounced as foreign accent and this is clearly seen in the pronunciation of words containing /b/, /m/ and /n/ as velarized consonants, in spite of the fact that these consonants are not originally velarized. Similarly, the dental stop /t/ is wrongly pronounced as the learners pronounce /t/ with a strong puff of air, in other words with strong aspiration.

Attenuation and Velarization are two important processes that are used wrongly by many learners. This is due to the phonological structure of the words and the effect of some sounds on the pronunciation of other consonants.

After three years of studying Tajweed and reciting Qur'an, the three informants have progressed to a great extent and their pronunciation has improved. However, there are some differences between the three

informants. As for Azza, the eldest informant, it is found that her progress in reciting the Qur'an is less than the other two informants. This can be attributed to the old age of the informant which can be a reason for the fossilization of some pronunciation errors made by the informant. The other informant Marwa, who has depended on learning the rules of Tajweed without listening to recorded tapes of the Qur'an recited by famous Sheikh, has progressed to a greater extent, however, she has had few pronunciation errors during her recitation. The third informant Rasha, who has learned the rules of Tajweed besides listening on regular basis to the recitation of Qur'an by the famous reciter Sheikh Mohammed Khalil El Hosary, has progressed to an advanced level and her recitation has become closer to correct recitation of the Qur'an.

Different factors play an important role in the learning process of correct pronunciation of Qur'an. One of these factors is related to the age. Getting older is not a difficulty in acquiring new information, however, the difficulty is due to the interference of past information or old wrong experience which causes errors to be fossilized.

Another factor is that learning rules of correct pronunciation without listening to experts in the recitation of Qur'an can hinder the learning process.

XI. CONCLUSION

After displaying the errors committed by students who learn English and students who learn Qur'an, it can be said that sounds that have similar sounds in English and Arabic (both in classical Arabic and the vernacular dialect) help students to pronounce correctly without errors. But this is not always the case with all similar sounds because some of these sounds have different place of articulation. This causes sounds to be pronounced differently and appearing to be far from the target language.

Learners of English and those who learn Qur'an use the same repair strategies such as substitution of consonants. In most cases substitution of consonants occurs as a result of the effect of the vernacular dialect on the target language (whether it is the English language or the Qur'an). Another feature that is common among the two groups of learners is devoicing and its opposite process sonorization.

A striking point is that velarization of consonants is a major error that is observed among learners of the Qur'an but it is not seen among learners

of English. This may be due to the fact that most of the examples of velarization of consonants come from the influence of L2 on L1, besides the fact that sounds in Arabic are affected by adjacent sounds, that's why velarization occurs frequently in Arabic.

One final remark is that not all the errors found in the study are the result of the influence of the L1 on the L2, however, in some cases ignorance and lack of knowledge of the phonological and phonotactic rules of the target language is another reason. Accordingly, a very important advice that could be said here is that to learn a target language correctly, one should listen more to the language from native speakers of the language as well as learn the phonological rules to apply it on the target language to come closer to the correct pronunciation.

LIST OF ABBREVIATION

CA= Contrastive Analysis
CAH= Contrastive Analysis Hypothesis
EA= Error Analysis
IL= Interlanguage
L1= First Language
L2= Second Language
NL=Native Language
TL= Target Language

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