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**Investigating Students' Appreciation of Cross-linguistic Morpho-phonological  
Analysis of English Words via Arabic Roots to Expose Arabic Meanings Embedded  
in English Vocabulary.**

**A Dissertation Submitted in Partial Fulfillment of the Requirements for a  
Master's Degree in Didactics of English**

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## **Declaration**

We hereby declare that the dissertation entitled “Investigating Students’ Appreciation of Cross-linguistic Morpho-phonological Analysis of English Words via Arabic Roots to Expose Arabic Meanings Embedded in English Vocabulary” is our own work and all the sources that we have used have been acknowledged by means of references. We also certify that we have not copied or plagiarized the work of other students or researchers partially or fully. In case our material is not documented, we shall be responsible for the consequences.

Signature

Date

## **Dedication**

I dedicate this work to my dear and beloved parents for their endless love, keen interest, great support, and encouragement. I also dedicate this work to all my brothers, sisters, nephews, and nieces.

With a great pleasure, I would like to dedicate this research paper to my dear supervisor Mr. Ahcène Kerdoun.

Finally, this work is dedicated to all Muslims and Arabs all over the world.

**Sadjia.**

## **Dedication**

This work is dedicated first and foremost to my beloved parents who have been my source of strength and inspiration.

Special dedication to my brothers Anis and Abd-Errahmane, my only and lovely sister Malak, my fiancé and future husband Housseem, my friends, relatives, supervisor and classmates who shared their words of advice and encouragement to finish this work.

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## **Abstract**

When a group of languages share a common origin, they can be considered as a language family known as "Protolanguage". For instance, English is believed to belong to the Indo-European family of languages, while Arabic is thought to have descended from a language known as Proto-Semitic. It follows that English and Arabic are expected to be structurally distinct Languages. However, many English words are observably similar to their counterparts in Arabic. Furthermore, if analysed morphologically as well as phonologically, almost every English word proves to have a direct cognate in Arabic whose sense could be much revealing of the origin it has developed from. Accordingly, this study is envisaged to investigate students' attitudes concerning the use of Morpho-phonological analysis of English vocabulary via Arabic lexical roots together to gain new insights into the closeness of these two languages, ever thought so distant. Thus, this study contends that English is of a Semitic origin, and so, if students are exposed to Cross-linguistic Morpho-phonological Analysis (CLMPA), their cultural awareness regarding the statuses of English and Arabic will be raised in favour of the recognition of Arabic ancestry. To achieve the research aims of this study, the data were collected through one research tool, a questionnaire. The latter was administered to thirty-five second year Master students at the department of English. The findings reveal that CLMPA has substantially succeeded in exposing the Arabic meanings embedded in English vocabulary, and so, raising students' cultural awareness regarding the unexpressed parentage of the two languages.

*Keywords:* English, Arabic, Cross-linguistic Morpho-phonological Analysis (CLMPA)

## List of Abbreviations and Symbols

**A:** Agree

**AR:** Arabic Root

**CA:** Classical Arabic

**CLMPA:** Cross-linguistic Morphophonological Analysis

**DA:** Disagree

**EFL:** English as a Foreign Language

**ER:** English Root

**IE:** Indo-European

**ME:** Middle English

**MDE:** Modern English

**MSA:** Modern Standard Arabic

**OE:** Old English

**P:** Page

**%:** Percentage

**\* -:** Word root.

**//:** Phonetic transcription

**→** : Reading from left to right

**←** : Reading from right to left

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## General Introduction

English and Arabic, although theoretically believed to be distant languages, when phonologically, morphologically, and even semantically scrutinized would show striking relationships. Nevertheless, they are categorized, for their historical development, as pertaining to different proto-languages. According to Wikipedia, “a proto-language is a hypothetical or reconstructed language from which a number of languages are believed to have descended in historical linguistics” (Wikipedia contributors, proto-language, 2012, para.1). Thus, it is equivalent to the parent language of a language family. Accordingly, English is thought to have descended from the Indo-European family of languages, while Arabic is believed to belong to the Semitic one because of varied levels of distinction: phonological, morphological, and semantic. In fact, many English words are clearly found out to have immediate similar counterparts in Arabic. Therefore, this manifest fact may attract researchers to conduct profound research of this phenomenon. To do so, Crosslinguistic Morphophonological Analysis came into being. In other words, CLMPA can be considered as a technique suitably serving the objective of exposing embedded Arabic meanings in English lexical items. According to Wikipedia, “Morphophonology is the branch of linguistics that studies the interaction between morphological and phonological processes” (Wikipedia contributors, Morphophonology, 2021, para. 1). This cross-linguistic case represents that interaction having occurred across Arabic and English. Therefore, cross-linguistic morphophonology can be understood to specify the types of interactions that have been utilized to generate potential English vocabulary. This specific study would help analyze the morphological and phonological changes having affected Arabic roots in contemporary English vocabulary formation process.

## **1- Background of the Study**

For students, particularly in advanced stages of EFL learning, it may become noticeable that many English words present significant relationships to their Arabic counterparts allowing the recognition of more or less evident similarities between certain Arabic and English lexical items not categorized by linguists as loan words. This observable ‘irregularity’ has encouraged to consider this issue thoroughly.

Research regarding the connection between English vocabulary and Arabic origins has gained specific interest by only a limited number of researchers, whose endeavours did not consider extracting the rules that clarify the system governing such a connection. For instance, Ahmad (1895) introduced a book entitled ‘Minan-ur-Rahman’, translated by Kazi and given the title ‘Arabic, Mother of all Languages’, unknown to most researchers in the domain of historical linguistics. This book, asserting that Arabic is the first human speech taught to men, considers all the other languages as natural ‘offsprings’ of Arabic. According to the author as translated by Kazi,

“A strong piece of evidence to support this claim is to be found, according to the author, in the highly organized system of Mufradaat possessed by Arabic. These Mufradaat are the so called ‘root-words’, the ‘simples’, or elementary symbols of speech which are the divinely communicated basis of all human articulation, and which are so varied and of such a comprehensive character as to serve the needs, not only of ordinary speech, but also the demands of all knowledge, religion, philosophy, culture, and science”.(p. 1-2)

Based on the observable similarities between certain Arabic and Old English lexical items, T. A. Ismail (1989) wrote “Classic Arabic as the Ancestor of Indo-European Languages and Origin of Speech”. In this book, the author believes that Arabic language is the origin from which Old English and Latin have sprung. The English word ‘tall’, for

example, justifies the fact that Arabic is its source because of its similarity with ‘tawil’ (/tawi:l/ ) ’طويل’, both in sounding and meaning. She supports this fact by emphasizing the numerous derivatives (tala, yatoulo, taiilon, taiilaton, dou tawlin, wa mostateel) ( طال يطول ( وطائل وطائلة وذو الطول ومستطيل), while deemphasizing the English counterpart ‘tall’ as one unique word having no derivatives.

Actually, research concerning the development of a technique that allows relating two languages to one another, permitting to find out which one is prior in existence to the other, has not yet been made available. Accordingly, this study is an attempt to investigate the connections between English and Arabic through measuring students’ appreciation of CLMPA of English words via Arabic roots. It is worth acknowledging that the two Arabic dictionaries Maqayees-Al-Lugha (مقاييس اللغة) and Almaany (المعاني) have been immensely utilized in the research process.

## **2- Statement of the Problem**

English and Arabic are thought to be distant languages as English is an Indo-European language, while Arabic is of a Semitic origin. By contrast, most English lexical items appear to be easily connected with Arabic ones when their morphological structure, sounding, and meaning are comparatively considered. This becomes more thought-provoking as to assume that a given English word has an immediate Arabic equivalent simply by eliminating vowels in the English element to clarify the Arabic consonantal root. Such a simplicity in tracing almost any English term back to an original Arabic one raises interesting questions begging immediate sound answers. For this purpose, CLMPA could be reliably employed to investigate the issue of Arabic being the source of English.

### **3- Aim of the Study**

The aim of this study is to expose the Arabic meanings embedded in English vocabulary through using the technique called Cross-linguistic Morpho-phonological Analysis of English lexical items via Arabic roots.

### **4- Research Questions**

The present research addresses the following research questions:

1- Would the fact that Arabic phonologically, morphologically, and semantically governs English affect students' attitude regarding English as the primary language of communication?

2- Can CLMPA employment at a large scale be conducive to rethinking the current language families?

### **5- Hypothesis**

This research is based on the following hypothesis:

If CLMPA is applied on any English lexical item, the equivalent Arabic root will be reasonably identified and Arabic embedded meaning exposed.

### **6- Means of the Research**

This study is descriptive in its design as it investigates the role of using CLMPA of English words via Arabic roots in order to expose the Arabic embedded meanings in English vocabulary, allowing to raise students' cultural awareness regarding the statuses of the two languages and their subsequent importance for language use. In order to investigate the topic under discussion and answer the previous questions, one instrument is used, the questionnaire. This is administered to 35 second-year Master EFL students.

## **7- Structure of the Study**

This dissertation is divided into three chapters: two theoretical and a practical one. It also provides a general introduction as well as a general conclusion.

The first chapter includes two sections: one about the linguistic history of English and another about that of Arabic. The first section describes the development of English throughout the three stages, namely Old English, Middle English, and Modern English. The second section sheds light on the evolution of Arabic throughout the four phases: Old Arabic, Middle Arabic, Modern Arabic, and Colloquial Arabic.

The second chapter is composed of three sections: morphology, phonology, and a third section discussing the domain of cross-linguistic morphophonology. The first section explains how words are formed, which is referred to as “word formation”. The second section describes speech sounds of a language and the rules governing the composition and combination of those sounds. The third section presents a discussion of cross-linguistic morphophonology which postulates that English is Arabic-root based. It seeks to elucidate the change having affected a given Arabic root resulting in the corresponding English word.

The third and final chapter details the practical part of the dissertation. It explains the design of the study and the adopted methodology. It also analyses the questionnaire administered to the thirty-five-students sample. Finally, it exposes some pedagogical recommendations and suggestions and specify the main limitations of the study.

## **Chapter One: Linguistic History of English and Arabic**

### **Introduction**

#### **Section One: History of English**

##### 1.1.1. Indo-European Family of Languages

###### 1.1.1.1. Old English (449-1100)

###### 1.1.1.1.1. Pronunciation

###### 1.1.1.1.2. Spelling

###### 1.1.1.1.3. Vocabulary

###### 1.1.1.2. Middle English (1100-1500)

###### 1.1.1.2.1. Vocabulary

###### 1.1.1.2.2. Spelling

###### 1.1.1.2.3. Pronunciation

###### 1.1.1.3. Modern English (1500-1800)

###### 1.1.1.3.1. Spelling and Pronunciation

## **Chapter One: Linguistic History of English and Arabic**

### **Introduction**

The term “language family” refers to a group of languages sharing a common ancestor, the so-called “protolanguage”. Mukminatun (2011) says that the Protolanguage is divided into two or more dialects. The speakers of those dialects had no mutual contact and they lived far from each other, and this led the dialects to become gradually more different from each other to the extent that the speakers of one dialect were no longer able to understand the speakers of the other dialects. This is why the different dialects were considered as separate languages. The repetition of this scenario through centuries led to the development of large language families.

Studies show that there are four groups of language families that exist all over the world: language families of Europe and Mideast, language family of Asia, language family of Africa, and language family of the Americas. Language families of Europe and Mideast are the largest language families over the world. Beside other language families, this group includes Indo-European languages and Semitic languages to which English and Arabic belong.

### **Section One: History of English**

This section takes as its major concern the history of English shedding light on the development of the English language through time and the changes that have occurred at the three periods of the English history: Old English, Middle English, and Modern English concerning the Phonological, Morphological, and Syntactic Developments.

#### **1.1.1. Indo-European Family of Languages**

Clackson (2007) states that Indo-European is considered to be the most widely studied language family in the world. 200 years ago, research was conducted on the

comparative philology of IE than all the other language families put together. IE first spread throughout Europe and many parts of south Asia, then after colonization it spread to every place of the globe. The family includes most of the European languages and many others of southwest, central, and south Asia. The Indo-European language family is taught to have the largest number of speakers of all language families with over 2.6 billion speakers or 45% of the world's population. IE languages are classified into 11 major groups namely; Hellenic, Italic, Albanian, Indo-Iranian, Baltic, Celtic, Armenian, Tocharian, Slavic, Germanic, and Hittite. These are taught to be the branches of Indo-European family tree.

Germanic languages, the most widely spoken languages in the world, are classified into 3 groups: North, West and East. North Germanic includes Icelandic, Swedish, Norwegian, Danish, and Faroese. West Germanic consists of English, German, Low German, Frisian, Dutch, Flemish, Afrikaans, and Yiddish. And finally, East Germanic includes Gothic.

#### **1.1.1.1. Old English (449-1100):**

According to Baugh and Cable (2002), Old English, which is also called Anglo-Saxon, is the language that is spoken and written in England before 1100; it is taught to be the ancestor of Middle English and Modern English. OE is placed in the Anglo-Frisian group of West Germanic languages, and it consists of four dialects which are known as Northumbrian in Northern England and South-eastern Scotland; Mercian in central England; Kentish in South-eastern England; and West Saxon in Southern and South-western England.

English was introduced to England about the middle of the fifth century. And since that time, a number of races inhabited the island. Baugh and Cable (2002) state that the first people in England about whose language recognized are the Celts, the last group of immigrants to settle in Britain before the arrival of the Anglo-Saxons. Celtic was the first Indo-European language spoken in England, and it is still spoken by a considerable number of

people. In addition to Celtic, Latin was introduced when Britain became a province of the Roman Empire and it was used for about four centuries.

As mentioned above, there are four dialects that can be distinguished in Old English times: Northumbrian, Mercian, West Saxon, and Kentish. Furthermore, OE is characterized by some features. According to Baugh and Cable (2002), the most noticeable differences between Old English and Modern English are concerned with pronunciation, spelling, and vocabulary.

#### **1.1.1.1.1. Pronunciation**

Old English words are different from their modern equivalents in terms of Pronunciation. Examples of such differences in Pronunciation are the long vowels which have undergone considerable modification; for instance, the word 'stān' is the equivalent of Modern English word 'stone'. Other similar examples are: /gān/=/go/, /bān/=/bone/ , /rap/=/rope/ .

#### **1.1.1.1.2. Spelling**

In fact, one can easily notice the differences between Old English and Modern English in terms of spelling. For instance, the sound of /th/ in OE is represented by two characters: þ and ð as in the word /wiþ/=/with/ or /ða/=/then/.

/sh/ represented by /sc/ like in /sceap/=/sheap/, /scip/=/ship/, /scift/=/shift/.

#### **1.1.1.1.3. Vocabulary**

A second feature of Old English, according to Baugh and Cable (2002), that distinguishes it from Modern English is the absence of words derived from Latin and French which form a large part of English today's vocabulary. Old English vocabulary is taught to be almost purely Germanic, and 85% of which, as studies show, is no longer in use.

Although OE lacks a large number of words borrowed from Latin and French, its resources are not limited. In fact, OE has its own way to enrich its vocabulary through affixes and self-explanatory compounds. It has great flexibility and can convert old words into new usages through prefixes and suffixes. A single root produces various derivatives. In fact, OE shows extraordinary derivation ability and word formation ability. Part of the reason for the flexibility of the OE vocabulary is that it stems from the extensive use of prefixes and suffixes to form new words from old words. Examples of Old English suffixes are: full, ness, dom. And prefixes such as: fore, miss, un, under. Another way that OE is flexible and often changes is compound words, where people can create new words as needed. For example, you can use the words 'sun' and 'flower' together to form the word 'sunflower'. (Baugh & Cable, 2002).

#### **1.1.1.2. Middle English (1100-1500):**

Middle English, the descendant of the Old English and the ancestor of Modern English, was a form of the English which was spoken after the Norman Conquest until the late 15th century. It has undergone remarkable changes in the English language concerning vocabulary, spelling, and pronunciation.

##### **1.1.1.2.1. Vocabulary**

Algeo (2009) says that Latin had a great influence on Middle English vocabulary. Scandinavian, Dutch and Flemish as well played an important role in building the vocabulary of ME. Though, the most important influence was French. Moreover, The Norman Conquest had an important impact on the English language and as a result, new English was built up. The author includes some examples of some words translated in OE and ME.

**Table 01:** Example Translated Words in OE and ME

æhta	catel	property
burhsittende man	citeseyn	citizen

In these examples the first expression is native English, while the second is borrowed from French.

#### **1.1.1.2.2. Spelling**

Just like vocabulary, Middle English spelling was influenced by French. For instance, the digraph *th* which was replaced by *p* and *a* in Old English writing, was gradually reintroduced in ME. Similarly, the diagraph ‘*uu*’ which was used in OE was replaced by ‘*w*’ in ME. In addition, in Old English, the consonant sound /v/ did not exist. Instead, the sound /f/ was used as in *drifen* 'driven' and *scofel* 'shovel'. In fact, no native English word began with [v], and all the words with initial v originated from Latin or French. Moreover, as a result of French influence, the letter *c* in old English changed its spelling into *ch* in ME as in *cild* which became *child*. Similarly, the symbol 'sc' in ME was used to indicate the sound of 'sk'. Furthermore, concerning vowels, doubling letters was very common in ME in order to indicate vowel length. For instance, the Middle English *ee* and *oo* were used to indicate /ε:/ and /ɔ:/. Finally, there were so many other examples of the spelling conventions of ME scribes. And these were only part off. (Algeo, 2009).

#### **1.1.1.2.3. Pronunciation**

Algeo (2009) pointed out that, there existed significant changes in pronunciation during the Middle English period. First, the old English ‘*hl*’, ‘*hn*’ and ‘*hr*’ were simplified to *l*, *n*, and *r* as in:

**Table 02:** Example Pronunciation Changes during ME and MDE

OE	ME	MDE
hlēapan	lēpen	‘to leap’
hnutu	nute	‘nut’
hraðor	rather	‘sooner’

Second, the voiced velar fricative ‘g’ that occurred after ‘l’ or ‘r’ in old English as in halgian and morgen became w in Middle English ‘halwen’ and ‘morwe (n)’. In addition, the prefix ‘ge’ in OE was replaced by i- (y-) such as in gelimpan= ilimpen. Concerning vowels, the long vowel sound ē, ī, ō and ū remained stable in ME. A Middle English word that was spelled with o (o) could be pronounced with different ways according to its form in OE as follows:

**Table 03:** Pronunciation Changes of ‘o’ in OE and ME

OE	ME	Transcription
ā	stān	stʌn /ɔ:/
ō	rōt	root (e) /o:/

### 1.1.1.3. Modern English: (1500-1800)

Braha (2016) pointed out that Modern English split up into two periods as follows: early Modern English from the sixteenth was marked by a major change in pronunciation, the so called Great Vowel Shift. The main factor on this vowel shift is thought to be the great

number of vowel sounds borrowed from the Romance languages which required a new pronunciation.

#### **1.1.1.3.1. Spelling and Pronunciation**

Brinton (2000) summarized the major features of Modern English spelling as follows: First, a variety of letters can represent only one sound as in the words: *meat, meet, key city, etc.* Second, a variety of sounds can be represented by only one letter such as with *d* like in *damage, educate, picked.* Third, there are some letters that can be silent in some cases and represent no sounds. As in *Knee, lamb, right, honor.* In addition, a single sound may be represented by two or more letters such as in *throne, school, blood.* Moreover, two or more sounds may be represented by one single letter like in *box* (*x=ks*) Furthermore, Braha (2016) has mentioned some examples of pronunciation changes. For example, the old English *x* was replaced by *gh* as in *burx* which became *burgh.* In some cases, the *gh* was pronounced *f* like in *cough,* and *laugh.*

To sum up, this short passage has shed some light on the history of the English language which has changed dramatically over the centuries in different ways in different contexts. It has also highlighted the linguistic developments of the language at the three stages namely, Old English, Middle English, and Modern English.

## **Section Two: History of Arabic**

1.2.1. Semitic Family of languages

1.2.2. Stages of Arabic language

1.2.2.1. Old Arabic (Proto- Arabic)

1.2.2.2. Middle Arabic (Classical Arabic)

1.2.2.3. Modern Arabic (Modern Standard Arabic)

**Conclusion**

## **Section Two: History of Arabic**

After having touched upon the History of English together with its development through time and the changes that have occurred at the three periods, this section will shed light on the History of the Arabic Language which is one of the major languages of the world. Thus, different stages of Arabic Language including Old Arabic (Proto- Arabic), Middle Arabic (Classical Arabic), and Modern Arabic (Modern Standard Arabic) are discussed in this section.

### **1.2.1. Semitic Family of Languages**

Semitic Languages are a group of related languages and dialects descended from the family of the Afro-Asiatic languages. Thus, these languages were spoken in the Arabian Peninsula, North and East Africa (Goldenberg, 2013). According to Al-Huri (2015), “Arabic is one of the World’s major languages with roughly 300 million speakers in twenty-two Arab countries. In 1974, Arabic was attested as one of the sixth United Nation’s official languages alongside Chinese, Russian, English, French and Spanish” (p. 28). Habash defined Arabic as “a collection of multiple variants among which one particular variant has a special status as the formal written standard of the media, culture and education across the Arab world. The other variants are informal spoken dialects that are the media of communication for daily life” (Habash, 2010, p.1). Gordon (2005) states that “Arabic belongs to the Semitic branch of the Afro-Asiatic (Hamito-semitic) family of languages which includes languages like Aramaic Ethiopian, South Arabian, Syriac, and Hebrew a number of the languages in this group are spoken in the Middle East, the Arabian Peninsula, and Africa” (as cited in Aoun, Choueiri & Banmamon, 2010, p. 1). This means that Arabic has been viewed as a member of the Semitic family of languages which contain various languages in the Middle East and North Africa. Moreover, “Arabic is a Southern-Central Semitic language. It is spoken in most

parts of the Arabian Peninsula, parts of the Middle East and North Africa. Since most of the Arabic speakers are concentrated in the Middle East. Arabic is a macro-language that has 30 modern varieties or dialects.” (Jamal & Almarri, 2019, p. 1).

### **1.2.2. Stages of Arabic Language**

At the very beginning of the Islamic emergence, the Arabic language had two main sources, Quran and pre-Islamic poetry. (Versteegh, 1997). These two sources were considered as the pillars of Arabic standardization and codification. They had a great importance in the development of Arabic. (Ryding, 2005). Therefore, Arabic language is divided into three main stages namely Old Arabic (Proto- Arabic), Middle Arabic, and Modern Arabic.

#### **1.2.2.1. Old Arabic (Proto- Arabic)**

Arabic is a widely-spoken language with an extended and wealthy history. It is a member of Semitic languages that embodies a variety of languages within the Middle East and North Africa. It's originally generated from Afro-Asiatic languages, which incorporate besides Arabic different languages like Hebrew, Ethiopian and alternative languages. The primary emergence of Arabic as a world language goes back to the seventh century CE (Versteegh, 1997). Al-Huri (2015) states that Arabic was found as an inscription within the Syrian Desert dating back to the fourth century. Throughout this era, Arab tribes, who were living within the Arabian Peninsula and neighboring regions, had a thriving oral poetic tradition. Besides, Ryding (2005) indicates that as a result of the scarcity of the written records, very little is understood concerning the character of Arabic of these times, between the third and seventh centuries. He claims that “the only written evidence is in the form of epigraphic material (brief rock inscription and graffiti) found in the Northwest and Central Arabia” (as cited in Al-Huri, 2015, p. 29). Moreover, according to Abu-Absi (1986), the Arabic orthography is an adaption of Syriac and Nabataean scripts, each of that was derived

from Aramaic. Therefore, Arabic doesn't evolve into the sunshine of history till the sixth or seventh centuries AD, the time of Islam emergence.

### **1.2.2.2. Middle Arabic (Classical Arabic)**

According to Ali Khrisat and Al-Harthy (2015), “Classical Arabic CA is known as the language of the Quran. This form of Arabic language has been used among the people of different tribes of the Arabian Peninsula.” (p. 254). Moreover, Al-Huri (2015) claimed that “Classical Arabic holds the most prestigious position among all Muslims across the world due to its religious and historical status being the language of both Quran and literary heritage of Arabs.” (p.31).As stated by Owens 2007,“Classical Arabic evolved from the standardization of the language of the Quran and poetry. This standardization became necessary at the time when Arabic became the language of an empire, with the Islamic expansion starting in the seventh century. In addition to Classical Arabic, there were regional spoken Arabic varieties. It is a matter of intense debate what the nature of the historical relation between Classical Arabic and the spoken dialects is” (as cited in Aoun, Choueiri & Benmamoun, 2010, p. 1).

### **1.2.2.3. Modern Arabic (Modern Standard Arabic)**

Habash (2010) considered Modern Standard Arabic as the official language for the Arab world, in which it is the language of media and education. He adds that it is based on Classical Arabic synthetically, morphologically and phonologically, while lexically it is modern, and it was first written rather than spoken. According to Bhatia and William (2004), “MSA has been viewed by linguists as a modified edition of classical Arabic. It has emerged as a result of Arabs’ contact with the Western culture and the dire need of assimilating the new political, technological and technical terms that had not been included in the Arabic dictionary. It is the most widely used in education, mass media, religious sermons and official speeches. Unlike the vernaculars, MSA is practically no one’s mother tongue, and good

proficiency in MSA requires more than elementary education” (as cited in Al-Huri, 2015, p. 31). Therefore, Suleiman (2003) stated that Modern Standard Arabic is the language used in writing and formal speaking.

Finally, this section has first shed some light on the history of the Arabic language by first reviewing the Semitic family of languages. It has also highlighted the linguistic developments of the Arabic language at the three periods namely, Old Arabic, Middle Arabic, and Modern Standard Arabic.

## **Conclusion**

In the light of the above study, it is evident that both English and Arabic have their own significant characteristics. They are thought to have different origins as English is believed to belong to the Indo-European family of languages, particularly, a Germanic language, while Arabic is thought to have descended from what is called “Proto-Semitic” language. Therefore, both languages are believed to be structurally distant languages. However, many English words seem to be related to their counterparts in Arabic. This observable case may support researchers to make a deep research of this phenomenon. In doing so, a morphophonological analysis of English words via Arabic roots would serve the purpose.

## **Chapter Two: Morphology, Phonology and Cross-linguistic Morpho-phonology**

### **Introduction**

#### **Section One: Morphology**

##### 2.1.1. Word Formation

###### 2.1.1.1. Words and Morphemes

###### 2.1.1.2. Word Formation Processes

###### 2.1.1.2.1. Affixation

###### 2.1.1.2.2. Conversion

###### 2.1.1.2.3. Back Formation

###### 2.1.1.2.4. Clipping

###### 2.1.1.2.5. Compounding

###### 2.1.1.2.6. Borrowing

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###### 2.1.1.2.8. Blending

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## **Chapter Two: Morphology, Phonology and Cross-linguistic Morpho-phonology**

### **Introduction**

This chapter consists of three sections, namely Morphology, Phonology, and Cross-linguistic Morpho-phonology. The first section discusses the main processes of word formation, i.e., how new words are formed. The second section illustrates the concept of phonology together with its main areas. Finally, the third section, which is called cross-linguistic morphophonology, postulates that English words are Arabic root-based. Thus, CLMPA, in this section, seeks to demonstrate the change having affected the Arabic root resulting in an English word

### **Section One: Morphology**

This section has been devoted to shedding some light to the concept of morphology in linguistics which is concerned with the structure of words and how they are created. That is to say, it deals with the ways in which new words are formed on the basis of other words or morphemes which is referred to as “word formation”.

#### **2.1.1. Word Formation**

According to Crystal (2003), word formation is “the whole process of morphological variation in the constitution of words, i.e. including the two main divisions of inflection and derivation.” (pp.523-524). He also claimed that “Most English vocabulary arises by making new lexemes out of old ones — either by adding an affix to previously existing forms, altering their word class, or combining them to produce compounds. These processes of construction are of interest to grammarians as well as lexicologists. ... but the importance of word-formation to the development of the lexicon is second to none. ... After all, almost any

lexeme, whether Anglo-Saxon or foreign, can be given an affix, change its word class, or help make a compound. Alongside the Anglo-Saxon root in *kingly*, for example, we have the French root in *royally* and the Latin root in *regally*. There is no elitism here. The processes of affixation, conversion, and compounding are all great levellers.” (pp. 523-524)

#### **2.1.1.1. Words and Morphemes**

Barber, Beal, and Shaw (2009) argued that words are considered as the smallest pieces of language but not the smallest meaningful units in a language. They supported their idea by referring to two words: *refill* and *slowly*. Barber, Beal, and Shaw argued that *re* and *ly* are meaningful units, however, they do not constitute words. Actually, they are called *morphemes*. A morpheme is the smallest linguistic part of a word that can have a meaning. Moreover, *re* and *ly* cannot occur independently. Thus, they are called *bound morphemes*. A bound morpheme is a morpheme that cannot stand alone. It must be attached to another morpheme. In contrast to a *free morpheme* which can occur independently such as the morpheme *slow*.

#### **2.1.1.2. Word Formation Processes**

It is stated that there are several types of word formation processes. The following lines will illustrate some detail about how words are created in English, and how some words came to be part of the language. Therefore, the major word formation processes are as follows: *affixation, conversion, back formation, clipping, compounding, borrowing, coinage, blending, and acronyms*.

##### **2.1.1.2.1. Affixation**

Also called “Derivation”. This process, according to Yule (2017), is the most common word formation process to be relied on in the creation of new words. Yule argues that this

process is accomplished by means of a number of elements described as affixes. Affixes include prefixes, and suffixes. Some examples of those affixes are: *un*, *mis*, *full*, *less* such as in the words *unhappy*, *misrepresent*, *joyful*, and *careless*.

#### **2.1.1.2.2. Conversion**

Lieber (2009) claims that affixation is not the only method used to create new words. In fact, new lexemes can be formed merely by shifting the part of speech of existing lexemes. This process is referred to as conversion or *functional shift*. In English, new verbs can be created from nouns and sometimes from adjectives like in the examples below:

<b>A) Noun.</b>	<b>Verb</b>
Bread.	To bread
Fish.	To fish
<b>B) adjective.</b>	<b>Verb</b>
Cool.	To cool
Yellow.	To yellow

#### **2.1.1.2.3. Back Formation**

Crystal (1995) refers to the process by which a new lexeme is formed by adding an affix to an old one. For instance, the prefix *un* can be added to the adjective *happy* to form the opposite *unhappy*, and from *inspect*, we can form the adjective *inspector*.

#### **2.1.1.2.4. Clipping**

According to Lieber (2009), clipping is a method used when forming new lexemes by shortening existing lexemes. For instance, the word *info* was created from *information*, and *blog* departed from *web log*.

#### **2.1.1.2.5. Compounding**

Another common word formation process is known as compounding which, according to Yule (2017), refers to the process by which a new word is produced by joining two separate lexemes. Some examples of English compounds are *textbook*, *wallpaper*, *sunburn*, etc.

#### **2.1.1.2.6. Borrowing**

As the name describes itself, borrowing refers to the process by which new words which have been borrowed from other languages came to be part of the English language. For instance, English has borrowed ‘*pizza*, *piano*’ from Italian, and ‘*alcohol*, *zero*’ from Arabic. (Nasser, 2008)

#### **2.1.1.2.7. Coinage**

Lieber stated that it is “possible to make up entirely new words from whole cloth, a process called coinage. However, we rarely coin completely new words, choosing instead to recycle bases and affixes into new combinations. New products are sometimes given coined names like Kodak, Yerox, or kleenex.” (Lieber, 2009, p.51)

#### **2.1.1.2.8. Blending**

According to Yule (2017), blending occurs when two separate words are combined to create a single new word. This happens by joining the beginning of one word and the end of another word. For instance, *brunch* (breakfast/lunch), and *motel* (motor/hotel).

#### **2.1.1.2.9. Acronyms**

Acronyms refer to the new terms formed by joining the initial letters of a group of other words. They are pronounced as single words. For example, NATO, NASA, or UNESCO. (Yule, 2017)

To conclude, this section has illustrated the so called “word formation” which refers to the processes in which words are created on the basis of other words or morphemes. That is, it has explained the main processes undertaken to form new words.

## **Section Two: Phonology**

2.2.1. Definition

2.2.2. Phonemes

2.2.3. Phones and Allophones

2.2.4. Minimal Pairs and Sets

2.2.5. Phonotactics

2.2.6. Syllable and Clusters

2.2.7. Aspiration

2.2.8. Coarticulation Effects

2.2.8.1. Assimilation

2.2.8.2. Elision

## **Section Two: Phonology**

After having dealt with morphology together with its definition and its concerns, this section highlights some definitions of phonology with its areas, and review some studies conducted in this respect.

### **2.2.1. Definition**

According to Akmajian, Demers, Farmer & Harnish (2001), “phonology is the subfield of Linguistics that studies the structure and the systematic patterning of sounds and human language. The term phonology is used in two ways; on the one hand, it refers to the description of the sounds of a particular language and the rules governing the description of those sounds. Thus, we can talk about the phonology of English, German or any other language. On the other hand, it refers to that part of general theory of human language that is concerned with the universal properties of natural language sound systems.” (p. 111). Bird (2002) defines the term Phonology as the study of the language sounds, their internal structure, and their composition into syllables, words and phrases.

### **2.2.2. Phonemes**

A Phoneme, according to Yule (2017), is “the smallest meaning-distinguishing sound unit in the abstract representation of the sounds of a language.” (p. 817). As reported by Abdurrahman (2019), “A phoneme /'foʊni:m/ is one of the units of sound that distinguish one word from another in a particular language. Example: kill-dill, each meaning distinguishing sound in a language is described as a phoneme. It is the single sound type which came to be represented by a single symbol. Slash marks are conventionally used to indicate a phoneme, /t/.” (p. 1).

A phoneme functions contrastively. This contrastive property is that the basic operational look for determining the phonemes that exist in any language. Thus, if one sound substitutes

another in a word and there is a change, then the two sounds represent totally different phonemes. (Yule, 2017).

### **2.2.3. Phones and Allophones**

Yule (2017) refers to a phone as “a physically produced speech sound, representing one version of a phoneme”, and an allophone as “one of a closely related set of speech sounds or phones”. (p. 817,793) Phones and Allophones are two different versions of a sound type. Phones are represented in square brackets; [t]. When there is a set of phones, they are all versions of one phoneme which are referred to as allophones of that phoneme, for instance, *bean and bead*. The main difference between phonemes and allophones is that substituting one phoneme for another will result in a word with a different meaning; however, substituting allophones will only result in a different pronunciation of the same word. (Yule, 2017).

### **2.2.4. Minimal Pairs and Sets**

Minimal pair (set) refers to “two (or more) words that are identical in form except for a contrast in one phoneme in the same position in each word (e.g. bad, mad)” (Yule, 2017, p. 812). If two words like ‘pat’ and ‘bat’ are identical in form expect for a contrast in one phoneme, which occurs in the same position, they are described as a minimal pair, such as feat, fit, fat, and fate. (Yule, 2017).

### **2.2.5. Phonotactics**

According to Yule (2017), “phonotactics constraints on the permissible combination of sounds in a language.” (p. 817). He views that “There are definite patterns to the types of sound combinations permitted in a language. We can form nonsense words which are permissible forms with no meanings. They represent identical gaps in the vocabulary of

English. E.g. ‘lig’ or ‘vig’ (not English words but possible). But ‘sing’ or ‘mig’ are not obeying same constraints on the sequence. Such constraints are called the Phonotactics of a language.” (as cited in Abdurrahman, 2019).

### **2.2.6. Syllable and Clusters**

A syllable is a “unit of sound consisting of a vowel and optional consonants before or after the vowel.” (Yule, 2017, p. 826). A syllable consists of one or more phonemes which must contain a vowel sound, and every syllable has a nucleus, usually a vowel-liquid or nasal. The main elements of a syllable are the onset (one or more consonants), and the rhyme and any following consonants are the coda. The syllables that have not got a coda are known as open syllables, then when there is a coda, they are called closed syllables. For instance, ‘cup’ is a closed syllable, while ‘no’ is an open syllable. Both onset and coda can consist of more than one consonant known as a consonant cluster. /s/ + (/p/, /t/, /k/) + (/r/, /l/, /w/) (Yule, 2017)

### **2.2.7. Aspiration**

Aspiration is “a puff of air that sometimes accompanies the pronunciation of a stop.” (Yule, 2017, p. 794). Producing the same sound in different words may result in an extra puff of air that is produced for the same sound, such as with stops p, t, k like in pit, kit, sit. (Yule, 2017)

### **2.2.8. Coarticulation Effects**

Yule (2017) defines it as “the process of making one sound virtually at the same time as the next sound” (p. 797). “Our talk is fast and spontaneous and it requires our articulators to move from one sound to the next without stopping. The process of making one sound

almost at the same time as the next is called coarticulation. Articulation effects are like assimilation and Elision.” (Yule, 2017, as cited in Abdurrahman, 2019).

### **2.2.8.1. Assimilation**

Assimilation is “the process whereby a feature of one sound becomes part of another during speech production” (Yule, 2017, p. 795). Yule (2017) argued that when two phonemes occur in sequence, and any aspect of a phoneme is taken or copied by another process, then this is known as assimilation. For instance, a vowel becomes nasal whenever it immediately precedes a nasal like in ‘can = I can go.’

### **2.2.8.2. Elision**

According to Yule (2017), it is “the process of leaving out a sound segment in the pronunciation of a word” (p. 804). As claimed by Yule (2017), when a present sound segment is omitted, the deliberate pronunciation of a word in isolation is described as elision. In consonants clusters, especially in coda position, /t/ in this process is a common casualty, such as the /t/ in ‘He must be’ or in ‘Aspects’.

This fairly short section has mainly been devoted to casting some light on phonology and its areas including phonemes, phones and allophones, minimal pairs and sets, phonotactics, syllable and clusters, aspiration, and coarticulation effects with both assimilation and elision; by reviewing some of its definitions and took in a number of research studies.

## **Section Three: Cross-linguistic Morpho-phonology**

2.3.1. Definition

2.3.2. Areas of Cross-linguistic Morpho-phonology

2.3.2.1. Cross-linguistic Morphology

2.3.2.1.1. Sample Transition Rules from Arabic to English

2.3.2.1.2. Structural Order

2.3.2.2. Cross-linguistic Phonology

2.3.2.2.1. Sample Phonological Transition Rules from Arabic to English

**Conclusion**

### **Section Three: Cross-linguistic Morpho-phonology**

This section takes as its major concern a discussion of Cross-linguistic Morpho-phonology, which postulates that English lexis has departed from Arabic roots, and so all English words are Arabic root-based. To support this postulate, morpho-phonological evidence has been made available. It follows that Cross-linguistic Morpho-phonology seeks to elucidate the change having affected the Arabic root resulting ultimately in an English word. In fact, as it has been mentioned in the goal of the study which targets raising students' cultural awareness, the embedded meanings to be exposed through CLMPA would show the cultural load contained in the root of any considered English lexical item. This load would help establish the link between the two considered languages. Moreover, such analysis would allow the inference of the system governing the transition from Arabic roots to English words. In so doing, to illustrate this change, considering significant examples will be relied on.

#### **2.3.1. Definition**

Morpho-phonology is commonly considered as the branch of linguistics that deals with the interaction between morphology and phonology. In a cross-linguistic case, such an interaction should be assumed to have occurred across the two languages, Arabic and English. Accordingly, Cross-linguistic Morpho-phonology is, therefore, defined to specify the kind of interaction having already been exploited to produce the potential English lexis, in particular. In this specific study, it helps to analyze the morphological and phonological change having affected Arabic roots in the course of the formation of current English vocabulary.

## 2.3.2. Areas of Cross-linguistic Morpho-phonology

Cross-linguistic Morpho-phonological analysis targets the analytical study of current active associations between Arabic and English at the two levels of morphology and phonology.

### 2.3.2.1. Cross-linguistic Morphology

In this subsection, the morphological system postulated to have ruled the evolution from Arabic roots into English words is analytically considered. Accordingly, this system could be essentially revealed through illustrations of the structural changes having occurred at the level of English word-building. The latter seems to obey to a number of basic rules that would explain the existing semantic correspondence of English lexical items and their Arabic origins.

Understanding the presumed linguistic transition would require to extract the basic 'rules' or strategies to employ to potentially transform any given Arabic root into a new English word. The process of such rules extraction is not intended to be comprehensive for many restrictive factors, which would oblige to select few among the most significant ones.

#### 2.3.2.1.1. Sample Transition Rules from Arabic to English

##### a. Final Feminine 't'

In Arabic, verb roots are inherently made in the third person singular masculine past: **فَعَلَ**. The feminine case is then realized by adding [-ت] as a feminine bound morpheme to the end of the verb. This same morpheme is actually encountered as a final letter in many English verbs suggesting that the word is Arabic feminine root. For example, the CLMPA of 'keep' and 'want' is realized as follows:

**Keep:** continue to be in a particular state or position.

Keep=> kept= /kept/.

/t/ in /kpt/ should be considered as the feminine [ت]

⇒ /kpt/=/kbt/ (substituting /b/for /p/) = بقت (circular order)

**Want:** desire

Want= /wɒnt/

⇒ wanted=/wɒntɪd/= /wɒtɪd/ (n is omitted because intrusive in corresponding Arabic root)

⇒ /wɒtɪd/=/wɒdɪd/ (substituting /d/ for /t/) = ودت (ed= feminine 't')

'wanted' can also be a good illustration of how final feminine 't' has evolved into the so-called English morpheme of the past tense.

### **b. Morpheme 'd' as Arabic Feminine 't'**

English past morpheme [d] with its three allomorphs, [-d], [-id], and [-t] would be assimilated as the Arabic [ت-] as in the following examples:

Asked= [askt] => [t] would be assimilated as the Arabic [ت-]; hence, [askt] = (ت) ← تقص

Added= ['æd.ɪd] => [ɪd] would be assimilated as the Arabic [ت-]; so, ['æd.ɪd] = عدت

Covered= ['kʌvəd] => [d] would be assimilated as the Arabic [ت-]; hence, ['kʌvəd] = كفرت

### **c. Free Morpheme 'to' as Arabic Present Tense Feminine Case**

The infinitive form of English verbs is 'to' + 'verb'

To= [ت-] in Arabic. For instance:

To write= [təraɪt] = توري, to stand= [təstænd] = تستعد

### **d. [-est] and [-st] as Arabic Bound Morpheme [است-]**

Examples: stimulate= استمالت

**e. [com-] ([con-], [col-], and [cor-]) as variations of Arabic [قم]**

Examples: connect= [kə'nekt] 'قم نصت' collect= 'قم لَصَ'

**2.3.2.1.2. Structural Order**

The structural order of English words, representing the direction of changes having affected the Arabic root, could be summarized as follows:

- **From Left to Right**

**Tall:** of great or more than average height.

Tall= root= /tɔ:l/= /twl/= طول

⇒ /twl/= طول

The great majority of English words have been formed out of direct inversion of the order of letters in Arabic roots before coding with particular inflection and sounding.

**Sound:** something that you can hear or that can be heard

Sound= /saʊnd/ (nasalized, intrusive /n/ is dropped) = /saʊt/ (/t/ substitutes /d/ according to table04).

⇒ /saʊt/= صوت

- **From Right to Left**

**Mouth:** the part of your face that you use for eating and speaking.

Mouth= /maʊθ/= /mθ/

Reading from right to left, /mθ/= فم (f /substituted by /θ/)

**Play:** to do something to enjoy yourself; to have fun.

Play= root= /plei/= /bly/ (since /p/ can be substituted by /b/)

⇒ /bly/= يلعب

- **Circular Order**

**Keep:** to continue to be in a particular state or position.

Keep= kept

‘t’ is feminine. /kp/= /kb/.

⇒ Reading from the middle to left to right, /kbt/= /bkt/= بقت

**Social:** relating to society or organization.

\*soci-= root =/sc/=⇒ (/ʃ/ substituted for /s/, and ‘c(i)’ as in ‘soci’, pronounced as /ʃ/, is also realizable as /k/ according to table 04. So, /sc/= /ʃk/

-al= adjective suffix realised from Arabic definite article ‘ال’.

⇒ Reading in a circular manner from right to left to the middle, /ʃ/+ /k/+ al = الشق

To sum up, this subsection is an attempt to elucidate the morphological change having affected the Arabic root which results in an English word. To explain this change, some significant examples are relied on. It is worth noting that examples abound, however, for practical purposes, only two examples for each case have been considered.

### 2.3.2.2. Cross-linguistic Phonology

This subsection represents the phonological system postulated to have ruled the evolution from Arabic into English. This system is illustrated through the phonological change to occur at this level. The latter is portrayed through two considerable tables explaining the sound shift from Arabic into English.

**Table 04: Some Letter Change from Arabic into English**

	ا	ب	ت	ث	ج	ح	خ	د	ذ	ر	ز	س	ش	ص	ض	ط	ظ	ع	غ	ف	ق	ك	ل	م	ن	ه	و	ي
A																		*										*
B																												*
C													*	*	*							*	*					
D																*	*	*										
E																		*										*
F																			*									
G																			*	*								
H				*																								
I	*																*											*
J	*																										*	
K																			*	*								
L																			*									*
M																			*									
N				*																								
O																		*										*
P																			*									*
Q																			*	*								
R																			*									*
S													*	*	*													
T														*	*	*											*	*
U																												
V	*																		*									*
W	*																		*									*
X													*	*													*	
Y	*																											*
Z												*	*														*	

The above table is an attempt to summarize letter/sound changes from Arabic to English. In other words, it shows the way Arabic letters and sounds have been converted into

English. While some English letters have multiple soundings in Arabic, others have only one or two pronunciations.

**Table05: Example English Sound/Letter Combination Correspondence in Arabic.**

English	Arabic				
	ش	ص	ك	ج	خ
<b>Ch</b>	Chink=شق	Check=صك	Church=شرك	Much=جم	Christ=خرص
<b>Ck</b>	ق Neck=عنق				
<b>Est</b>	است Establish=استبلس				
<b>Gh</b>	غ Taught=طغت				
<b>Kn</b>	كن Know=كنو				
<b>Ph</b>	بح		فه Philosophy=بحر (السف)		
<b>Ps</b>	فس Psycho=فسق				
<b>Sc</b>	ش Science=شني				
<b>Sch</b>	شك School=شكل				
<b>Sh</b>	ش	سح	صه	ص Shark=قرش Shame=سحم Shade=صهد Shock=صعق	
<b>St</b>	است Simulate=استمالت				
<b>Th</b>	ذ	ض	تج	ط The=ذا Earth=أرض Path=فتح Pathogen=فتح جن Throw=طير	
<b>Wr</b>	ور Wro(te)=ورّت				

The table is an attempt to summarize some sound/letter combination shifts from Arabic into English. That is to say, it explains how some Arabic sound/letter combinations are transferred into English. Some of the examples mentioned above correspond to several sound/letter combinations in Arabic, while others have only one sound/letter combination in Arabic. As mentioned above, these differences in pronunciation are consciously used to serve the purpose of covering the Arabic root.

#### 2.3.2.2.1. Sample Phonological Transition Rules from Arabic to English

- ‘on’ Corresponding to ‘double dhammah’ (ضمتان)

Example: neuron=نورٌ

#### b. Intrusive consonants

- **Dropping Intrusive /n/ before Consonants**

Example: want=> (nasalised ‘n’ is dropped, and /t/ is substituted by /d/) so, want=ود

- **Dropping Intrusive /l/**

Example: explain=> (‘l’ is dropped, and ‘ex’ corresponds to عكس in Arabic) so,

explain=عكس بين

- **Dropping Intrusive /m/**

Example: simple=> (‘m’ is dropped, and /b/ substituted for /p/) so, simple=سبيل

To sum up, this subsection is an attempt to clarify the phonological change having affected the Arabic root resulting in an English word. In order to explain this change, some considerable examples have been made available.

#### Conclusion

To conclude, this chapter, which highlights the three principle areas in this study namely, Morphology, Phonology, and Cross-linguistic Morpho-phonology, explains word formation processes, the speech sounds of a language together with the laws governing them, and how sound choice and sound change from Arabic to English were the main processes undertaken to establish the new language.

## **Chapter Three: Field Work**

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## **Chapter Three: Field Work**

### **Introduction**

This study is used to investigate students' appreciation of Arabic meanings embedded in English vocabulary using morphophonological analysis of English words via Arabic roots. Because of the difficulties generated by the existing circumstantial restrictions, one research tool has been imposed for collecting data, namely a questionnaire administered to second year Master students.

### **3.1. The Students' Questionnaire**

#### **3.1.1. The Sample**

The population targeted by this questionnaire is second year Master students of English. Thirty-five second year Master students have been chosen as the sample for our study. The former are assumed to be competent and satisfy the requirement of mature students who are ready to accept critical thinking. Thus, they are the category of students able to provide reliable data for investigating students' appreciation of Arabic meanings embedded in English vocabulary.

#### **3.1.2. Description and Aims of the Students Questionnaire**

A questionnaire is defined as "the collection of information from a sample of individuals through their responses to questions." (Check & Schutt, 2012, p. 160). The purpose of using the questionnaire is to be managed in a variety of ways, and it is a practical way to collect data using online and mobile devices.

The students' questionnaire is administered to 35 second year Master students at the department of English, University of Jijel. It consists of 23 questions conceivably separated into two parts on the basis of the questions aims.

The First part is composed of 13 questions. The first three questions aim at knowing students' perception on the language families to which English and Arabic belong. The other ten questions aim at knowing students' perception of the root of the randomly selected English words from Oxford dictionary. The selection of words followed the randomisation procedure as illustrated below:

Two lists were made. The first list consists of the Alphabet letters from A to Z. The second list is composed of numbers from 1 to 200. From the first list, which consists of the 27 English letters, 15 letters were randomly picked up. Then with each letter, two words were selected according to the random selection of numbers from the second list. Then, because of restricted time and practical purposes, only ten words were selected to be studied.

### 3.2. Data Analysis and Interpretation

#### 3.2.1. Part One: Root Identification

**Responses to Item 01:** English is a/an Indo-European, Semitic, or Afro-Asiatic language.

**Table 06**

Students' Perception of the Language Family of English

Options	Number	Percentage
Indo-European	29	82.85%
Semitic	5	14.28%
Afro-Asiatic	1	2.85%
Total	35	100%

The item above aims at investigating students' perception of the language family of English. The results in the above table indicate that 82.85%, of the students have opted for the first option 'Indo-European', 14.28% of them have said that English is of a Semitic origin, while one student believes English is an Afro-Asiatic language. It is clear that students have already been taught that English is an Indo-European language.

**Responses to Item 02:** Arabic is considered a/an Indo-European, Semitic, or Afro-Asiatic language.

**Table 07**

Students' Perception of the Language Family of Arabic

Options	Number	Percentage
Indo-European	2	5.71%
Semitic	19	54.28%
Afro-Asiatic	12	34.28%
No answer	2	5.71%
Total	35	100%

The above item aims at investigating students' perception of the language family of Arabic. The results show that 54.28% of the students believe Arabic is of a Semitic origin, 34.28% of them have chosen 'Afro-Asiatic', and only 3 students have opted for 'Indo-

European'. It seems that the majority of students have already been taught that Arabic is a Semitic language.

**Responses to Item03:** English Words are built on Arabic Roots.

**Table 08**

Students' Perception of English Being Based on Arabic Roots

Options	Number	Percentage
Strongly agree	3	8.57%
Agree	24	68.57%
Disagree	8	22.85%
Total	35	100%

The item above aims at investigating students' perception of English being based on Arabic roots. The investigation of this question has yielded 68.57% of the students opting for 'agree', while 22.85% of them having opted for 'disagree', and 8.57% of them opted for 'strongly agree'. That is, the majority of students agree that English is actually based on Arabic.

**Responses to Item 04:** The Root of negligible is 'neglect', 'جَل', or 'لج'.

**Table 09**

Students' Perception of the Root of 'negligible'

Options	ER (neglect)	AR (*gl-جَل )	AR (*lg-لج)	Both	No answer	Total
Number	21	7	7	0	0	35
Percentage	60%	20%	20%	0%	0%	100%

This item aims at investigating students' perception of the root of 'negligible'. According to the table above, 60% of the students have opted for the English root '\*neglect-', while 40% of them have chosen the Arabic root 'جَل' has been selected by 20% of the students, and 'لج' by the other 20% of the students. This means that the majority of students do not believe the English word 'negligible' is Arabic root-based. It can be said that the

structure of the word ‘negligible’ seems different from the Arabic root; students could not understand how this word can be based on one of the Arabic root options.

**Responses to Item 05:** The Root of income is ‘come’, or ‘قام’.

**Table 10**

Students' Perception of the Root of ‘income’

Options	ER (come)	AR (قام)	Both	No answer	Total
Number	22	11	2	0	35
Percentage	62.85%	31.42%	5.71%	0%	100%

This item aims at investigating students’ perception of the root of ‘income’. The results indicate that 62.85% of the students have opted for the English root ‘come’, 31.42% have said it is taken from the Arabic root ‘قام’, while 2 students have chosen ‘both’, which means they cannot say which root it is actually taken from. Thus, the majority of the students believe the English word ‘income’ is English root-based. The difference in terms of the structure between the English word ‘income’ and the Arabic word ‘قام’ has led students to believe that ‘income’ must be an English root-based.

**Responses to Item 06:** The root of banner is ‘\*ban-’, or ‘بان’.

**Table 11**

Students' Perception of the Root of ‘banner’

Options	ER (*ban-)	AR (بان)	Both	No answer	Total
Number	22	9	1	3	35
Percentage	62.85%	25.71%	2.85%	8.57%	100%

The item above aims at investigating students’ perception of the root of ‘banner’. The first option ‘\*ban-’ has been selected by 62.85% of the voters. 25.71% of the students have chosen the Arabic root ‘بين’. While 3 students have chosen ‘no answer’, one student has said

‘both’. That is, most of the students view the English word ‘banner’ as taken from the English root ‘ban’.

**Responses to Item 07:** The Root of zap is ‘zap’, or ‘صب’.

**Table12**

Students’ Perception of the Root of ‘zap’

Options	ER (zap)	AR (صب)	Both	No answer	Total
Number	16	19	0	0	35
Percentage	45.71%	54.28%	0%	0%	100%

The above item aims at investigating students’ perception of the root of ‘zap’.

According to the table above, the English root ‘zap’ has been selected by 45.71%, while the Arabic root ‘صب’ has been chosen by 54.28%. That is to say, the majority of students believe the English word ‘zap’ is taken from the Arabic root ‘صب’. It can be said that the structure and sounding of the word ‘zap’ recalls the Arabic word ‘صب’, which supported students to choose the Arabic root.

**Responses to Item 08:** The Root of tear is ‘tear’, or ‘طير’.

**Table13**

Students’ Perception of the Root of ‘tear’

Options	ER (tear)	AR (طير)	Both	No answer	Total
Number	21	13	0	1	35
Percentage	60%	37.14%	0%	2.85%	100%

This item aims at investigating students’ perception of the root of ‘tear’. The results show that 60% of the students have opted for the English root ‘tear’, 37.14% of them have selected the Arabic root ‘طير’, while one student has chosen no answer. This means the English root ‘tear’ has been selected by the majority of the students.

**Responses to Item 09:** The Root of laconic is ‘\*lacon-’, or ‘لسن’.

**Table 14**

Students’ Perception of the Root of ‘laconic’

Options	ER (*lacon-)	AR (لسن)	Both	No answer	Total
Number	25	9	1	0	35
Percentage	71.42%	25.71%	2.85%	0%	100%

This item aims at investigating students’ perception of the root of ‘laconic’. From the table above, the English root ‘\*lacon-’ has been chosen by the majority of students with a percentage of 71.42%, 25.71% have opted for ‘لسن’, while one student has selected both roots.

**Responses to Item 10:** The root of hemorrhage is ‘hemorrhage’, or ‘همر+هاج’.

**Table 15**

Students’ Perception of the Root of ‘hemorrhage’

Options	ER (hemorrhage)	AR (همر+هاج)	Both	No answer	Total
Number	17	18	0	0	35
Percentage	48.57%	51.42%	0%	0%	100%

Concerning this item which aims at investigating students perception of the root of ‘hemorrhage’, a student should choose one of the provided answers: the English root ‘hemorrhage’ and the Arabic roots ‘همر+هاج’. According to the results shown in the table above, the majority of students with a percentage of 51.42% have opted for the Arabic roots ‘همر+هاج’ while the other 48.57% of the students have selected the English root ‘hemorrhage’.

**Responses to Item 11:** The root of question is ‘quest’, or ‘تقصي’.

**Table16**

Students’ Perception of the Root of ‘question’

Options	ER (quest)	AR (تقصي)	Both	No answer	Total
Number	19	15	1	0	35
Percentage	54.28%	42.85%	2.85%	0%	100%

The above item aims at investigating students’ perception of the root of ‘question’.

The results indicate that the English root ‘quest’ has been chosen by the majority of the respondents with a percentage of 54.28%. The Arabic root ‘تقصي’ has been selected by 42.85%, and as the table shows, one student has chosen both roots.

**Responses to Item12:** The root of gateau is ‘gateau’, or ‘غذاء’.

**Table 17**

Students’ Perception of the Root of ‘gateau’

Options	ER (Gateau)	AR (غذاء)	Both	No answer	Total
Number	26	7	1	1	35
Percentage	74.28%	20%	2.85%	2.85%	100%

The results of the item above, which aims at investigating students’ perception of the root of ‘gâteau’, are distributed as follows: 74.28% of the students have opted for the English root ‘gâteau’, 20% of them have selected the Arabic root ‘غذاء’, one student has chosen both roots, while one student gave no answer. Thus, it is clear from these results that the majority of students believe that the English word ‘gâteau’ is English root-based.

**Responses to Item13:** The root of Semitic is ‘semitic’, or ‘صمت’.

**Table 18**

Students’ Perception of the Root of ‘Semitic’

Options	ER (Semite)	AR (صمت)	Both	No answer	Total
Number	11	23	1	0	35
Percentage	31.42%	65.71%	2.85%	0%	100%

This item aims at investigating students’ perception of the root of ‘Semitic’.

According to the table above, the majority of students believe that the English word ‘Semitic’ is Arabic root-based, since 65.71% of them have opted for the Arabic root ‘صمت’, 31.42% have chosen ‘semitic’, while one student has selected both roots.

### 3.2.2. Part Two: Cross-linguistic Morpho-phonological Analysis

**Responses to Item 01:** The root of ‘negligible’ is ‘جل’.

**Table 19**

Students’ Appreciation of the CLMPA of ‘negligible’

Options	Strongly agree	Agree	Disagree	No answer	Total
Number	11	18	4	2	35
Percentage	31.42%	51.42%	11.42%	5.71%	100%

The item above aims at investigating students’ appreciation of the CLMPA of the word of ‘negligible’. The results shown in the table above indicate that 51.42% of the students have chosen to agree, with 31.42% of them have strongly agreed, while 11.42% of total students have disagreed. This means that the CLMPA has helped expose the Arabic embedded meaning in the word ‘negligible’. It has clearly analyzed the word ‘negligible’ by chunking it into root and affixes: ‘neg’ which is considered as a negation prefix, the root \*lig- which can be read from right to left as جـل and the suffix ‘-ible’ which is used as an adjective suffix. So, neg + /dʒl/+ ible suggests ‘not great’ which is the opposite of ‘جل’. It can be said that the semantic contrast between the English word ‘negligible’ and the Arabic word 'جل' has simplified for students the acceptance of the word ‘negligible’ as very probably issued from the Arabic root ‘جل’.

**Responses to Item02:** the root of ‘income’ is ‘قام’.

**Table 20**

Students’ Appreciation of the CLMPA of ‘income’

Options	Strongly agree	Agree	Disagree	No answer	Total
Number	12	13	10	0	35
Percentage	34.28%	37.14%	28.57%	0%	100%

This item aims at investigating students' appreciation of the CLMPA of the word 'income'. According to the table above, 37.14% of the students have opted for 'agree', 34.28% of them have selected 'strongly agree', while 28.57% of them have chosen to disagree. That is, the majority of students agree on the CLMPA of the word income. 'income' has been analyzed as follows: the prefix 'in' = inside, and 'come' = /km/=قامSo, /km/+in=' قام 'داخلا';so, in+/km/= 'الدخل'. Thus, it seems that this has helped students to accept the Arabic word 'قام' as the root of the English word 'income'.

**Responses to Item 03:** the root of 'banner' is 'بان'.

**Table 21**

Students' Appreciation of the CLMPA of 'banner'

Options	Strongly agree	Agree	Disagree	Both A and DA	Total
Number	9	12	15	1	35
Percentage	25.71%	34.28%	42.85%	2.85%	100%

The above item aims at investigating students' appreciation of the cross-linguistic analysis of the word 'banner'. As they are shown in the table above, the results are as follows: 42.85% of the students have chosen 'disagree', 34.28% of them have selected 'agree', while 25.71% of students have strongly agreed. Although disagreement has been the choice of many students, the percentage of agreement (59.99%) is higher than the percentage of disagreement (42.85%). 'banner' has been analyzed as ban= root= بان and er= agent suffix. So, /bæn/+ er= 'رابة مبنية'. We can say that the sounding and the meaning of the word 'banner' recalls the Arabic root 'بان' which has enabled students to assimilate, and thus, to accept the proposed analysis of 'banner'.

**Responses to Item 04:** the root of ‘zap’ is ‘صب’.

**Table 22**

Students’ Appreciation of the CLMPA of ‘zap’

Options	Strongly agree	Agree	Disagree	No answer	Total
Number	9	14	11	1	35
Percentage	25.71%	40%	31.42%	2.85%	100%

The item above aims at investigating students’ appreciation of the CLMPA of the word ‘zap’. The results indicate that 40% of the students have selected ‘agree’, 25.71% of them have chosen ‘strongly agree’, which means that 65.71% of the students agree on the CLMPA of ‘zap’, while 31.42% have disagreed. That is, the percentage of agreement (65.71%) is higher than the percentage of disagreement (31.42%). ‘zap’ is a free morpheme, and /zæp/= /sb/= صب Thus, it can be judged that the structure, sounding, and meaning of the English word ‘zap’ is justly attributed to the Arabic root ‘صب’.

**Responses to Item 05:** the root of ‘tear’ is ‘طير’.

**Table 23**

Students’ Appreciation of the CLMPA of ‘tear’

Options	Strongly agree	Agree	Disagree	No answer	Total
Number	10	16	8	1	35
Percentage	28.57%	45.71%	22.85%	2.85%	100%

This item targets examining students’ appreciation of the CLMPA of the word ‘tear’. As illustrated above, the results show that 45.71% of the students have opted for ‘agree’, 28.57% have selected ‘strongly agree’, while 22.85% of them have disagreed. This aggregates to 74.28% of the students agreeing on the CLMPA of the word ‘tear’. ‘tear’ is a free morpheme, and ‘tear’=/tjɪr/= طير. Thus, easy for students to assimilate the English word ‘tear’ through the Arabic root ‘طير’.

**Responses to Item06:** the root of ‘laconic’ is ‘لسن’.

**Table24**

Students’ Appreciation of the CLMPA of ‘laconic’

Options	Strongly agree	Agree	Disagree	No answer	Total
Number	10	14	11	0	35
Percentage	28.57%	40%	31.42%	0%	100%

This item targets students’ appreciation of the CLMPA of the word ‘laconic’.

According to the table above, 40% of the students have chosen to agree, 28.57% of them have strongly agreed, while 31.42% of them have opted for ‘disagree’. Thus, the percentage of agreement is 68.57%. This word has been analyzed as lacon= /lcn/= /lsn/=لسن and ‘ic’=adjective suffix. Again, the morphological structure, the sounding, and the semantic content of the root /lcn/, as it was illustrated by the CLMPA, strongly recaptures the Arabic root ‘لسن’.

**Responses to Item07:**the root of ‘hemorrhage’ is ‘همر+هاج’.

**Table 25**

Students’ Appreciation of the CLMPA of ‘hemorrhage’

Options	Strongly agree	Agree	Disagree	No answer	Total
Number	7	14	14	0	35
Percentage	20%	40%	40%	0%	100%

The above item aims at investigating students’ appreciation of the CLMPA of the word ‘hemorrhage’. The results vary as follows: 20% of the students have strongly agreed, 40% of them have agreed, while 40% of students have disagreed. It seems that chunking the word ‘hemorrhage’ into two Arabic roots ‘همر+هاج’ in addition to the structure and the sounding of the roots /hmr/+ /hdʒ/ which recall the Arabic roots ‘همر+هاج’ has made it easy for students to understand that ‘hemorrhage’ is actually taken from the Arabic roots ‘همر+هاج’.

**Responses to Item08:** the root of ‘question’ is ‘قصي’.

**Table26**

Students’ Appreciation of the CLMPA of ‘question’

Options	Strongly agree	Agree	Disagree	No answer	Total
Number	11	16	8	0	35
Percentage	31.42%	45.71%	22.85%	0%	100%

The item above aims at investigating students’ appreciation of the CLMPA of the word ‘question’. As it is shown in the table above, 31.42% of the students have chosen to strongly agree, 45.71% of them have agreed, while 22.85% of students have selected ‘disagree’. It seems it was easy for students to understand that the root /ks/ (dropping the nominal suffix ‘-ion’ as well as the final feminine’) = قصي. Thus, the structure, the sounding, and the meaning of the two words ‘quest’ and قصي are very similar helping students to understand that the Arabic root ‘قصي’ is, in fact, the root from which the English word ‘question’ is generated.

**Responses to Item09:** the root of ‘gateau’ is ‘غذاء’.

**Table 27**

Students’ Appreciation of the CLMPA of ‘gateau’

Options	Strongly agree	Agree	Disagree	No answer	Total
Number	10	11	14	0	35
Percentage	28.57%	31.42%	40%	0%	100%

This item aims at investigating students’ appreciation of the CLMPA of the word ‘gateau’. The analysis has yielded 28.57% of the students having opted for ‘strongly agree’, 31.42% of them for ‘agree’, while 40% of the students have opted for ‘disagree’. Although the percentage of disagreement (40%) is a little bit high, the percentage of agreement

(59.99%) is higher. It seems that the students who have agreed on the CLMPA of ‘gâteau’ could easily assimilate the word ‘gâteau’ to the Arabic word ‘غذاء’. On the other hand, the students who have selected ‘disagree’ could not understand that the English word does not have to have the exactly same meaning as the Arabic word. For instance, ‘gâteau’ is a type of food, thus, it is a type of ‘غذاء’. Consequently, they do share close semantic relationship.

**Responses to Item10:** the root of ‘Semitic’ is ‘صمت’.

**Table 28**

Students’ Appreciation of the MPA of ‘Semitic’

Options	Strongly agree	Agree	Disagree	No answer	Total
Number	7	20	8	0	35
Percentage	20%	57.14%	22.85%	0%	100%

In response to this item, which aims at investigating students’ appreciation of the CLMPA of the word ‘Semitic’, the majority of students (77.14%) have agreed on the CLMPA of ‘Semitic’, and 20% of them have strongly agreed. While the other 22.85% of the students have chosen to disagree. ‘Semitic’ has been analyzed as: ‘semitic’= /smt/= صمت and ‘ic’ is used to form adjectives. So, /smt/+ ic= صمت It can be said that the structure and the sounding of the root /smt/ recalls the Arabic root ‘صمت’. In fact, this indicates that the CLMPA has succeeded in exposing the Arabic root ‘صمت’ from which the English word ‘Semitic’ is taken in an understandable way.

**Table 29: Summary of Students' Perception of Roots before and after CLMPA**

Roots	Disagreement				Agreement			
	Before CLMPA		After CLMPA		Before CLMPA		After CLMPA	
	N	%	N	%	N	%	N	%
Negligible	21	60%	4	11.42%	14	40%	29	82.84%
Income	22	62.85%	10	28.57%	11	31.42%	25	71.42%
Banner	22	62.85%	14	40%	9	25.71%	20	57.14%
Zap	16	45.71%	11	31.42%	19	54.22%	23	65.71%
Tear	21	60%	8	22.85%	13	37.14%	26	74.28%
Laconic	25	71.42%	11	31.42%	9	25.71%	24	68.57%
Hemorrhage	17	48.57%	14	40%	18	51.42%	21	60%
Question	19	54.28%	8	22.85%	15	42.85%	27	77.13%
Gateau	26	74.28%	14	40%	7	20%	21	59.99%
Semitic	11	31.42%	8	22.85%	23	65.71%	27	77.14%
Total Percentage	57.13%		29.13%		39.42%		69.42%	

### 3.2.3. Comparing Students' Agreement on Arabic Roots before and after CLMPA

#### 1) Negligible

The results shown in the table above indicate that 40% of the students have agreed on the Arabic roots 'جل', or 'لج' before CLMPA. However, 82.84% of the students have opted for 'agree' on the CLMPA of the word 'negligible' as being taken from the Arabic root

‘جل’ which is the opposite of ‘negligible’. Thus, it seems that CLMPA has succeeded in representing the Arabic root ج as the origin of the English word ‘negligible’.

## 2) **Income**

As shown in the table above, the results indicate that 31.42% of the students have chosen the Arabic root ‘قام’ before CLMPA. And after CLMPA, the percentage is increased. As illustrated above, 71.42% of the students have chosen to agree on the CLMPA of ‘income’. This means that CLMPA has succeeded in exposing the Arabic embedded meaning in ‘income’.

## 3) **Banner**

It is shown in the table above that only 25.71% of the students have agreed on the Arabic root ‘بان’ before CLMPA. However, after CLMPA, the percentage of agreement on the Arabic root is 57.14%. It seems that CLMPA has represented the Arabic root ‘بان’ simply and easily by just dropping affixation.

## 4) **Zap**

The results represented above indicate that 54.28% of the students have selected the Arabic root ‘صب’ before CLMPA. And after CLMPA, 65.71% of the students have agreed on the CLMPA of ‘zap’. This means that the students already agree on the English word ‘zap’ as being taken from the Arabic root ‘صب’ even before CLMPA. And then, after CLMPA, the percentage is increased.

## 5) **Tear**

As it is shown in the table above, 37.14% of the students have chosen to agree on the Arabic root ‘طير’ before CLMPA. However, after CLMPA, the percentage of agreement is doubled. 74.28% of the students have opted for ‘agree’ on the CLMPA of ‘tear’. It seems that the

closeness of the English word 'tear' and the Arabic root **طير** in terms of structure, sounding, and meaning has helped students to easily understand and accept the CLMPA of 'tear'.

#### 6) **Laconic**

Concerning the word 'laconic', only 25.71% of the students have selected the Arabic root 'لسن' before CLMPA. And then, after CLMPA, 24 students which means 68.57% of students have accepted and agreed on the CLMPA of 'laconic'. It can be said that the CLMPA has succeeded in analysing the word and showing the Arabic root which is very close in meaning to the English word 'laconic'.

#### 7) **Hemorrhage**

The results shown in the table above indicate that 51.42% of the students have chosen the Arabic roots 'همر+هاج' before CLMPA, which means half (1/2) of the students have accepted the Arabic roots 'همر+هاج' as being the origin of 'hemorrhage'. And after CLMPA, the percentage has increased to 60%. Based on the previous results, it can be said that the students already accept the word 'hemorrhage' as being taken from Arabic. And then, CLMPA has helped the other 9.58% of the students to agree that it is actually originated from the Arabic roots 'همر+هاج'.

#### 8) **Question**

The table above represents the results of the word 'question' as follows: 42.85% of the students have selected the Arabic root 'قصي'. This means the majority of students have chosen the English root and disagreed on the Arabic root. However, after CLMPA, the percentage of agreement has highly increased to 77.13%. Therefore, it seems that CLMPA has succeeded in representing the English word 'question' as being Arabic-root based.

### 9) Gateau

As it is shown in the table above, only 20% of the students have opted for the Arabic root 'غذاء' before CLMPA. Then, after CLMPA, the percentage of agreement has increased to 59.99%. That is to say, in addition to the 20% of the students who already agree on the Arabic root, 39.99% of the students have agreed on the CLMPA of 'gateau'. This indicates that CLMPA has well succeeded in analyzing the word.

### 10) Semitic

The results in the table above indicate that 65.71% of the students have chosen the Arabic root 'صمت' which means that the sounding and the structure of the word 'Semitic' recalls the Arabic root صمت and after CLMPA, the percentage of agreement has increased to 77.14%. That is, CLMPA has supported the perception of the word 'Semitic' as being, in fact, originated from the Arabic root 'صمت'.

As a conclusion, based on the results mentioned above, it can be said that CLMPA was really effective in exposing the Arabic meanings embedded in English vocabulary. The total agreement of the Arabic root before CLMPA was 39.42%, and after CLMPA, the total agreement is increased to 69.24%. That is to say, CLMPA has succeeded to achieve the aim of this study.

### 3.3. Limitations

The study has been liable to many restrictions:

- In doing this research, we could not rely on the findings of any research, because there is no research that was conducted in this subject.
- It would be better if the study was done as an experiment, but because of restricted time, only the questionnaire was used.

- The study would be exhaustive if it was extended to teachers.
- The sample is narrow. The questionnaire was answered by only 35 students.

### **3.4. Recommendations and Suggestions**

In the light of the conclusive findings of this study, we recommend that:

- the study be conducted in relation to syntax, because we have seen direct syntactic relationship between English and Arabic.
- CLMPA be incorporated in teaching English vocabulary to expose the Arabic meanings embedded in English vocabulary.

## **General Conclusion**

English and Arabic are believed to belong to different language families. And so, they are thought to be distinct in terms of structure. However, observing some similarities between certain English words and their Arabic counterparts has driven us to ask the question: can English be of a Semitic origin? This has urged us to consider a study for which the students' questionnaire has been selected as the only tool for data collection. In the current research paper, we have tested an envisaged technique labelled CLMPA on a group of Second Year Master EFL students. We claim that the use of CLMPA of English words via Arabic roots can be effective in exposing the Arabic meanings embedded in English words, and raising students' cultural awareness regarding the statuses of English and Arabic. The findings reveal that Second Year Master EFL students have benefited from the use of the considered technique by agreeing on the majority of Arabic roots and meanings exposed by CLMPA. This partially agrees with our research hypothesis, which claims that students will understand that English is actually based on Arabic roots.

Finally, the conclusion of this study should encourage teachers to use such a technique to teach students that Arabic is, in fact, the origin and the root of English, which will raise their cultural awareness regarding the statuses of the two languages.

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## Appendix

### STUDENTS' QUESTIONNAIRE

Dear student,

We would be very grateful if you could answer this questionnaire designed to investigate students' appreciation of Arabic meanings embedded in English vocabulary using morpho-phonological analysis of English words via Arabic roots.

#### **A) PART ONE: ROOT IDENTIFICATION**

*Choose what you believe is appropriate below:*

1) English is a/an.... language.

Indo-European

Semitic

Afro-Asiatic

2) Arabic is considered a/an .... language.

*Indo-European*

*Semitic*

*Afro-Asiatic*

3) English words are built on Arabic roots.

*Strongly agree*

*Agree*

*Disagree*

4) The root of '**negligible**' is \_\_\_\_\_

*neglect*

\*g|- =/جل/

\*lg- =/لج/

5) The root of '**income**' is \_\_\_\_\_

*come*

قام

6) The root of '**banner**' is \_\_\_\_\_

\*ban\_

بين

7) The root of '**zap**' is \_\_\_\_\_

zap

صب

8) The root of 'tear' is \_\_\_\_\_

tear

طير

9) The root of 'laconic' is \_\_\_\_\_

\*lacon-

لسن

10) The root of 'hemorrhage' is \_\_\_\_\_

Hemorrhage

همر هاج

11) The root of 'question' is \_\_\_\_\_

quest

قصي

12) The root of 'gateau' is \_\_\_\_\_

gateau

غذاء

13) The root of 'Semitic' is \_\_\_\_\_

Semite

صمت

## B) PART TWO: MORPHOPHONOLOGICAL ANALYSIS

*Please, consider the list of symbols below while reading the analysis, then state your appreciation at the end of each word analysis.*

\* - indicates word root.

// indicates phonetic transcription.

→ reading from left to right

← reading from right to left

**Note:** *Vowels in Arabic are not used, therefore conveniently omitted in root analysis.*

1) **Negligible**= small as to be meaningless

Negligible consists of: neg + lig + ible

neg- = negation prefix

lig= root=\*lig-.

In Egyptian Arabic, /g/= /dʒ/ like in /gamil/ = /dʒamil/. So, reading from right to left, 'lig' becomes /ldʒ/= <sup>←</sup>لج which means 'be great'.

-ible: adjective suffix

It follows that neg + /dʒl/ + ible suggests 'not great' = negligible

*Strongly agree*

*Agree*

*Disagree*

**2) Income**= financial gain over a period of time

Income = in + come

in- = prefix = inside

come= root= /km/= قام

It follows that /km/ + in = قام داخلا and so, in + /km/ = الدخل.

*Strongly agree*

*Agree*

*Disagree*

### 3) **Banner**= distinctive flag

Banner= ban +(n)er

ban= root= \*ban- = /bæn/ = بان

-(n)er = agent suffix

It follows that /bæn/ + (n)er= distinctive flag= راية مبينة

*Strongly agree*

*Agree*

*Disagree*

### 4) **Zap** = strike with force

zap = root. Since /s/ may substitute /z/, and /b/ may substitute /p/ because of the same place of articulation, then /zæp/ = /sb/ (without vowel).

It follows that zap = صب بعنف

*Strongly agree*

*Agree*

*Disagree*

**5) Tear** = separate violently

tear= root= /teə(r)/= /tjr/= طير (A diphthong mostly corresponds to a consonant in Arabic)

It follows that /tjr/ means pull violently = طير

*Strongly agree*

*Agree*

*Disagree*

**6) Laconic** = brief

Laconic= lacon+ ic

lacon = /ləkɒn/ = /lcn/= Arabic root =/lsn/= لسن

-ic= adjective suffix

It follows that /lsn/ + ic = “cleverly stated with few words” = بليغ = لسن

*Strongly agree*

*Agree*

*Disagree*

**7) Hemorrhage**= shed blood (blood shedding)

Hemorrhage= hemorr + hage

\*hemorr- = /hmr/= همر

\*hage- = /hdʒ/= هاج

It follows that /hmr/+ /hædʒ/= bleed violently = همر + هاج

*Strongly agree*

*Agree*

*Disagree*

### 8) Question= Inquiry

question= quest + ion

quest = /kwest/= /kst/

/kst/= تقصت=قصت

-ion: nominal suffix

It follows that /kst/+ ion= inquiry = تقصي

*Strongly agree*

*Agree*

*Disagree*

**9) Gâteau** =any various rich cakes

gâteau= /gætəʊ/ =/ɣæðæo/= غداء= type of food

*Strongly agree*

*Agree*

*Disagree*

**10) Semitic** = relating to the group of Semitic languages

Semitic = semite + ic

semite = /si:mait/ =/smt/ = صامت

-ic = adjective suffix

It follows that /smt/+ ic= صامت

*Strongly agree*

*Agree*

*Disagree*

## Résumé

Lorsqu'un groupe de langues partage une origine commune, ils peuvent être considérés comme une famille de langues connue sous le nom de « Protolangue ». Par exemple, l'anglais appartiendrait à la famille des langues indo-européennes, tandis que l'arabe descendrait d'une langue connue sous le nom de proto-sémitique. Il s'ensuit que l'anglais et l'arabe devraient être des langues structurellement distinctes. D'autre part, de nombreux mots anglais sont sensiblement similaires à leurs homologues en arabe. De plus, s'il est analysé morphologiquement aussi bien que phonologiquement, presque chaque mot anglais s'avère avoir un apparenté direct en arabe dont le sens pourrait être très révélateur de l'origine à partir de laquelle il s'est développé. En conséquence, cette étude est envisagée pour enquêter sur les attitudes des étudiants concernant l'utilisation de l'analyse morpho-phonologique sur le vocabulaire anglais via les racines lexicales arabes ensemble pour acquérir de nouvelles connaissances sur la proximité de ces deux langues, jamais considérées comme si éloignées. Ainsi, l'hypothèse de cette étude prétend que l'anglais est d'origine sémitique, et donc, si les étudiants sont exposés à l'analyse morpho-phonologique interlinguistique (CLMPA), leur conscience culturelle concernant les statuts de l'anglais et de l'arabe sera élevée en faveur de la reconnaissance de l'ascendance arabe. Pour atteindre les objectifs de recherche de cette étude, les données ont été recueillies au moyen d'un outil de recherche, le questionnaire. Ce dernier a été administré à trente-cinq étudiants de deuxième année de Master au département d'anglais. Les résultats révèlent que CLMPA a considérablement réussi à exposer les significations arabes ancrées dans le vocabulaire anglais, et ainsi à sensibiliser les élèves à la culture de la filiation inexprimée des deux langues.

## المخلص

عندما تشترك مجموعة من اللغات في أصل مشترك، فيمكن اعتبارها عائلة لغة تُعرف باسم "اللغة الأولية". على سبيل المثال، يعتقد أن اللغة الإنجليزية تنتمي إلى عائلة اللغات الهندية الأوروبية، بينما يعتقد أن اللغة العربية تنحدر من لغة تُعرف باسم Proto-Semitic. ويترتب على ذلك أنه من المتوقع أن تكون اللغتان الإنجليزية والعربية لغتين متميزتين هيكلياً. من ناحية أخرى، فإن العديد من الكلمات الإنجليزية تتشابه بشكل ملحوظ مع نظيراتها العربية. علاوة على ذلك، إذا تم تحليلها مورفولوجياً وكذلك فونولوجياً، فإن كل كلمة إنجليزية تقريباً تثبت أن لها صلة مباشرة باللغة العربية، والتي يمكن أن يكشف معناها كثيراً عن الأصل الذي نشأت منه. وفقاً لذلك، تم تصور هذه الدراسة للتحقيق في مواقف الطلاب فيما يتعلق باستخدام التحليل المورفولوجي الفونولوجي على المفردات الإنجليزية عبر الجذور المعجمية العربية معاً لاكتساب رؤى جديدة حول التقارب بين هاتين اللغتين، والتي كان يعتقد أنه بعيد جداً. وبالتالي، تدعي فرضية هذه الدراسة أن اللغة الإنجليزية هي من أصل سامي، وبالتالي، إذا تعرض الطلاب للتحليل اللغوي المورفولوجي الفونولوجي (CLMPA)، فإن وعيهم الثقافي فيما يتعلق بحالة اللغة الإنجليزية والعربية سيرتفع لصالح الاعتراف من أصل عربي. لتحقيق أهداف البحث لهذه الدراسة، تم جمع البيانات من خلال أداة بحث واحدة هي الاستبيان. كان هذا الأخير يدار لخمس وثلاثين من طلاب السنة الثانية ماسثر في قسم اللغة الإنجليزية. كشفت النتائج أن CLMPA قد نجحت بشكل كبير في كشف المعاني العربية المضمنة في المفردات الإنجليزية، وبالتالي رفع الوعي الثقافي للطلاب فيما يتعلق بالنسب غير المعلن للفتين.