Ministry of Higher Education and Scientific Research University of Babylon College of Education for Human Sciences Department of English



The Syllable in English and Arabic: A Contrastive Study

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By

Sajjad Falah Mohammed Abid-Ali

By Supervised

Asst.Prof. Nesaem Mehdi Abdullah (PhD)

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{هُوَ الَّذِي جَعَلَ الشَّمْسَ ضِيَاءً وَالْقَمَرَ نُورًا وَقَدَّرَهُ مَنَازِلَ لِتَعْلَمُوا عَدَدَ السّنِينَ وَالْحِسَابَ مَا خَلَقَ اللَّهُ ذَلِكَ إَلَّا بِالْحَقِّ يُفَصِّلُ الْآيَاتِ لِقَوْمٍ يَعْلَمُونَ} .

سورة يونس- الآية 5

{It is He who made the sun to be a shining glory and the moon to be a light (of beauty), and measured out stages for her; that ye might know the number of years and the count (of time). Nowise did Allah create this but in truth and righteousness. (Thus) doth He explain His Signs in detail, for those who understand } (Ali, 1946:485)

(Surah Yunus- Ayah 5)



Dedication

This graduating paper is dedicated to my family with love and respect.

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Chapter One

Introduction

1.1 The Problem

One of the notions that are repeatedly used in phonetics and phonology is the notion of the syllable. This unit proved its importance in the history of writing. Historically, it was the Greek who first modified the Semitic syllabary to represent consonants and vowels as separate symbols. The later writing systems like those of Arabic, Hebrew, Aramaic, Indic and others have followed the principles first and last established by the Greeks (Ladefoged, 1982: 237). The syllable is the phonological building block of words and the basic unit of organization in all languages including English and Arabic. Thus, the present study is set to explore the structure of the syllable in English and Arabic assuming that it is the basic unit of organization for a sequence of speech sounds. As such, the study is intended to answer the following questions:

- 1. Is syllable a phonetic or a phonological unit?
- 2. What is the syllable structure in each language?
- 3. Is there any theory about the syllable, its nature, and structure in both languages?
- 4. Which language is more explicit in its treatment of the syllable?

1.2 The Aims

The study aims at:

- 1-Investigating whether the syllable is a phonetic or a phonological unit.
- 2- Finding out the structure of the syllable in each language.
- 3- Outlining whether there is any theory about the syllable, its nature and structure in both languages.
- 4- Showing which language is more explicit in its treatment of the syllable.

1.3 The Hypotheses

It is hypothesized that:

1-The syllable is a phonetic and a phonological unit at the same time.

2-Each language has its own syllable structure.

3-There are various theories about the syllable, its nature and structure in English, but a few theories in Arabic.

4-English is more explicit in its treatment of syllabic.

1.4 The procedures

The following procedures are adopted:

1- Presenting a theoretical background about the syllable in English and Arabic.

2-Conducting a contrastive analysis of the syllable in both languages be focusing on the similarities and differences between the two languages as far as the syllable is concerned.

3-Coming up with certain conclusion.

1-5 The limits

The paper is limited to tackle the notion of syllable in English and Arabic so as to shed light on the similarities and differences between the two languages as far as the syllable is concerned.

1.6 The value

The study is hopped to be of value to students who are interested in contrastive studier as well as to those who study English as foreign language.

Chapter Two

The syllable in English

2.1 Definition of syllable

The term syllable, in its broadest sense, represents one of the fundamental elements in phonetics and phonology; it is researched from a phonetic and phonological perspective. The syllable ideas, however, are backed up by evidence derived from several disciplines of research, including psycholinguistics, which examines how children learn to speak and language universals (Fallows ,1980:76).

Roach (2002:66) states that the syllable is a fundamentally important unit in both phonetics and phonology. Crystal (1989: 164) defines the syllable as " an element of speech that acts as a unit of rhythm, consisting of a vowel, states that a syllabic consonant or vowel / + consonant combination ".On the other hand, Hancock (2003: 50) a syllable is frequently characterized as a collection of one or more sounds with a peak or nucleus.

Phonetically speaking, the air pressure is most audible in the nucleus. People frequently have difficulty comprehending where one syllable stops and another begins because the core portion of a syllable is more prominent than the surrounding sounds for example, the word "bitter"[b'Itə] may be heard as (bi-tter, bit-ter or bitt-er).

Phonologically speaking, syllables are the different combinations of vowels and consonants that make up a word. (the study of the location of sounds in sequence is called phonotactics). Vowels can form a syllable on their own or they can be the " centre or nucleus " of a syllable , e.g. [e] in bed [b | ed].

In addition, some consonants like / m, n, ŋ, 1 / are called syllabic consonants since they function as syllables in final position and also we have what is called " minimum syllable ", as in [|m] to show agreement and [$|\int$] to keep someone quiet and these are consonant sounds, but they have meaning. (Roach, 2002: 76).

2.1.1 Significance of the Syllable

For Crystal (2003:447), "the syllable is important in phonology in relation to prosody, and cross-linguistic studies of rhythm .In the distinctive features theory of phonology syllable is used to replace the syllabic nucleus".

Likewise, Bolinger (1975:56) emphasizes that the syllable's function in rhythm is mostly responsible for its obviousness. i.e., when speakers divide a conversational flow between strong and weak beats, much as in music. Additionally, anything higher is nearly always connected to the meaning and structure of the language, therefore it is advisable to stop at the level of the syllable when structuring sound-units.

It is necessary to mention that the significance of syllable has increased especially in models of non–linear phonology in relation to derivation .In addition, a syllable plays a role in prosodic morphology as being a level above the "mora" and below the "foot"- the unit of rhythm in languages" (ibid.).

Finch (2000:68) and the Free Encyclopedia assert that the stressed patterns of English, which are crucial to the structure of speech, are carried by the syllables.

O"Connor (1973:201) explains the importance of the syllable when he affirms that "the syllable is useful as the largest unit one needs to consider in explaining how phonemes are permitted to combine together in a language". Moreover, Smith and Wilson (1980:141) also refer to the significance of the syllable in the necessity for a unit that is larger than a phoneme and smaller than a word.

2.1.2 The Syllable: Various Theories

a. The Prominence Theory

The Prominence Theory confirms that "a syllable is phonetically a peak in prominence resulting from a combination of stress, length, pitch and intrinsic sonority" (Trask, 1996: 291).

The relative sonority theory (the prominence theory) which is created by the Danish phonetician O. Jespersen, who established a ranking of speech sounds according to sonority; so he started with the most sonorous sound sequentially, the open vowels , mid-Open vowels , the close vowels / i:, I ,

u: /, the liquids and nasals, the voiced fricatives, voiced stops / **b**, **d**, **g** / , the voiceless fricatives/ **f**, **s** / and ends with the voiceless plosives/ **p**, **t**, **k** / as the least sonorous. Consequently, the English word / melt / "melt" starts with the minimally sonorous /m/ to the maximally sonorous /e/, it continues with a decreasing sonority through /l/ to a second minimum with /t/. Speech sounds can be ranked in terms of their sonority according to sonority hierarchy in the following figure.

Least sonority

1	voiceless obstruents(e.g. t s k)
2	voiced obstruents (e.g. d g P z)
3	nasals (e.g. m)
4	liquids (e.g. r)
5	glides (e.g. w)
6	vowels (e.g. a 0) Greatest sonority

Figure (1) Sonority Hierarchy (Katamba, 1989:104)

This theory is a listener-based theory since the listeners can specify the number of syllables in any word they hear by recognizing the sounds that are more prominent or sonorant or carrying power than others, i.e. they are felt protrude from their neighbors. These prominent sounds are the peaks and they are generally carried by vowels. On the other hand, Consonants, are the sounds of weak prominence (Brosnahan and Malmberg, 1970: 141).

b- The Pulse Theory (Chest Pulse Theory)

A term especially associated with the theory of speech production proposed by Stetson in (1928) who conceives of the syllable in this case as "basically the result of a ballistic-type periodicity of movement in the expiratory muscles so that each syllable is a puff of air from the chest"(Brosnahan and Malmberg,1970:142). The number of syllables in a word is determined by such chest pulses and increased air pressure. According to this theory, the syllable, not the sound, constitutes the fundamental unit of speech. It is concerned with the muscular activity controlling the movement of the lungs during speech production

This theory does not take into consideration words that have two vowel sounds, such as the word "being", which has two vowels: the first is long and the second is weakly stressed. It is doubtful whether there is a double chest pulse even though the word is divided into two units linguistically (Gimson, 1980:56).

Abercrombie (1967: 40) clarifies that the syllable has three phases: the starting chest pulse phase, the passage of the air through the vocal tract, and the conclusion of the movement of this air coinciding with the beginning of another chest pulse. The syllable in this case is defined as "the product of the way the pulmonic airstream mechanism works; its basis is a chest pulse on which are superimposed the articulatory movements and the allied movements of the vocal cords and velum which produce segments".

2.1.3 The Nature of the Syllable

O"Connor, (1973:201) states that the nature of a syllable structure varies from one language to another since there is no universal phonological syllable. The phonological view of the syllable requires a separate definition for each language. However, Malmberg (1963:1), among other phoneticians, believes that a syllable consisting of a consonant plus a vowel is the only one which is general for all languages.

Most people can count how many syllables there are in any given word or sentence even if they cannot define what a syllable is. According to Roach (2009: 70), the syllable may be defined both phonetically and phonologically, i.e., according to the phonetic definition syllables are usually described as consisting of a centre which has little or no obstruction to airflow and it is louder than other components(sounds that precede or follow the centre). Before and after the centre, there will be greater obstruction to airflow and/or less loud sounds. The sounds that precede the centre are called the onset while those which follow the centre are called the coda. The sounds which represent the centre are vowels while those that represent the onset and the coda are consonants.

The phonological definition of the syllable: This kind of definition looks at the possible combinations of the phonemes. The study of the possible phoneme combinations is called Phonotactics. The phonological point of view decides which sound or sounds can occur in initial position, medial position , final position and so on (ibid.).

2.1.4 The Structure of the Syllable

Modern phonological theory generally agrees that the syllable has a component or a hierarchical structure rather than a linear one. (Ladefoged, 2006:242). Katamba, (1989:154), Gingrich, (1992:138), Clark and Yallop, (1995:411) and Roach (2000:73) argue that for descriptive purposes, the syllable can be divided into onset and rhyme; within the rhyme we find the nucleus (also the peak) and coda. Not all syllables have all parts; the smallest possible syllable contains a nucleus only(which is almost always a vowel), as in are /a: /, or / \mathfrak{I} / and err /3: /.

The initial sounds of a syllable, those that come before the nucleus, are referred to as the onset. These are always consonants in English. The rhyme is the rest of the syllable after the onset. It can be divided up into the nucleus and the coda. The nucleus, which is an obligatory element, represents the nuclear or most sonorous element in a syllable .It is a vowel in most cases, although the consonants /r, l, m, n/ and the velar nasal / η / can also be the nucleus of the syllable. On the contrary ,the coda is an optional element and includes all consonants that follow the peak(Katamba, 1989:154 ; Durand, 1990:216; Giegerich,1992:138; Clark and Yallop, 1995:411; Roca and Johnson,1999:242; and Roach,2000:73).

2.1.5 Analysis of Syllable Structure

If the word in question has a vowel(any vowel may occur, though u is rare) as its first syllable, the syllable is said to have a zero onset so the onset refers to the part of the syllable which precedes the centre. If the syllable begins with one consonant, that initial consonant may be any consonant phoneme except /ŋ/ and /3/. When a word begins with two or more consonants together we call them a consonant cluster. Initial two-consonant clusters are of two types in English. The first one is composed of "s" followed by one of a small set of consonants; examples of such clusters are found in words such as 'sting' 'stir'), 'sway' 'swei', 'smoke' 'smauk'. The s in these clusters is called the pre-initial consonant. The table below shows these clusters (Roach ,2009:53).

Table (1): Two-consonant Clusters with Pre-initial s

Pre-initial			Ini	itial							
s plus	р	t	k	f	m	n	Ι	w		j	
	/spin/	/stik/	/skin/	/sfiə/	/smel/	/snəu/		/slip/	/swim/	/sju:/	

The other type begins with one of a set of about fifteen consonants, followed by one of a set of consonants such as /l, r, w, j/: play /plei/, try/trai/, quick/kwik/, few/fju:/. The first consonant in such clusters is called the initial consonant. The second consonant is referred to as the post – initial consonant. (ibid).

English words can begin with /s/ followed by two consonants (Initial three-consonant clusters) as illustrated in the following examples:

split/split/, stream/stri:m/, square/skweə/.

The /s/ in such clusters is called the pre – initial consonant. The /p/, /t/ and /k/ are called the initial consonants. The /l/, /r/ and /w/ are called the post initial consonants. Consider the following diagram:

		L	r	W	J
S	Р	Splay	spray		Spew
S	Т		string		Stew
S	К	sclerosis	screen	Squeak	Skewer

Table (2): Initial three-consonant clusters

The coda is represented by consonants. Four consonants can occur at the end of English words. If the last consonant is absent, the syllable will have a zero coda. If there is only one consonant it is called the final consonant. There are two types of two – consonant final clusters. Any consonant may be a final consonant except /h, r, w, j/ (Giegerich, 1992: 138). The first one is as follows:

 $Pre-final+final: bump / b \Lambda mp /, bent / bent /, bank / bænk /, belt / belt /, ask / a:sk /.$

In such clusters, the consonants /m, n, η , l, s/ are called pre – final consonants. The consonants /p, t, k, / are called final consonants

The second type is as follows:

Final + post – final : bets /bets/, beds /bedz/, backed /bækt/, bagged /bægd/, eighth /eit Θ /. In such clusters, the consonants /t, d, k, g, t/ are called final consonants. The consonants /s, z, t, d, Θ / are called post – final consonants. Consider the following tables :

 Table (3):
 Final Three-consonant Clusters

		pre-final	Final	post-final
"helped"	Не	L	Р	Т
"banks"	Bæ	Ŋ	К	S
"bonds"	Во	Ν	D	Z
"twelfth"	Twe	L	F	

 Table (4): Final Three-consonant Cluster

		Final	post final (1)	post final (2)
"fifths"	Fi	f		S
"next"	Ne	k	S	Т
"lapsed"	Læ	р	S	Т

The bulk of four-consonant clusters may be analyzed as consisting of a final consonant preceded by a pre-final and followed by post-final 1 and post-final 2, as shown below:

Table (5): Final Four-consonant Cluster

		pre-final	Final	post final (1)	post-final (2)
"twelfths"	Twe	L	F		S
"prompts"	Pro	М	Р	t	S

Only a few cases appear to need a different kind of analysis, as consisting of a final consonant with no pre-final but three post-finals (ibid.)

Table (6): Final Four-consonant Cluster

		Final	Post final (1)	Post final (2)	Post final (3)
"sixths"	Si	k	S		S
Texts	Те	k	S	Т	S

To sum up, we may describe the English syllable as having the following maximum phonological structure:

Pre-initial	initial	post-initial	vowel	pre- final	final	post-final 1	post final 2	post final 3

Figure (2) Maximum phonological structure of English syllable

A more sophisticated study of the syllable's vowel and coda, known as the rhyme, is used in recent phonological research. The peak of the rhyme, which is often a vowel, and the coda, which is optional, are separated. As with me, the rhyme might not have a coda.



Figure (3) syllable structure

So English syllable structure may be represented by (CCC)V(CCCC). This formula states that a vowel by itself can make a syllable. A syllable's vowel can be followed by up to four consonants and can have up to three consonants before it.

2.1.6 Open vs. Closed Syllables

Syllables are divided into open and closed according to the ending of the syllable. Syllables that end in a vowel or diphthong are known as open (free) syllables g, i.e., they end with "nuclei". Closed syllables (also called complete or blocked) are those that have at least one consonant following the vowel, i.e., they end with 'coda'. (Hartman and Stork, 1976:228)

Therefore, open syllables have a non-branching rhyme, but closed syllables have a branching rhyme. This type of syllables, that has the CVC structure, is thought to be a subsequent innovation of the open syllable CV (Brosnahan and Malmberg, 1970:210). On the other hand, the most common open syllable has the structure CV, as in "we" [w'i:], the CV (a consonant followed by a vowel) structure, which is not closed by another consonant, is regarded as a basic phonological unit in all languages since relatively all languages 139 have it in their structures and may be the first systematic utterances of children are expected to be of this form (Hogg and McCully, 1989:36).

Syllable Structure		Transcription
VC	Is	['iz]
VCC	end	['end]
VCCC	ants	['ænts]
CCVCCCC	prompts	[prompts]
CVC	moon	[m'u:n]
CVCC	jump	[dʒ ʌ mp]
CVCCC	hands	[h'ændz]
CVCCCC	Sixths	[s'Iksθs]
CCVCCC	plants	[pl'ænts]
CCVCCC	twelfths	[twelf θ]
CCCVC	Strong	[str'ɒŋ]
CCCVCC	springs	[spr'Iŋz]
CCCVCCC	splints	[spl'Ints]

Table (7): Closed syllables

Table (8): Open syllables

Syllable Structure	Example	Transcription
V	Or	['ɔ:]
CV	sea	[s'i:]
CCV	through	[θr'u:]
CCCV	screw	[skr'u:]

2.2 The Syllable in Arabic

2.2.1 Definition of Arabic syllable

A syllable is a continuous speech unit. For instance, the syllables in the word "habitat" are divided as follows: Ha-bi-tat. Depending on how you arrange the consonants and vowels to form the syllable, there might be several sorts of syllables. Arabic contains 6 different syllable kinds. There are 3 common and 3 rare.

2.2.2 Theories of the Syllable

No theories are developed in Arabic in the literal meaning of the word (theory). Yet, some traces are made by Hasan (1990: 170) presuming that chest beats occur at regular intervals during speaking and Al-Hamad (2000: 209) who offers an analysis of the syllable from three possible perspectives: articulatory, a syllable is a collection of sounds generated within a single heartbeat; The syllable's sonority peak is situated between two bases in acoustics; functional, it is a sequence of consonants and vowels. (Roach et al., 2004:Int.).The most common closed syllable has the structure CVC as in "died" [d'aId].

2.2.3 The Nature of the Syllable

Syllables are a basic unit of language used in all languages. The syllable has been crucial to both classical and colloquial Arabic phonology since the days of the ancient Arab grammarians. Arabic metrics have been explained in terms of syllables, which are groups of vowels and consonants that follow one another. The placement of stress also affects the internal prosodic structure of each syllable as well as the number of syllables in a word. The examination of the syllable must come first before the analysis of stress. Many linguists have offered varying perspectives in their descriptions of the internal structure of the syllable. Some descriptions were based on rules, templates and principles, some others were based on constraints (Beeston, 1970: 20-1).

2.2.4 The Structure of the Syllable

Syllable structure, according to Hassaan (1998: 73), is a part of phonological word division that focuses on the composition, division, and distribution of pronounceable word segments. Phonotactics, also known as the rules of sound distribution, which are the particular sequences of sounds that occur in a language, also includes syllable structure. Additionally, lexical stress analysis is part of the study of Arabic syllables. According to Arabic, each language has its unique sequences of consonants and vowels in addition to other characteristics like duration, stress, and intonation (ibid.).

2.2.5 Analysis of Syllable Structure

Hassan (1990:173) and many other Arab linguists (e.g. Al-Ani ,1983:13; Abdo , 1970:129 ; Anis, 1995:164) adopt the idea that the syllable is an ordered symmetry of analytic molecules and that there are six types of syllables as follows: short closed, short open, mid-closed, mid-open, long closed, and long

Double-closed, three are common and three are rare as showing bellow:

	Syllable Structure (common)	Example
1	CV	بْ ‹بِ ‹بْ
2	CL (long vowel)	با
3	CVC	رَب

Table (9): Common syllable Structure

Table (10): Rare Syllable Structure

	Syllable Structure (RARE)	Example
1	CVCC	ضرب
2	CL (long vowel) C	جاب
3	CL (long vowel) CC	(ذ double) شاذّ

Generally speaking, phonetic syllables can be maftuh (open) which end with a semi-vowel (waw and ya) or short sounds, and muqfal (closed) when a consonant or more closes them up.

Al-Ani (1983: 131) argues that the syllable appears to be based on how British linguists defined it, where the nucleus is the most conspicuous component and the remaining components are seen as minor. The nucleus is acoustically prominent, and the presence of both short and long vowels gives it syllabicity (ibid.).

Al-Ani (1970:33) and Al-Ani and May (1973: 89-93) claim that CV, CVV, and CVC Since they occur more frequently than the other types, they are unmarked categories in terms of their distribution. namely CVVC and CVCC. CV and CVC are more frequent types because there are no constraints of any kind on their distribution in any position in Arabic words. In word beginning, medial, and final positions, they can appear at will. On the other hand, the distribution of the CVV type is subject to various limitations. This kind occurs more frequently in middle position compared to initial or final positions and less frequently in final position than the other two locations.

According to Al-Ani and May (ibid.), a syllable rhyme may have one consonant, as in the CVC and CVVC patterns, or it may not have any consonants at all, as in the CV and CVV patterns. The CVVC patterns are also limited to the word's final position.

In Arabic, the syllable's structure must adhere to certain rules. The first restriction is that each syllable must start with a consonant, with the exception of cases where the phrase starts with the definite article, as in the case of "the manager," almudi:r. The initial vowel of the definite article is dropped when a word ends in a vowel and the next word starts with it, and the consonant then completes the final syllable of the preceding word. for instance, المدير [baytul mudi:r] becomes [baytu -l mudiir] "home (of) the manager." No syllable may begin with a consonant cluster (two or more consonants), which is the second restriction (ibid.). The second restriction is that no syllable may begin with a cluster of consonants (two or more consonants). The third restriction is that the pattern CVVC, which results from germination, is constrained (ibid.)

There are two types of syllables in Arabic, according to Haywood and Nahmad (1982: 12): short and long. Like the three syllables in the word كتب "kataba," the short syllable consists of a consonant and a short vowel (wrote). The three syllables in this word should be equally spaced apart. A voweled consonant is followed by an unvowelled letter to form the lengthy syllable. This might be a vowelled consonant followed by a really consonantal second letter with sukun, as in the first syllable of kalbuhu, or a consonant with a vowel followed by a long vowel, as in the first syllable of kataba كتب (write) or the second syllable of kabirun كبير (large) (his dog). Thus, the word كتاب xitabtum (you (plural) wrote) is one short syllable followed by two long.

An unvowelled letter cannot start a syllable. Because of this, no word may start with two consonants without a vowel coming before it. This explains why some verb forms, such as istalama with hamzatulwasl, start with an additional alif (received). Except at the conclusion of a phrase, no syllable shall conclude with two unvowelled consonants. Thus, reading qalbun (heart) as qalb (heart) would be possible without a case-ending stop (ibid. 13).

According to Khalil (1999: 25), the formula for the Arabic syllable structure is: CV(V)(C) (C). Arabic can use the following syllable types:

CV as in ب bi (with), CVV as in في fii (in), CVC as in أب ab (father), CVVC as in فيل fiil (elephant), CVCC as in نهر (river), and CVVCC as in فيل jaadd (serious). The last type is rare and must contain long /aa/ followed by a geminate cluster (ibid.).

Chapter Three

The Comparison between English and Arabic syllables

This chapter is allocated to conduct a comparison between the syllables in English and Arabic. The comparison is clarified in the following points:

- 1- Syllables are regarded in both English and Arabic as the fundamental organizing unit for a sequence of speech sounds.
- 2- In English, two types of theories dealt with the syllable either in terms of acoustic properties of sounds such as sonority or prominence, or on the notion that the syllable is a unit in the organization of the sounds of an utterance; whereas in Arabic, no theories are built in the strict sense of the word theory, albeit some traces are made by Arab linguists assuming that the syllable can be studied: 1) articulatory as a group of sounds produced in one chest pulse, 2) acoustically as a sonority peak between two bases, and 3) functionally as a sequence of sawamit (consonants) and sawa`it (vowels).
- 3- In English, syllables consist of onset and rhyme. The rhyme contains a nucleus (a vowel) and a coda (a consonant), while in Arabic there are six possible structures of syllables depending on the way the consonants and vowels are arranged.
- 4- Syllables that end in vowels are known as open syllables in English, whereas those that end in consonants are known as closed syllables. The same is applicable in Arabic, where the former variety is referred to as maftuh and the latter as muqfal.
- 5- In English, syllables are phonetically described as consisting of a centre, which has little or no obstruction to airflow, preceded and followed by great obstruction, while in Arabic, syllables are phonetically described as chest pulses.
- 6- Arabic has two kinds of syllables: open syllables (CV) and (CVV) and closed syllables (CVC), (CVVC) and (CVCC). Every syllable begins with a consonant or else a consonant is borrowed from a preceding word through elision especially in the case of the definite article 'al' (the) (used when

starting an utterance) or 'l' (when following a word), e.g., baytu-l mudiir بيت "house (of) the director", which becomes bay-tul – mu –diir when divided syllabically. In English, by contrast, a syllable may begin with a vowel, as in "east" /i:st/ or it may consist of a vowel alone, as in "are" /a:/.

- 7- No syllable in Arabic may begin with a cluster of two or more consonants. In contrast, a syllable in English can start with one, two, or three consonants, as in "say" /sei/, "play" /plei/, and "street" /stri:t/.
- 8- Due to restrictions on consonant clusters, Arabic syllable patterns are more restricted than those of English. In contrast to English, which allows syllable-initial clusters of up to three consonants and syllable-final clusters of up to four consonants, Arabic only permits syllable-medial and final clusters of up to two consonants as in "ردن". Additionally, a vowel can create a syllable in English on its own, as seen in the words "are" and "err." Arabic is less explicit than English in this regard.
- 9- The following syllable types are admissible in Arabic: CV as in 'bi' (with), CVV as in 'في' 'fii' (in), CVC as in 'أب' 'ab' (father), CVVC as in 'فيل 'fii' (elephant), CVCC as in 'ier') 'river), and CVVCC as in 'ze' 'jaadd' (serious). The last type is rare and must contain long /aa/ followed by a geminate cluster, while the permissible patterns in English are as follows: V as in 'are', CV as in 'saw', VC as in 'up', CVC as in 'cat', CCV as in 'play', VCC as in 'apt', CCVCC as in 'strand', CCCVCCC as in 'scripts', CVCCC as in 'texts'. Accordingly, English is more explicit than Arabic in this area since it accepts many syllable patterns.
- 10- In contrast to English, final word syllable in Arabic is part of the original structure of the word itself; it is not a separate morpheme referring to plurality or past tense as in English.
- 11- In general, English is more explicit than Arabic in the treatment of syllable due to the aforementioned points.

Chapter Four Conclusions:

This chapter is concerned with the conclusions the study reached at as for as the comparison between English and Arabic syllables is concerned:

Both Arabic and English languages treat the syllable as the structural group of words in functional speech science and that it is the basic unit for the organization of the language chain and its system Prosody and its tone pattern. This topic has two dimensions: first, a phonetic dimension, as the syllables are described in English as consisting of a center that has obstruction (the obstruction) or a little obstruction to the airflow that is preceded and followed by a little obstruction, while the syllables in Arabic are described as chest pulses. As regard phonological dimension , syllables in English are difficult, consisting of main and peripheral vocabulary, and in Arabic, they are considered a unit for each language, and this unit consists of a series of correct letters and vowels, in addition to other features such as length, stress and intonation.

Syllables in the two aforementioned languages are understood as phonological units consisting of vowels that form the center or peak and the consonant letters that are marginal and optional in English and located in the initial and final limits of words, and in Arabic they are a group of sounds that form the bases that fall before and after the peak.

The syllables have a hierarchical structure consisting of correct letters and the center often vowels, As for Arabic, the syllable is treated as an organized symmetry of analytical units, depending on the sequence of consonant and vowel letters.

In English, open syllables are ones that finish in vowels, whereas closed syllables are those that end in consonants. The same holds true in Arabic, where the first type is known as maftuh and the second as muqfal, the difference lies in the fact that the last syllables of words in English consist of phonetic groupings consisting of four consonants at the end of the word and refer to the plural or the past or the use of ordinal numbers. In Arabic, the last syllables of words depend on the union of vowels and consonants, which is a major part of the original word.

Bibliography

Roach,P. (2002)." *A Little Encyclopedia of Phonetics* ".www.linguistics.reading.ac.uk/staff/PeterRoach.

Crystal, D.(1989). What is Linguistics?. London: Edward Arnold.

Roach, P. (2009). *English Phonetics and Phonology*. Cambridge: Cambridge University Press.

Bolinger, D. (1975). *Aspect of Language*. (2nded.). New York:: Harcourt Bra ce Jovanovich, Inc.

Finch,G.(2000). *Linguistic Terms and Concepts*. NewYork: Macmillan Ltd.

Oconnor, J.((1973). *Phonetics*. Harmondsworth : Penguin Books Ltd.

Smith, N. and Wilson, D. (1980). *Modern Linguistics*: The Results of Chomsky's Revolution. Harmonds Worth : Penguin.

Trask, R.L. (1996). A Dictionary of Phonetics and Phonology. London and New York:Routledge.

Katamba, F. (1989). An Introduction to Phonology. London: Longman.

Brosnahan ,L.F ;Bertil ,Malmberg(1970) *Introduction To Phonetics* .Cambridge: W.Heffer and sons.

Gimson, A. C. (1975). An Introduction to the Pronunciation of English. London: Edward Arnold.

Abercrombie, D. (1967). *Elements of General Phonetics*. Edinburgh: Edinburgh University Press.

Durand, Jacques(1990) Generative and Non-Linear Phonology .London: Longman.

Giegerich, Heinz (1992) *English Phonology: An Introduction*. Cambridge: Cambridge University Press.

Hartmann, R and Stork, (1976). *Dictionary of Language and Linguistics*. London: Applied Science Publishers Ltd.

Hogg, R. and McCully, C.B. (1989). *Metrical Phonology*. Cambridge: Cambridge University Press.

Hassan, Tammam(1990) Manahij-l-bahth fil- lugha [Research Methods in Language]. Cairo: Al`Angelo.

Al-Hamad, G.K. (2000) *Al-Madhal-ila-`Ilm Aswat-l-`Arabiyaa*[*An Introduction to The Phonetics of Arabic*]. Baghdad: Matb`aa-l-Magm`a-il-`Lmi-il-Iraqi.

Beeston, A. F. L. (1970). *The Arabic Language Today*. London: Hutchinson University Press.

Hassaan, T. (1990). Manahij -l- Bahth Fil Lugha. Cairo: Al Angelo.

Hassan, T. (1998). Al- Lugha -l-Arabiya Maanaha Wa Mabnaha. Cairo: Alam Alkutub.

Anis, I. (1995). Al Aswat -l- Lughawiyya [The Linguistic Sounds]. Cairo: Al-Angelo.

Al-Ani, S. (1970). Arabic Phonology. The Hague: Mouton.

Al-Ani, S. H. (1983). Al-Tashkil -l-Sawti Fil Lugha -l-Arabiya [The Phonetic Forming in the Arabic Language: Arabic Phonology]. Al- Nadi -l-Thaqafi -l-Arabi.

Al-Ani, S, and & May, D (1973). *The Phonological Structure of the Syllable in Arabic*. In Salman Al-Ani , ed., Readings In Arabic Linguistics. Bloomington: Indiana University Linguistics Club.

Khalil, A. (1999). *A Contrastive Grammar of English and Arabic*. Jordon: Jordon Book Centre.