

Hadeel K. Ali **Hasan Sh. Ali**
University of Tikrit / College of Education / English Department

As a result of historical sound change or synchronic rule, many sounds are added or inserted. Addition of sounds may be very prominent in informal speech. Epenthesis or addition is the insertion of one or more sounds to a word, especially to the interior of a word. According to Crowley (1997: 55) epenthesis may be divided into two types: excrescence which refer to the insertion of a consonant, and anaptyxis which refers to the insertion of a vowel.

In English the process of epenthesis is versus deletion in particular positions, that general principles govern the choice of epenthesis whether a vowel or a consonant. In Arabic the essential phonological characteristics can be clarified by showing the selection of epenthesis according to the restricted conditions.

This study includes listing words in English and Arabic that necessitate the use of epenthesis in both types excrescence and anaptyxis. The aim behind this study is to show how universal conditions can govern words with the use of epenthesis in both languages.

Investigation of epenthesis in English and Arabic has received much attention recently. The reason behind that is interactions with English and Arabic (and some dialects of Arabic)

show some vowel harmony. Ali and Lahrachi (2004: 3) show that vowel insertion occurs between onset consonant clusters. Modern standard Arabic doesn't allow word initial consonant clusters of two or more segments, but such clustering is widely attested in modern Arabic. Dialects of Arabic are more influenced with epenthesis rather than modern standard Arabic because they are influenced by invasion especially by French invasion like: Lebanese, Palestinian, and Jordanian Arabic.

There is a visible epenthetic vowel occurring within word final consonant clusters; e.g. /bikr/ ----/bikə**r**/; /rikb/ ---- /rikə**b**/ and the like. Many minimal pairs (singleton and geminates) show initial, medial, or final clusters. Many of the modern Arabic words are derived from modern standard Arabic, therefore, there is no reason why in modern Arabic there should be a vowel before the geminate consonant, but not in the singleton cases. For example in modern standard Arabic minimal pair /baka/ and /bakka/ is represented in modern standard as /bka/ and /bekka/ no vowel before singleton consonant /k/. Short vowels are always elided in the singleton case and thus resulting in a branching onset, i.e. many consonant clusters are formed.

Brasington (1978: 23) maintains that there are many conditions govern the selection of epenthesis themselves as a means of resolving phonotactic difficulties. Many evidences show that universal conditions govern the modification of in admissible consonant sequences. However, the choice of epenthetic versus deleting solutions are positionally determined.

2. Epenthesis and Vowel Harmony

Lass (1984: 184) clarifies that epenthesis is the process in which new segments may appear in the words or morphemes. The most general form is reflected in the anaptyxis which is the insertion of a vowel between two consonants. These consonants are most usually sonorant or obstruent + sonorant or sonorant + obstruent cluster, for example, [fɪləm/ for [film], [æθəli:t/ for [æθli:t/, etc.

Trask (1996: 132) denotes that epenthesis is present in English language as a result of several developments. For example, the word **empty** was /æm̩ti/ and **thunder** was **punor**. Non-standard pronunciations include 'athalete' for **athlete** and 'fillum' for **film** with epenthetic vowel.

In Arabic Ba'alabki (1999: 78) observes that studying Arabic sounds comparatively includes phonemic sound change. This change is clear from one period to another in the history of language. It is difficult and rare to have consonant cluster in Arabic, for this reason many vowels are inserted.

Therefore, in modern standard Arabic words like: **katb**, **kerm**, **ebd**, will be pronounced, **kateb**, **karem** and **ebed**. However, inserting a vowel between two consonants clusters is called anaptyxis.

Anaptyxis is used to keep vowel harmony in Arabic. The duration of anaptyxis varied across words and speakers. There is a visible epenthetic vowel occurring within word final consonant cluster, for example, /bikr/ --- /bikə̃r/, rikb/---- /rikə̃b/etc. In final cluster of Arabic /baħr/ a schwa vowel /ə̃/ is present like /bahə̃r/,

therefore a phonologically active sukuun is present between clusters.

Abul-Salim (1987: 34) shows that epenthetic vowels participate in round harmony; epenthetic vowel realized as /u/ of stem vowel is /u/, e.g. [ʔækil] 'food' [furun] 'oven' and so on.

Epenthetic vowels must be in the harmony domain to participate: only if the epenthetic vowel is stem-internal. Vowel harmony is regressive if the source of alternation is the stem vowel, like:

Bint = > binit 'girl'

Uxt = > uxut 'sister' (harmony)

Bahr = > bahar 'sea' 'lowering'

Another example is present in Lerantine Arabic in which harmony and lowering do not cross a morpheme boundary because of its regressive nature, for example:

Zur-t-na > zuritna but not zurutna 'you visited us'

Yu-Tlub-l-na > Yu Tlubina but not *Yu Tlubulna 'he asks for us'

Yi-smaH-l-ha > YismaHilha not * YismaHilna > 'he allows for her, gives permission'.

Brasington (1978: 33) observes that in English consonant clusters may result in modifactory process one of them is epenthesis, like:

stamp > sitaamp

trump > turump

milk > milik

project > projaakt

2.1 The Structure of English Syllable

Ladefoged (2001: 60) denotes that syllables have rules. Some consonants are dropped and shortened. With epenthesis consonants are added. A homorganic voiceless stop may be inserted after a nasal before a voiceless fricative followed by an unstressed vowel in the same word. So epenthesis includes the insertion of a sound into the middle of a word as clarified in the following list:

Words	Epenthetic form
Something	'sʌmpθɪŋ
Youngster	'jʌŋkstə
Prince	pɹɪnts
Tense	tents
Once	wʌnts
Length	lɛŋkθ
Mince	mɪnts
Patience	pɛɪʃənts
Chance	tʃənts
Samson	sæpsʌn
Thomson	θʌmpsʌn

Lance	laɪnts
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Collins and Mees (2008: 119) makes it clear that epenthesis is related to liaison which is the addition of a segment into a word which was previously absent. In Irish English an epenthetic /ə/ is inserted in sequences such as /m/ and /rm/ like : alarm /ə'larm/.

2.2 Epenthesis of a Vowel Canaptyxis

Carr (1993: 41) observes that opposite to the process of elision is epenthesis which is segment insertion in a specific environment. This process will be represented by a rule of the form:

$\phi \rightarrow [i]$

Picnic $\rightarrow$ pɪkænik

Film $\rightarrow$ filəm

This is related to the conception of segment structure which is connected with underspecification Theory (UT). One of the main hypotheses of this theory is that where a language has an epenthetic vowel, for example, a vowel inserted into appropriate slots such as /U / in Japanese pronunciation of loan onsets like /skr/ in English, it will result in the least specified.

However, Crowley (1997: 34) makes it obvious that epenthesis often breaks up a consonant or vowel sequence that is not permitted by the phonotactics of a language. Sporadic cases can less obviously motivated however, such as, **warsh** in some varieties of American English. Regular or semiregular epenthesis commonly occurs in languages which use affixes. For example, a schwa /ə/

or an /ɪ/ is inserted before the English plural suffix. /z/ and the past tense suffix - /d/ when the root ends in a similar consonant for example:

glass ----- glasses /gla:sez/ or /gla:sIz/

bat ----- batted /bætəd/ or /glɑ:sIz/

change -----changes /tʃeɪdʒ nez/ or /tʃeɪdʒ nIz/

lash ----- lashes /læʃəz/ or /læʃIz/

Vocalic epenthesis occurs when words are borrowed from a language that has consonant clusters or syllable codas that are not permitted in the borrowing language, though this is not always the cause. However, languages use various vowels for this purpose, though schwa is quite common when it is available.

2.3 Epenthesis of a Consonant (Excrescence).

Carr (2008: 50) admits that intrusive 'r' is an example of an epenthetic consonant of non-rhotic varieties of English, as in **law and order**: [lɔːrəθ ɔːdər]. The inserted segment is an epenthetic consonant.

Brasington (1978: 33), on the other hand, shows that an example of epenthetic consonant is indefinite article a, which becomes an before a vowel. In old English this was one in all positions, so a diachronic analysis would see the original **n** diachronically disappearing except where a following vowel required its retention : an > a. However, a synchronic analysis in keeping with the perception of most native speakers, would see it as epenthesis: a > an.

In English, a stop consonant is often added to break a nasal + fricative sequence as:

'hamster' ----- [hæmpstə]

'warmth' ----- [wɔrmpθ]

'fence' ---- [fents]

'prince' ----- [prɪnts]

'dreamt' ----- [drempɪ]

'something' ----- [sʌmpθɪŋ]

'length' ----- [leŋkθ]

3. The Structure of Arabic Syllable

Henry (1966: 43) maintains that modern standard Arabic always starts with one consonant sound, and avoids starting with onset consonant cluster especially plosives.

A group of plosive consonant cluster is rare in Arabic for example, the word 'uktub' is used instead of ktub (كتب). The same is true concerning the Greek name 'platon', in Arabic it becomes (أفلاطون) (ḍaflatunu). To start a syllable in Arabic there must be alhamza.

While verbs require a different rule. For example, when two words are separated by vowels the condition will be like this:

(qala ktub) قال اكتب, it is also used with the analysis of words into syllables like: (qa-lak-tub) قال ك/ ثُب.

The same is true for the words ثم انطلق (tumma nta laqa), the analysis will be: (tum-man-ta-la-qa).

Then if in the middle of the word there is a consonant cluster (which is always avoided in Arabic). This cluster is the result of joining two words like: يستكتب (yastaktibu) (yas-tak-ti-bu). At the

end of the word if a pause is not available the state will be like this: (gusnun) غُصْنٌ (branch) will be (gusun) instead of (guşun).

Therefore Arabic consonant syllable can be described as follows:

consonant + short vowel

Consonant + long vowel

Consonant + short vowel + consonant

Or CVCVC

Arabic poetry contains different rhymes. It has no particular syllable. It is accepted to leave a long or diphthong in an open syllable like (hu- way- ssa-tun) خويصّه or (ih-ma-rra) احمار اح-ما-رر.

In prose according to Anees (1971: 21) it is agreed to shorten long vowels. In dual condition, it will be like: لم يضربا القوم (lam-yadri-ba-lqawma), in plural form it will be like:

(lam-yadribu-lana) لم يضربا الآن

With feminine form:

(lam-tadribi-bnaki) لم يضربي ابنيك

Shaheen (1980: 38) denotes that Arabic syllable consists of a mixture between vowel and consonant, each one depends on the rhyme of speaking. For example the words:

Bal بل , min من , consist of C+V+C, sometimes C+V+V like: maa ما , haa ها , If one word is linked together with another word to make one and two syllables like: kaa/na/hunaa كان هنا two syllables like: kar/bun/Şadiid كربٌ شديد

Arabic language avoids consonant cluster except rare conditions, in contrast with English and French. Some words like سعى sa'aa, Arabic tries to shorten even vowel sounds to be plural

pronoun like Saa'a + uu, together will be smoothly glide to long sound like: Sa'aa + uu>sa'a+ uu>Sa'aw.

3.1 Epenthesis of a Vowel (anaptyxis)

Al-Bala'abaki (1999:78) admits that in Arabic language it is difficult to trace epenthetic vowel material between consonant clusters, because Arabic doesn't have a clear widespread cluster like English.

In many Arabic accents like Lebanese Arabic, and Saudi Arabic, it is possible to find many cases related to epenthetic vowels. It is possible to find epenthetic vowel in the middle of lexical words in order to forbid any consonant cluster. However, anaptyxis or *الاقحام* can be found whenever parsing conditions: in, an –un are dropped. Therefore the words like *katb*, cannot be written with final cluster which is not very familiar in Arabic, so it will be:

Keteb, like the following examples:

/kelb/ كلب 'dog'

/kerem/ كرم 'generosity'

/ebed/ عبد 'slave'

/melek/ ملك 'king'

/fehim/ فهم 'understand'

/wδsδl/ وصل 'arrive'

/bδka/ بكى 'cries'

/sδmδ?/ سمع 'hears'

Al-Bala'abaki (1999: 79) insists upon the fact that allophonic change or phonetic sound change leads to different arrangement of

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phonemes from one period to another. Sibilant sounds in Arabic was s, š, ŝ, now become only two sounds: /s, ʃ/ each one has a different sound in origin.

3.2 Epenthesis of Consonants-Singleton Vs Gemimates

Ali and Lahrouchi (2004: 34) suppose that many of the modern Arabic words are derived from the modern standard Arabic and therefore there is no reason why is modern Arabic (MA) there should be a vowel before the geminate consonant but not in the singleton cases. For example, in modern standard Arabic (MSA) minimal pair /baka/ and bakka/ is represented in MA like /bka/ and /bekka/ no vowel before the singleton consonant /k/.

It has become widely accepted with little proof that short vowels are elided in the singleton case and thus resulting in a branching onset consonant cluster. Ali and Lahrouchi (2004: 36) make a very interesting data set by showing minimal pairs (singleton vs geminates) which can be summarized in the following table:

	Singleton		Geminates	
Sounds	MSA	MA	MSA	MA
h	/fahima/	/fhə ^h m/	/fahhama/	/fhhə ^h m/
k	/baka/	/bka/	/bakka/	/bδkka/
l	/ʕalam/	/ʕlə ^h m/	/ʕallam/	/ʕəllə ^h m/
m	/Samas/	/Sməs/	/Sammās/	/Səmməs/
ʃ	/Naʃita/	/nʃə ^h ts/	/Naʃʃita/	/nəʃʃə ^h ts/
r	/barad/	/brəd/	/barrad/	/bərrəd/

Conclusions

In the light of the previous discussion, the following conclusions are arrived at:

1. Epenthesis is a segmental insertion in a specific environment which is opposite to the process of elision. It often breaks up a consonant or vowel sequence that is not permitted by the phonotactics.
2. In modern Arabic (MA) there should be a vowel before the geminate consonant but not in the singleton cases, although it is derived from the Modern Standard Arabic.
3. It is possible to find epenthetic vowel in the middle of lexical words in order to forbid any consonant cluster.
4. A group of plosive consonant cluster is rare in Arabic, for example, the word 'uktub' is used instead of 'ktub'.
5. In English, a stop consonant is often added to break a nasal + fricative sequences as:

'prince' --- [prɪnts]

'length' --- [lɛŋkθ]

6. Arabic dialects are more influenced with epenthesis rather than modern standard Arabic because they are influenced by invasion.

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الدكتور هنري فليش اليسوعي (١٩٦٦) العربية الفصحى: نحو بناء لغوي جديد: تعريب
وتحقيق د. عبد الصبور شاهين. بيروت: المطبعة الكاثوليكية.