

# Consonants Clusters in English and Arabic

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By

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## Abstract

This paper aims at showing the similarities and differences between English and Arabic consonant clusters. In order to achieve this aim, a theoretical background of consonant clusters in English and Arabic should be introduced and a comparison of consonant clusters in English and Arabic should be presented. The results of this paper show that English and Arabic consonant clusters are different as for position, so English consonant clusters can be used in initial, medial and final, while in Arabic, consonant clusters can be used only at the end of syllable.

**Key Words:** Phonetics, Consonants, Consonant Clusters, Syllabic Consonant, Syllable

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## 1. Introduction

### 1.1 The Problem

Two or three consonant sounds combined into one word are referred to as a consonant cluster.

Learning pronunciation can be challenging due to the distinctions between one's first and second language (Bell, 1995: 93). Rather than alphabet letters, consonant clusters relate to phoneme groups. According to Emad (2010), syllables in Classical Arabic cannot start with a vowel and cannot have an initial consonant cluster.

Consonant clusters are often pronounced with a short vowel inserted to aid in pronunciation.

Some clusters, such as /sp/, /gr/, /spl/, and /str/, contain sounds that are not included in the Arabic consonant inventory or have distinct pronunciations. The Arabic learners of English will have difficulties with these clusters. Once more, parts may be separated by a brief vowel (Bauman-Waengler, 2000: 74).

Arabic words lack the frequent three- and four-consonant clusters seen at the endings of English words.

It is focuses on consonant clusters in English and Arabic. Hence, this research attempts to answer

the following question:

What are the similarities and differences between consonant clusters in English and Arabic?

### **1.3 The Aims**

The purpose of this study is to examine consonant clusters, including definitions and placements in Arabic and English. When necessary, examples in both languages will be provided to address and completely explore points of resemblance and difference.

This research attempts to compare case, number and gender in English with those in Arabic so as to find out the underlying similarities and differences that may emerge between English and Arabic in the formation of case, number and gender. Focus is to be directed to the position of these case, number and gender. Moreover, the number, gender and case of the relevant noun heads will also be discussed.

### **1.4 The Hypothesis**

It is expected that consonant clusters in Arabic are more complex than consonant clusters in English.

### **1.5 The Procedures**

The present paper has adopted the following procedures:

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1. A theoretical background of consonant clusters in English and Arabic will be introduced.
2. A comparison of consonant clusters in English and Arabic will be presented.
3. Results of the comparison will be given.
4. Giving some conclusions at the end of this paper.

## 1.6 The Limits

The present paper will be limited to the description of the English and Arabic consonant clusters depending largely on the collected reliable data of the two unrelated languages.

## 1.7 The Value

It is expected that the paper is of great value for researchers, English students, linguists and textbook designers.

## 2. Consonant Clusters in English

### 2.1 Syllable

Scholars have been working for years to define the term "syllable" or to explain what a syllable in the context of language actually is. As per the findings of Edward et al. (1989: 76), a syllable is a phonological unit that comprises one or more sounds. According to Wikipedia, a syllable is the organisational unit for a spoken

sound sequence. A syllable, according to (www.teachit), is a single unit of written or spoken word, an uninterrupted sound that is utilised to form words.

A syllable is a unit of pronunciation that is usually smaller than a word and bigger than a single sound. A good dictionary will identify where these syllabic divisions occur in writing, therefore giving information on how a word may be hyphenated. A word may be pronounced "syllable at a time," as in ne-ver-the-less.

The phonological syllable is described by Laver (1994:114) as a complicated unit consisting of core and peripheral parts. The consonants or non-syllabic segments are the peripheral components, while the vowels or syllabic segments are the core elements. For instance, the ending \nt\ and the first consonant \p\ are peripheral elements in the syllable \peint\, but the diphthong \ei\ is the centre.

## 2.1 Definitions of Consonants Clusters

Cathford (1988: 209) defines consonant clusters as "those sequences of consonant that occur initially or finally in syllables. For example both /pl/ and /nt/ are consonant clusters in the word plant, because they occur in one and the same syllable. But we would not call the sequence /p-l/ in stop-light a consonant cluster, because the sequence crosses a syllable boundary.

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Crystal (1991: 67) brings another definition of consonant clusters. He defines them as those sequences of "adjacent sounds, occurring in restricted pattern at the beginning or end of syllables. Initial clusters include (spr-) and (fl-) final clusters include [-mps] and [-nt]. The notion is also used for consonant letters in the written language (where such clusters are referred to as blends). There is no one-to-one correspondence between clusters in speech and writing: the last letter of fox is a consonant cluster in speech, [ks] and the final sound of (sik) is a consonant cluster in writing, sick.

The term consonant clusters often refer to the group of consonant sounds which follow one another without any vowel occurring between to consonants. This phonological aspect exists in English sound system at various position within word structure e.g. Initial, medial and final. To produce such clusters, foreign learners encounter some difficulties in articulation since their languages have no or very few consonant clusters.

Initial two consonant clusters are of two sorts composed of s followed by one of the small set of consonants examples of such clusters are found in words such as 'sting' sɪŋ 'sway 'sweɪ 'smoke' səʊk. The s in these clusters is called the pre initial consonant and the consonant (t, w, m in the above examples) the initial consonant (Roach, 2009: 68-71).

Wikipedia, in linguistic consonant cluster, consonant sequence or consonant compound is group of consonants which have no intervening vowel. In English for example; the groups \spl\ and \ts\ are consonant clusters in the word splits.

Richard (1993: 61) stated that consonant cluster is grouping of two or more consonant that occurs without vowel in between the consonant. While according to Rogerson (2011: 115) a sequence of consonants at the beginning or ends of syllable.

## 2.2 Positions of Consonant Clusters

According to Duanmu (2009: 171-181), there are three main positions of English consonant clusters:

### 2.2.1 Word Initial Clusters

If consonants are sequenced word initially, the cluster is known as word initial cluster.

**a. CC cluster:** It also has two subtypes. They are:

- One of /p, t, k, b, d, g, m, n, l, α, f, v, h, l/ + one of /l, r, w, j/. as for example: play, prey, cry, dry, view, etc.
- /s/ + one of /p, t, k, f, m, n, l, w, j/. As for example, speak, sky, stick, snail, swim, skim, Shrine, snakes, sticks, sphere, stair, skeet, slope, snow, etc.

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**b. CCC Cluster:** In the word initial position three consonants occur together. The structure of this cluster is the following:

/s/ + one of /p, t, k/ + one of /l, r, w, j/. As for example,

Splash, Spring, Strong, Stupid, Screen, Square, Spurious, Screw, Skewer,

## 2.2.2 Word Final Clusters

The sequence of consonants in the final position of a word is called word final position consonant

cluster. The following types of word final consonant clusters can be found:

**a. – CC Cluster:** As for example, Slept, taps, caps, depth, jobs, robbed, books, looks, bags, watched, draft, craft, graphs, etc.

**b. – CCC cluster:** As for example, Pushed, gasp, ask, test, restCamp, ramp, warmth, terms, rent, dent, bench, pens, gulp, bulb, film, gold, sold, told, solve, etc.

**c. – CCCC Cluster:** As for example, Milked, tempt, arranged, whilst, jumps, months, acts, amongst, texts, sixths, prompts, etc.



## 2.2.3 Word Medial Clusters

The cluster of consonants in the middle position of the word is called word middle consonant

cluster. There are two types of word medial consonant clusters. They are:

**a. Intra-syllabic consonant cluster:** The sequence of consonants in the word medial position which belong to the same syllable is called intra-syllabic cluster. As for example, camping, reply, windy, extra, etc.

**b. Inter-syllabic cluster:** If the consonant belonging to different syllables occurs together, the cluster formed is called inter-syllabic cluster. As for example:

movement /vm/,

description /skr/

import /mp/

blackboard /kb/

extra /kstr/

Some more examples of consonant clusters:

a. Nasal + stop – camp, bend, stamp, etc.

b. Nasal + fricative – length, warmth, terms, kings, etc.

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c. Stop + stop – packed, begged, kept, tract, etc.

d. Stop + nasal – written, bitten, certain, etc.

e. Stop + lateral – middle, cattle, bottle, huddle, etc.

f. Nasal + affricate – change, bench, lunch, etc.

g. Fricative + stop – best, test, ask, draft, etc.

h. Lateral + fricative – health, wealth, solve, etc.

## 3. Consonant Clusters in Arabic

### 3.1 Consonant Clusters in Arabic

Standard Arabic forbids initial consonant clusters and more than two consecutive consonants in other positions. In linguistics, a consonant cluster is a group of consonants which have no intervening vowel. In English, for example, the groups /spl/ and /ts/ are consonant clusters in the word splits. Some linguists argue that the term can only be properly applied to those consonant clusters that occur within one syllable. Others contend that the concept is more useful when it includes consonant sequences across syllable boundaries. According to the former definition, the longest consonant clusters in the word extra would be /ks/ and /tr/, whereas the latter allows /kstr/ (Brame, 1970: 95).

### 3.2 Positions of Consonant Clusters in Arabic

### 3.2.1 Initial Consonant Cluster in Arabic

According to Daana (2009), Classical Arabic allows no initial consonant cluster, which retain the

Classical Arabic phonological feature in this particular position.

### 3.2.1 Final consonant Cluster

In Arabic, consonant clusters can occur only at the end of syllables and that Arabic does not

permit consonant clusters at the beginning of syllables.

## 3.3 Comparison of English and Arabic Consonant Clusters

English consonant clusters are two, three, or more consonants. Consonant clusters may occur at

the beginning of a word (an initial consonant cluster), at the end of a word (a final consonant cluster). For

example, in English: initial cluster /spl-

/in/splɑʃ/ “splash”; final cluster /-st/ in /test/.

English permits consonant clusters at the beginning and end of syllables. (Richards et al, 1992:

79). However, in Arabic, consonant clusters can occur only at the end of syllables and that Arabic does not

permit consonant clusters at the beginning of syllables. Hence, Arabic has three consonant clusters while

English has ten (Al-Khawali, 1993:60-61). But Balasurbarmain,(2000:117 ) stressed that initial consonant

cluster in English can be made up of either two or three consonants ( as

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in “spleen” and “steam”) and final consonant clusters can be made up of either two  
,three , or four consonants (as in “texts” ).

Actually, there are two types of clusters in initial and final consonant clusters. The former refers to the sequence of two or three consonants that occur at the beginning of a word. While the latter refers to the sequence of two or more consonants that occur at the end of a word. Really, English initial consonant clusters are divided into two kinds: Initial clusters- made up of two consonants and initial clustersmade up of three consonants. The first kind is of two types in English. The first type is composed of /s/ followed by one of the following small sets of consonants / p, t, k, f, m, n, l, w, j / as in the following words; “spy”, “stay”, “sky”, “sphere”, “small”, “snow”, “sleep”, “sear”, and “suit”. The sound /s/ in these clusters is called the pre-initial consonant and the other consonants / p, t, k...etc.

The other type of two initial consonant clusters begins with one of the following consonants /p, t, k, d, b, g, θ, ʃ,v, m, n, h/ followed by one of the following sets /l, r, w, j / as in (“play” , “ try” ,”quick”, “few”,...etc. / and the three initial consonant clusters in English has a sequence of three consonants which occur initially. They are as follows (spr-, str-, skr-, spj-, skj-, skw-) as in (“spring”, “scream”, “street”, “spurious”, “stupid”, “skewer”, “splendid”, and “square”).

The consonant order at the end of words in English final clusters is more varied than at the beginning, primarily because most nouns (like "dogs," "facts," "fields," etc.) require the addition of /-s/ or /-z/ to form their plural forms, and most verbs (like "wished," "asked," /a:skt/, etc.) require the addition of /-t/ or /-d/ to form their past tense. Additional nouns formed with the sound /ʃ/ are "strength" (streŋθ/), "sixth" (siksɪ/), and so on.

In Arabic, however, starting consonant clusters are strictly forbidden. Arabic allows consonant clusters in the syllable-final position, however these clusters can only include two consonants. Here are several instances of Arabic ending consonant clusters that are acceptable: /-lb//qalb/; /-rb//kərb/; /-bt//sabt/; /-sb//hizb/.

Here, it is noted that the English phonology allows consonant clusters to start syllables with up to three consonants, finish syllables with up to four consonants, and begin syllables with up to three consonants. As a result, English allows for a large range of syllable patterns that are closely related to consonant clusters.

## 4. Conclusion

It is concluded that:

1. Consonant Clusters in Arabic Altaha (1999) gives the following possible phonetic distribution patterns of Modern Standard Arabic syllables:

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## 2. Consonant Clusters in Arabic

- 1) C-V as in /bi/ “with”
- 2) C-VC as in /lam/ “not”
- 3) C-VCC as in /qalb/ “heart”
- 4) C-VV as in /laa/ “no”
- 5) C-VVC as in /qaal/ “say”
- 6) C-VVCC as in /ħaadd/ “sharp”

3. Consonant Clusters in Arabic Modern Standard Arabic is one of the languages that do not allow initial consonant clusters at all.

4. English and Arabic types of consonant clusters are different, so the hypothesis of this paper has been validated.

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