

# Substitution in Arabic: Lisan Al-Arab Dictionary as a Model

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**Abstract**—This study investigates the concept of substitution in Arabic, its history, the reasons for its emergence, its prevalence, and the environment of its occurrence as it revealed by Ibn Manzur in his great dictionary “Qamos Lisan Al-Arab” (Dictionary of Arabs Tongue). The methodology adopted is descriptive and analytical. It is based on investigating the use of substitution by ancient Arabs in the tribes’ dialects. The data was extracted from chapters 3 and 4 of the Lisan Al-Arab dictionary. The study's findings revealed that substitution is not limited to specific Arab regions but has become a linguistic phenomenon even among Arabs living in cities. Most scholars consider the most important reason for the emergence of substitution to be the linguistic variation among dialects; however, Arabic dialects are well-established in that substitution is a variable occurrence that takes place according to the human tendency to reduce articulatory effort. The study also revealed that the reasons behind substitution include the similarity of sound production in the manner or place of articulation.

**Index Terms**—Arabic language, Lisan Al-Arab Dictionary, substitution in Arabic

## I. INTRODUCTION

Variations in the semantic meaning of words triggered by substituting a single sound often cause confusion among listeners and speakers. Such words frequently have different meanings and usually differ in one sound. For example, various verbal forms of the sound "qāf"/q/ (in the verb /qāl/ (said) may be pronounced as /jāla/, /ʔāl/ or /kāl/. According to ancient linguistics, this variation is because the sound of /q/ in the word /qāl/ (said) is a voiced uvular plosive; however, according to modern linguists, the same sound is aspirated. Another example is the sound of /dʒ/, a voiced post-alveolar affricate sound in the well-known verb /jāla/ (said). The same sound may be pronounced either in an amplified way or as a palatal sound. Modern linguists have termed it "jaujaua". These examples show that the substitution of one sound may trigger a variation in meaning, such as "kaukua" (Alkhaldi et al., 2023; Al-Shalabi et al., 2009; Essa et al., 2023).

Although ancient Arab linguists wrote many books on the emergence of substitution and the reasons for its appearance, they did not discuss its apparent impact on the development of Arabic; instead, they claimed that it was one of the traditions of Arabic speech (Malkawi & Rababah, 2012; Rababa'h, 2000; Rababah et al., 2019). Ancient linguists devoted specific works to studying substitution, such as Ibn Al-Skeet's (1978) book "Substitution" and the same-titled book by Abu Al-Tayyib (1961). They devoted chapters of their book to substitution and its impact. Also, Ibn Faris' book "Al-Sahib" (The Friend) (Ibn Faris, 1963, pp. 203-204); Ibn Jinni's (1990) "al-Khasaes" (The Features: Chapter the Two Consonant Sounds Can Be Used Interchangeably); and Al-Suyuti's (2014) *Al-Mizhar* (The Appearance).

On the other hand, modernists differed from the ancients regarding the impact of substitution and its role in expanding the Arabic language (Al-Karmali, 1938; Anis, 1966; Al-Rafi'i, 1880; Zeidan, 1982).

### A. The Concept of Substitution: Occurrence and Commonness

Many linguistic factors contribute to the richness of languages in general and of the Arabic language in particular. These factors can be divided into the following categories:

#### (a). External Factors

External factors contribute to the richness of both the semantic meaning of the language and its vocabulary, for instance, when words are synonymous (the pronunciation of the words is different, but they have the same meaning), as seen in the words /albat-tar/ and /alkatiṣ/ which mean "the cutting sword" or "the keen sword". Also, when the words are homophones (they have the same pronunciation, but the meaning is different), such as the word /ain/, which means "eye", "the spring of water", "spies", "a type of rain", and "a member of the Senate". In addition to the various

metaphors, the metaphor also plays a significant role in the richness of meaning and pronunciation through analogy in all its forms.

#### (b). *Internal Factors*

Internal factors change the sounds of the word and its structure. Still, they radically alter their new meaning, such as in "*al-galb*" (metathesis), "*al-naht*" (analogy and merging sounds), and "*al-ibdl*" (phonological substitution). Substitution is just one of the internal factors that have impacted the expansion of Arabic. Substitution is to replace one sound with another in the same word so that these two substituted sounds have either the same place of articulation or are similar in phonetic feature (or both) without completely changing the meaning of the substituted word or with only a slight change in its purpose (Abu Ghosh, 1977; Al-Rafa'i, 1940; Al-Karmali, 1938; Ibn Sayyidah, 1980; Nasif, 1886; Zeidan, 1982).

Arabic has many examples based on this phenomenon. For example, the word /amt'arat/"rained" is pronounced in two ways: /hat'anat/ or /hat'alat/ (Ibn Al-Skeet, 1978, p. 61). Also, the verb /kabaħa/, meaning "curbed," was pronounced in two different ways: /Kabaħa/ or /Kamaħa/ (Ibn Al-Skeet, 1978, p. 75). There is also the word "tail", which is pronounced as /ajama/ and /ajaba/ (Ibn Al-Skeet, 1978, p. 74), /asmariħa/ and /asbariħa/"I filled the cup to its top" (Ibn Al-Skeet, 1978, p. 74).

#### B. *Types of Substitution: Phonological Substitution and Morphological Substitution*

One of the most distinguished linguists, Ibn Jinni (n.d.), created two criteria for distinguishing substitution from other parts of speech. The first criterion is the derivation, forming new words from the root morpheme. If words have a similar past and present tense and a passive noun, then such words are judged to be the root morpheme. For example, the words /hat'alat/ and /hat'anat/ ("to rain") are morphemes and allomorphs. It is said /hatanat/, /hahtan/, and /tihtan/ (rained) /hat'alat/, /taht'alu/, /tiht'al/ (rained) and the /hat'n/, /hat'l/ (rainy).

The second criterion is everyday use. Ibn Jinni (1958) mentioned that the most common word on this phenomenon is the root morpheme, and the least common term is the allomorph. Moreover, equally used, each can be considered a root morpheme (Vol. 1, p. 210). For example, the words /bal/ and /ban/ mean "but". The word "but" is written as /bal/ (e.g., Zaid did not stand up, but (/bal/) Amr) or /ban/ (e.g., Zaid did not stand up, but /ban/ Amr). The sound /n/ has replaced the /l/ here (Ibn Jinni, 1990, Vol. 2, p. 86).

#### C. *Significance of the Study*

The study is characterized by its novelty. It has combined the theoretical and practical aspects of substitution and expanded the arguments on the causes of its emergence and popularity. Also, the study delved into the Arab sources and references written on substitution, linking the opinions of the ancients and the modernists to this common linguistic phenomenon; thus, it contributes to understanding the views of ancient or modern linguists. Furthermore, the study rooted the substituted words, analyzed their characters and uses, and proved whether or not those altered words were caused by roots from different languages or by the phonetic change. As such, the study has linked several disciplines: linguistics, lexicography, phonology, and the cultural legacy left to humankind by Semitic languages.

#### D. *Study Objectives*

The study aims to:

- Show whether substitution is rooted in current Arabic dialects and investigate the roots of this phenomenon in the Arabic linguistic heritage, which many researchers have referred to in their books as "*linguistic substitution*."
- Highlight the efforts of ancient and modern linguists who have taken up substitution as the subject of their writings.
- Investigate the causes and prevalence of substitution and the main reasons for its occurrence, such as the differences in Arabic dialects and the variations in sounds that occur due to the need to reduce the articulatory effort.

To achieve these objectives, the study aims to answer the following question: "How does the usage of substitution, as seen by Ibn Manzur in his dictionary "*Lisan Al-Arab*" (*third and fourth chapters*), agree with the views of modern linguists regarding the reasons for its emergence and prevalence?"

## II. LITERATURE REVIEW

There are two types of substitution: morphological substitution, which can be found in different words (weights) such as /ʔzahara/, /ʔedaa/, /ʔestihab/, /matlaʔa/, and /mostad/, and linguistic substitution, which is defined as replacing one letter with another within a word. These two altered letters agree in the place and manner of articulation in both words without changing the meaning of the modified word (or only slightly changing its purpose). Abu Eid (2014) studied the phenomena of /aletibaʔa/ and substitution in Ibn Jinni's "*Contemporary Phonetic Vision*." He discussed the phenomenon of /aletibaʔa/ in the book of Al-Mohtaseb (pp. 224–231). He stated that substituting short and long diacritics and silent characters is more likely for vocal reasons alone. He concluded that these phenomena are, in essence, examples of substitutions.

Likewise, Al-Khashan (2015) explained several types of substitution: dialectical substitution, i.e., different dialects and semantic substitution, the substitution of dilution, and the substitution caused by speech and alveolar defects. Moreover, he explained the verbs in which substitution occurs, such as those found in the substitution of the glottal stops /ʔ/ and /b/.

Najjar (2008) studied the phonetic and morphological changes in two books of melody for Tabrizi and Lakhmi, which are, respectively: "Tahdhīb Islah Al-Mantiq" (Refine Logic Repair) and "Muqaddimat fi tashih allisan" (The Introduction to the Correction of the Tongue). The study revealed changes based on: change, increase, decrease, and morphology. As for the types of changes, some were a change in the letters, a change in the vowels, amplification, exaggeration, or a spatial inversion. As for the alterations of the increase, some of them were those of satiation, an increase in hamza, or an emphasis. As for the decrease changes, they were divided into shortening, deleting the hamza, and reduction. The morphological changes were divided into derivational and non-derivative changes.

The etymological changes were divided into what was in the infinitive, what was in the noun of the subject, what came in the noun of the participle, what came in the instrument's name, and what occurred in the name of the place. The non-derivative changes were divided into masculine and feminine, attributed nouns, plural, and small changes. The study mentioned 671 changes, divided into 355 cases of changes of type (changes of change), 75 cases of increases in type, 61 cases of decreases in type, and 180 cases of morphological changes. Therefore, the phonetic changes appeared in 491 cases, and the morphological changes appeared in 180 cases; these morphological changes are divided into derivative changes (103 cases) and non-derivative changes (77 cases).

Khasan (2015) addressed the ancients' definition of substitution and how they differed among themselves, asking, "Is it a substitution or a difference of languages between the features of the Arabic language?" (p. 333). He explained that the concept of substitution has different types. He defined the letters of substitution and assigned originality to the substitution formula, citing the opinions of linguists regarding the number of letters in which substitution occurs, their evidence, the types of substitution, and the effect of the difference in the language on its emergence. He also mentioned how it was difficult to determine the reasons for this phenomenon (pp. 337–349).

Saleh and Arslan (2019) studied the impact of linguistic change on the ancient Arabic dialects. Their study revealed that the old Arabic dialects varied from one another in terms of phonetics, conjugation, phonemics, and semantics. Their language alternation, confined to hearing and unique to particular tribes and not following specific criteria and regulations, contributed to their difference at the phonological level. The researchers studied the linguistic alternation for the letters that permit substitution based on the pronunciation of the letters and their characteristics, such as the alternation between homogeneous letters, similar sounding letters, and letters with similar or different character features and pronunciation.

Abu Nawas and Al-Thawiya (2018) attempted to establish some of the dialects spoken in the tongues of the people in light of the ancient Arabic dialects. To confirm that these dialects are an integral part of the Arabic linguistic heritage, the study began by dealing with phonetic substitution in the Naour dialect of Jordan and analyzing it in a way that aligns with the investigations of ancient Arabic dialects and modern phonology. In order to reach the desired goal, the nature of the research necessitates that it starts with an introduction in which it presents the motives and methodology of the research. A preliminary introduction talks about the region of Naour and its inhabitants. Then it presents the phenomenon of phonetic substitution in this dialect regarding the substitution of vowels and vowels.

Al-Daradji (2016) studied voice substitution in "Alqamus Almuhit" (Ocean Dictionary). He stated that linguistic correction is a vast and rich field of linguistic study. Despite the studies that have been written in this field, old and new, there remains the need for such studies because of the preservation of the tongue from making mistakes. The broader field includes linguistic correction, slippage, melody, and phonetic correction. Therefore, the researcher followed the manifestations of phonetic correction and dealt with it (phonetic substitution) in the book "*Al-Moheet Dictionary*" (Ocean Dictionary) of Fayrouzabadi to benefit from it in preserving the tongue and the service of the Arabic language.

### III. METHODOLOGY

This study adopted the descriptive-analytical approach to show whether substituted words resulted from different dialects or a phonetic shift, the remnants of Semitic dialects caused them, or misspelling and mishearing played a role in creating these substitutions. To gather rich data on substitution, the researchers referred to many references, such as the "*Comprehensive Encyclopedic Dictionary*," which contains and reflects what was produced by the Arab-Islamic civilization. Many people of various dialects are included under its banner. Ibn Manzur's "*Lisan Al-Arab Dictionary*," which contains many examples of substitution, was also used; however, the researchers limited the sample to words that appeared in the third and fourth chapters only.

### IV. FINDINGS AND DISCUSSION

The Arabic dictionaries have preserved the entity of the language, perpetuated its existence, and recorded everything that Arabs heard in their different languages. *Substitution* is a linguistic phenomenon that will continue to be investigated because it is a widespread and continuous linguistic phenomenon among the people of all Arab societies. It is not limited to one Arab state and has become a linguistic phenomenon among the people of all Arab cities, towns, and

communities. Most scholars believe that the diversity of dialects within a language is one of the most important reasons for the emergence of substitution; however, Arabs do not think about this because Arabic dialects are so well established. Substitution is a variable according to human tendencies that are used to reduce speech effort. The reasons for a substitution include the similarity of the place and manner of articulation of the sounds. Still, the proximity of the sounds, along with voicing and aspiration, may also have a role to play. This section discusses the linguistic substitution phenomenon introduced by Ibn Manzur's famous "*Lisan Al-Arab*".

#### A. Substitution in Ibn Manzur's *Lisan Al-Arab* Dictionary

Substitution was explained in Ibn Manzur's *Lisan Al-Arab* Dictionary, and the following examples are instances of this phenomenon:

##### (a). Voiceless Alveolar Plosive Into Voiced Alveolar Plosive: /t/ to /d/

e.g., /harat/ and /harad/

In words/harata/ and /harada/ (i.e., grow up) (Ibn Manzur, 1968, Vol. 6, p. 4649), the /t/ sound is altered to /d/. The /t/ is an aspirated voiceless alveolar plosive sound (Al-Farahidi, 1986, Vol. 4, p. 3), while the sound /d/ is a voiced alveolar plosive (Anis, 1961, pp. 123–124; Ibn Al-Jazari, 1985, pp. 86–87). It can be noticed that the two sounds have the same place of articulation and manner of articulation, but they are just different in terms of aspiration and voicing. This substitution is attributed to the tribe of Bani Tamim in Saudi Arabia. Sibawayh (1988) said, "They say /wadad/ ("wedge"), but its underlying form is /watad/, which is the good Hijazi" (Sibawayh, Vol. 4, p. 482).

##### (b). Voiceless Denti-Alveolar Plain Plosives Into Voiceless Emphatic Denti-Alveolar Plain Plosives /t/ to /tʰ/

e.g., /ti:xah/ and /ti:kah/

Due to the similarity of the place of articulation and the plosive manner of articulation, substitution occurred in the voiced /t/ in the words /ti:xah/ and /ti:kah/ (the pronunciation of the first sound is different in the two words). /ti:xahum/ means "suffered," and the first sound was substituted. The /t/ sound in the first word is palatal, unlike in the second. Both are alveolar, plosive, and aspirated sounds, except that the first /t/ is hard palatal, and the second is soft palatal.

##### (c). Voiced Interdental Fricative Into Voiceless Dental Fricative /ð/ to /θ/

e.g., /malað/ and /malaθ/

Due to the similarity of both the place of articulation and the manner of articulation, substitution in /malað/ and /malaθ/ occurred between /ð/ and /θ/. Abu Ishak explained that the sound /θ/ was substituted with the sound /ð/ (Ibn Manzur, 1968, Vol. 3, p. 505). The sound /ð/ is a voiced interdental fricative, whereas the sound /θ/ is a voiceless one. They sound the same; they have different voicings. Arabs tend to eliminate the voiced sound /ð/ and convert it to voiceless.

##### (d). Voiceless Interdental Fricative Into Voiced Labial Fricative /θ/ to /f/

e.g., /alθawhad/ and /alfawhad/

Due to the similarity of the manner of articulation as well as the closeness of the place of articulation, substitution occurred between the two sounds /θ/ and /f/ in words /θawhad/ and /fawhad/ (both meaning the fat boy or the teenager) (Al-Zubaidi, 1965, Vol. 7, p. 470). The sounds /θ/ and /f/ are fricatives, voiceless, and close to one another in the place of articulation.

##### (e). Voiced Labial Fricative Into Voiceless Dental Fricative /f/ to /θ/ e.g., /afo:r/ and /aθo:r/

The reason for the substitution between /f/ and /θ/ in the two words /afo:r/ and /aθo:r/ (pit as in they fell in a nasty 'pit') is the phonetic change in the Arabic language. The first word may come from the root /afara/ (soil), and it is possible that /θ/ has been substituted with /f/. The Arabian tribe Tamim might have found that the sound /θ/ is more appropriate than /f/ because it affects what is heard (Ibn Manzur, 1968, Vol. 4, p. 539). The sound /θ/ is easier on the ear than the /f/, although both are voiceless.

##### (f). Voiced Postalveolar Affricate Into Voiceless Velar Fricative e.g., /alʔsladʒ/ and /alʔaslax/

Substitution occurred between the sounds /x/ and /dʒ/ in the words /alʔsladʒ/ and /alʔaslax/ (i.e., people who are deaf or hard of hearing). The Kufics (in Iraq) tended to use the sound /x/, whereas the people of Basra tended to use the sound /dʒ/. Ibn Sayyidah (1996) stated, "I have heard someone say 'yatasalax' (meaning 'pretends to be deaf') with an /x/ sound, and I know a woman used to be called /salxaa/ (deaf), so both /x/ and /dʒ/ are good to be used. Al-Azhari (n. d.) said, "I heard more than one of the Bedouins, Qais and Tamim, calling the deaf 'Aslaj'. As for the others from Banu Asad and those around them, they say /aslax/ (Ibn Manzur, 1968, Vol. 4, p. 2479). We believe there is no phonetic change or substitution because the sound /dʒ/ and /x/ do not have the same place or manner of articulation. So, it is incorrect for the /dʒ/ to be substituted with /x/ (Ibn Sayyidah, 1996, Vol. 4, pp. 183–184).

##### (g). Voiceless Pharyngeal Fricative Into Voiceless Velar Fricative /ħ/ to /x/ e.g., /radaħa/ and /radaxa/

In words /radaħa/ and /radaxa/ (crushing the stones) (Ibn Manzur, 1968, Vol. 4, p. 2479), substitution occurs between the sound /ħ/, which is a voiceless guttural fricative, and the sound /x/, which was considered a voiced glottal sound in

ancient linguistics. In contrast, it is voiceless palatal in modern linguistics. What justifies the substitution between the two voices is the similar place of articulation according to the ancients and its closeness according to the modernists. Arabic retained /x/ and /ħ/ within its phonetic system, with restrictive agreement transformations, whereas the /x/ was lost in most northern Semitic languages, including Canaanite, Aramaic, Hebrew, and Syriac (Al-Zoubi, 2005, p. 32).

(h). *Voiceless Pharyngeal Fricative Into Voiceless Glottal Affricate /ħ/ to /ʔ/ e.g., /baħaθrat/ and /baʔθrat/*

Due to the similarity of the place of articulation and the manner of articulation, substitution occurred between /ħ/ and /ʔ/ in words /baħaθrat/ and /baʔθrat/, which mean "to extract, uncover, and scatter" (Ibn Duraid, 1987, Vol. 2, p. 111). The ancient linguists called the phenomenon of shifting the sound /ħ/ to /ʔ/ /faħfaha. Therefore, *al-faħfaha* is a feature of the Hatheel tribe's speech, as Ibn Masoud used to say /ʔata/ instead of /hata/. As such, in Hebrew and Southern Arabic, they used to say /ʔada hi:n/. Modern linguists disagree with this label and reject it. They argue that if the sound /ʔ/ turned into /ħ/, it would be correct to call it faħfaha (Al-Jundi, 1978, pp. 108–109).

(i). *Voiceless Pharyngeal Fricative Into Voiceless Glottal Fricative /ħ/ to /h/ e.g., /baħtara/ and /bah tara/*

The frictional manner of articulation and the aspirated feature substituted the emphatic sound /ħ/ and non-emphatic /h/ such as /baħtara/ and /bah tara/ (i.e., short) (Ibn Manzur, 1968, Vol. 4, p. 85). These two sounds share the same place of articulation, manner of articulation, and features of voicing and aspiration. The sound of /ħ/ is emphatic voiceless aspirated pharyngeal fricative, while the sound of /h/ is voiceless aspirated glottal fricative, so the similarity of the manner of articulation, the feature of voicing, and the convergence of the place of articulation cause the phonemic substitution between them. Other substitution examples are in words /aħsant/ instead of /ahsant/ with the emphatic /ħ/ (Al-Jundi, 1978, p. 470).

(j). *Voiceless Velar Fricative Into Voiceless Glottal Affricate /x/ to /ʔ/ e.g., /alθi:xah/ and /alθi:ʔah/*

The substitution between the sounds /x/ and /ʔ/ occurred in many words, an example of this is /alθi:xah/ and /alθi:ʔah/ (i.e., grass) (Ibn Manzur, 1968, Vol. 3, p. 66). The sounds /x/ and /ʔ/ are similar in the place of articulation but differ in their way out of the mouth. The ancients believed they emerged from the throat, whereas modern linguists believe they are stratified, near the uvula or similar to the place of articulation of the sound /q/. As such, they are similar in that they are both voiced and aspirated fricatives. The ancients classified them as voiced, but the modernists see them as aspirated.

(k). *Voiceless Glottal Affricate Into Voiceless Glottal Fricative /x/ to /h/ e.g., /alxawxaʔ/ and /alhawhaʔ/*

There is a substitution between the sounds /x/ and /h/, which occur in words /alxawxaʔ/ and /alhawhaʔ/ (i.e., the fool). Al-Azhari (n.d.) said, "As far as I know, according to Abu Al-Obaid, the word /alhawhaʔ/ means 'the cowardly fool.'" The /x/ sound may be an underlying form of the sound in this word (Ibn Manzur, 1968, Vol. 3, p. 14). The sounds /x/ and /h/ are similar in terms of the place of articulation. As such, the sound /x/ is guttural according to the ancients, stratified according to the modernists, and the sound /h/ comes out of the larynx. They are similar in their manner of articulation. Both are frictional and similar in their aspirations (Ibn Manzur, 1968, Vol. 3, p. 14).

(l). *Voiceless Alveolar Plosive Into Voiced Dental Fricative /d/ to /ð/ e.g., /aljaho:d/ and /aljaho:ð/*

Substitution may occur in the sounds /d/ and /ð/, such as in /aljaho:d/ and /aljaho:ð/. The term /aljaho:d/ is a name of a tribe, and it was said that the name of this tribe is /jaho:ð/, so it was Arabized by shifting the sound /ð/ into /d/ (Ibn Manzur, 1968, Vol. 3, p. 439). The justification for substituting the two sounds is the voicing and the closeness of the place of articulation. Additionally, there is a group of words from *Lisan al-Arab* which have substituted the sound /d/ with /θ/, including /danix/ and /θanix/; /tashweed/ and /tashweeθ/; /qunfod/ and /qunfoθ/; /marada/ and /maraθa/; /al-ma'd/ and /al-ma'θ/; /munjed/ and /unjeθ/; /mudal/ and /muθek/; /dakar/ and /θakar/; /aldf/ and /alθaf/; /nimrod/ and /nimroθ/; and /qishda/ and /qishθa/.

(m). *Alveolar Nasal Into Alveolar Trill /n/ to /r/ e.g., /taʔsana/ – /taʔsara/*

The sounds /r/ and /n/, such as in the word /taʔsara/ (i.e., got slower), are interchangeable due to their places of articulation (Ibn Manzur, 1968, Vol. 4, p. 20). Nevertheless, the substitution that occurred in this word might be due to mishearing.

(n). *Voiced Alveolar Fricative Into Voiceless Alveolar Emphatic Fricative /z/ to /s/ e.g., /al-ʕazd – /al-ʕasd/*

Due to the similarity of the places of articulation of the two sounds /z/ and /s/, their manners of articulation, and the aspiration features, substitution may occur between them. As for the /z/ sound, according to modern linguistics, it is a voiced alveolar sound, but according to ancient linguistics, it is a voiced fricative aspirated sound. As for /s/, it is an alveolar sound for modern linguistics, while according to the ancients, it is a voiced palatal fricative aspirated sound. Thus, the two sounds are identical in their production but differ in voicing and occlusion or amplification. Examples of substitution between them occur in the words /al-ʕazd/ and /al-ʕasd/ (i.e., intercourse) (Ibn Manzur, 1968, Vol. 3, p. 290). As indicated before, the similarity of the place of articulation, the manner of articulation, and the voicing justify the substitution. In Semitic languages, the sound /z/ turns into the sound of /s/ as in the example /zad/, which is "the food of the traveller". It appears in the Hebrew "צַדִּיק", but it also appears in the Akkadian "siditu". In Aramaic (ܨ ܨܝܩ) it

remained the same, however. Furthermore, it remained the same in the Syriac /zadwa/ and the Arabic /zad/ (Bergsträsser, 1977, p. 37).

(o). *Voice Alveolar Fricative Into Voiceless Alveolar Fricative /z/ to /s/ e.g., /al-zard/ and /al-sard/*

The similarity of the place of articulation, the manner of articulation, and the aspiration justified the substitution between /z/ and /s/. As was mentioned above, according to modern linguists, the /z/ sound is a voiced fricative alveolar aspirated sound, while the /s/ is a voiceless alveolar fricative aspirated sound. According to ancient linguists, the sound /s/ is a voiceless aspirated fricative. Examples include /al-zard/ and /alsard/, both of which mean "the shield" (Ibn Manzur, 1968, Vol. 3, p. 194). Regarding voicing and aspiration, the sound /s/ differs from the sound /z/. The justification for the substitution is the similarity of the two sounds in the place of articulation and the frictional body. This justification applies to /zanx/ and /sinx/, /alasad/ and /alazd/, /al-zaqr/ and /al-saqr/ (Ibn Manzur, 1968, Vol. 3, p. 194).

(p). *Voiceless Alveolar Fricative Into Voiceless Alveolar Emphatic Fricative /s/ to /ṣ/ e.g., /rasaxa – /raṣaxa/*

There is also a substitution between the sounds /s/ and /ṣ/. Both phonemes are alveolar fricatives, according to modernists. For the ancients, they are fricative and aspirated, except that the /ṣ/ is emphatic of /s/; that is, it is amplified while the /s/ is soft. Thus, the /ṣ/ has the accentuated manner of articulation of the /s/. If the /s/ is given the amplification feature, it becomes /ṣ/ (or the emphatic /s/). This can be seen in /rasaxa/ and /raṣaxa/ (i.e., became steady) (Ibn Manzur, 1968, Vol. 3, p. 19). The /ṣ/ has taken the place of /s/ due to the existence of the /x/ sound after it. Therefore, the /x/ sound has given /s/ the feature of amplification, so it has become /ṣ/ (or "the emphatic /s/"). Thus, /s/ changes to /ṣ/ (or "the emphatic s") if one of the sounds or the amplified sounds, /x/ and /ṣ/ as well as /q/ and /t/ (emphatic t), occurs after it as in /samax/, /samx/, /sabxa/ and /sabkha/; /saqar/ and /saqr/ in the dialect of Tamim, the Bedouin tribe.

The phonetic justification for substituting /s/ with /ṣ/ is that /s/ is an independent sound from the lower tongue. In contrast, the /ṣ/ sound is pronounced from the top of the tongue because it is difficult to pronounce /s/ due to the involvedness of the tongue moving from the lower to the higher, which is heavy on the tongue and requires effort (Ibn Jinni, 1985, Vol. 1, p. 201). Other examples include /aljsar/ and /alṣar/ (i.e., the left) (Ibn Manzur, 1968, Vol. 4, p. 24).

(q). *Voiced Alveolar Emphatic Fricative Into Voiced Dental Fricative /z/ to /ḏ/ e.g., /hinzyan/ and /hin ḏyan/*

Substitution occurs between /ḏ/ and /z/ (emphatic z). Both sounds are voiced interdental fricatives, but /z/ is amplified and /ḏ/ is soft. Examples are the words /hinzyan/ and /hin ḏyan/ (shameless) (Ibn Manzur, 1968, Vol. 3, p. 433). The Arabs substituted the amplified sound (za') with the soft one /ḏ/ to eliminate the effort of pronouncing the /z/ sound (emphatic z).

(r). *Voiced velar Fricative Into Voiced Pharyngeal Fricative: /ɣ/ to /ʕ/ e.g., /ɣamdan/ – /ʕamdan/*

Some linguists believe that substitution in these words is due to the misspelling of the sounds in words such as /ɣamdan/ and /ʕamdan/ (i.e., a mountain). Al-Azhari (n.d.) stated that speakers tended to use /ɣamdan/ with /ɣ/ (part 3, p. 306). The sound of /ʕ/ is a guttural, fricative medium between intensity and softness (Hassan, 1982, p. 102). According to the moderns, the sound /ɣ/ is voiced velar fricative, while to the ancients, it was considered stratified, fricative, voiced, and amplified (palatal). So, in terms of articulation, they are the same according to the ancients and similar according to the modernists. This is the justification for substituting between them, except that the sound /ʕ/ tends to be easy. At the same time, the /ɣ/ has a weak noise similar to that of /x/, and its place of articulation narrows when pronouncing it, so a rustle is heard that makes it close to the plosive sound as if it were an amplified sound. As a result, it was changed to the /ʕ/sound (Al-Hamawi, 1995, Part 4, p. 153).

(s). *Bilabial Nasal Into Voiceless Labio-Dental Fricative: /m/ to /f/ e.g., /alʒam/ and /alafx/*

Substitution may occur between the sounds /f/ and /m/ due to the closeness of their places of articulation, as in /alʒam/ and /alafx/. The /f/ sound is a voiceless aspirated labio-dental fricative, while the /m/ sound is bilabial nasal. Substitution between the two sounds is caused by the different dialects of the Arab tribes, given that these examples are a few in Arabic (Ibn Manzur, 1968, Vol. 3, p. 433).

(t). *Voiced Bilabial Nasal Into Voiced Nasal Alveolar: /m/ to /n/ e.g., /max/ and /naxa/*

The sounds /m/ and /n/ are frequently substituted and merged, such as in /maxi/ and /naxa/ (Ibn Manzur, 1968, Vol. 3, p. 52). The sound /m/ is a voiced bilabial nasal, while /n/ is a voiced alveolar nasal. These sounds are similar in terms of articulation and voicing, but they differ in the location of articulation. The justification for the substitution here is the similarity in the manner of articulation (nasal) and the voicing. Some linguists attribute the substitution between them to the differences in dialects, which justify substituting /m/ for /n/ across the tribes' dialects. As such, Taghlib, a Bedouin tribe, uses /m/ instead of /n/. Likewise, the Tayyi tribe prefers the sound /n/ as it is distinguished from silent sounds because of its clarity in hearing and the melody accompanying it as it increases the length of the distance from which it is heard. For this same reason, the Tamim tribe prefers the sound /n/ over the sound /m/.

(u). *Voiced Bilabial Nasal Sound Into Voiced Glottal Fricative: /m/ to /h/ e.g., /marada/ – /harada/*

A substitution does not occur between /m/ and /h/ due to their phonemic shift. These two sounds do not agree in the place of articulation, the manner of articulation, the voicing, or the aspiration. The sound /m/ is a voiced bilabial nasal, while /h/ is a fricative laryngeal sound. The substitution between the words /marada/ and /harada/ was caused by dialect differences or mishearing. Nonetheless, this type of substitution is rare in Arabic.

(v). *Voiced Alveolar Nasal Into Voiced Post-Alveolar (Palatal) Approximant: /n/ to /j/ e.g., /hannada/ – /hayyada/*

The /n/ and /j/ sounds are opposed except for the voicing feature. The sound /n/ is a voiced alveolar nasal, while /j/ is a fricative sound. The words /hannada/ and /hajjada/, which mean "did not delay" and "did not lie", are examples of this substitution. The justification behind this substitution may refer to the differences between dialects (Ibn Manzur, 1968, Vol. 3, p. 441). The Tayi tribe changes /n/ into /j/, for instance, /ijsan/ instead of /insan/ (human) (Abu Al-Tayyib, 1960, Vol. 2, p. 461).

(w). *Velar Approximant Into Post-Alveolar (Palatal) Approximant: /w/ to /j/ e.g., /aldzawaθar/ and /al- aldzayaθar/*

The substitution between the /w/ and /j/ is due to the identical manner of articulation and voicing. However, this does not go into the morphological substitution, as /j/ and /w/ are frequently interchanged for many phonetic reasons. The two words /alawaar/ and /al-alayaar/ (i.e., a cow) is one of the words in which a substitution between /j/ and /w/ occurs. According to the ancients, the sound /w/ is a voiced antral fricative, and the sound /j/ is a voiced oral fricative. Some Bedouin tribes elongate the sound /j/ in their speech because it is easier to hear than the /w/. Urban tribes like the Hijazis tend to say /jee/ instead of /jaa/ as /j/ is more manageable to articulate than /w/. As a result, Arabic speakers tended to shift from /w/ to /j/ (Ibn Manzur, 1968, Vol. 4, p. 124).

## V. CONCLUSION

The analysis of the data based on the gathered examples about the linguistic phenomenon known as substitution has revealed that hearing different pronunciations of the same word in Modern Standard Arabic (MSA) was the main instigator of this research about the substitution. Substitution is one linguistic phenomenon linking modern linguists to ancient linguists. The aim of resorting to the most well-known Arabic dictionaries that include words containing substitution is to preserve the entity of the language, to perpetuate its existence, and to record, everything heard in Arabic with its various dialects. The current study is multidisciplinary as it draws upon several fields of study, such as linguistics, lexicography, semantics, and phonetics, to understand the emergence of substitution and the reasons for its prevalence.

Many scholars have stated that substitution occurs because of the differences between dialects. However, it is believed that substitution occurs in the true nature of well-established Arabic dialects and that substitution varies according to the human tendency to reduce verbal effort. The most important reasons for the occurrence of substitution are the similarity of the place of articulation and/or the similarity of the manner of articulation and the proximity of the sounds. It is also believed that voicing and aspiration characteristics may play a role in phonetic substitution. However, these are considered minor substitution processes compared to the similarity of the place or manner of articulation. Admittedly, there are phonetic shifts of the same word due to the different dialects of the Arab tribes.

Nonetheless, the reason for substitution is due to the innate nature of the dialects and cannot be justified as substitution per se. The number of substituted words in the third and fourth parts of the *Lisan Al-Arab* Dictionary is seventy-two. The highest was the percentage of substitution that occurred in /d/, which amounted to nineteen (19/72). This was followed by /θ/, /h/ and /z/, which amounted to seven changes (7/72).

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