

# Rules of Phonological Generation in the Arabic Lexicon

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## Abstract

The Arabic language is characterized by the richness of its vocabulary and meanings, thanks to its capacity for generating vocabulary. This is evidence of the language's creativity, and the principle of generation allows the language to continue expressing and evolving in terms of words, structures, and meanings, by producing countless sentences from a limited set of vocabulary and written symbols. Since generation is a form of creation and innovation in language, it extends beyond mere sentences to encompass words, considering them as the fundamental building blocks of sentences. Therefore, this research addresses an important issue in Arabic linguistics, namely the issue of phonological generation, which is a fundamental pillar in the advancement and vitality of any language. The research aims to identify the rules of this type of generation and elucidate the stance of the Arabic lexicon towards it and its known product, known as "Al-Mawlid," both in definition and application.

**Keywords:** *Language, Rules, Generation, Phonology, Arabic Lexicon.*

## 1. INTRODUCTION

The Arabic language possesses inherent flexibility and a high capacity for generating words and expressions that keep pace with the advancements of the era on one hand, and align with technological progress and civilizational advancement on the other. This has been proven in the past and is still evident today. Thus, understanding the concept of generation in general, and the rules of phonological generation specifically, is essential for contemporary Arabic as a vibrant language capable of carving out a place among scientifically advanced languages, asserting its dominance worldwide.

Hence, I deemed it appropriate to title this study: "Rules of Phonological Generation in the Arabic Lexicon," attempting to highlight this issue due to its scattered appearance in heritage books and to give it its due share of study and analysis. Thus, the following questions emerged: What is phonological generation? What are its types? What are its phonological rules?

This research aims to address these questions, relying on a methodological approach for this study. The exploration of this topic was not coincidental but aimed at identifying the rules of this type of generation and elucidating the stance of the Arabic lexicon towards it and its product known as "Al-Mawlid," both in definition and application. The plan of this research paper proceeded as follows:

## 2. GENERATION IN LANGUAGE

Generation in language means to produce or generate something<sup>1</sup>. The term implies the creation or production of something new, originating from something else. Arabic scholars have used the term "Al-Mawlid" to refer to what is innovated or introduced into people's

speech, which does not have ancient authenticity in Arabic. In this context, Al-Jawaliqi stated: "Nihreer is opposite to Baleed, and Al-Asma'ee used to say: Nihreer is not from the Arabs' speech, rather it is a coined word."<sup>2</sup>

If we browse through our Arabic dictionaries, we find that "Tawleed" linguistically means upbringing, modernity, creation, renewal, production, establishment, and benchmarking against the original. It encompasses everything related to invention, innovation, creation, and renewal.<sup>3</sup>

### 3. GENERATION IN TERMINOLOGY

On the terminological level, generation means "the extraction or creation of new forms and words with Arabic roots or measured against Arabic. It is often associated with morphological forms and types of derivation, such as measuring one word against another, the progression and growth of vocabulary, or investigating branches derived from origins."<sup>4</sup>

This generative process, termed "Generative" in French, denotes "the process of creating new words in a language based on existing forms in that language, taking into account the systems and rules specific to that language."<sup>5</sup> Thus, the term "Al-Mawlid" is coined to refer to the occurrence of a new meaning, which is named as such due to its temporal proximity. It is also called "Muḥdath"<sup>6</sup> to emphasize the element of time in the linguistic issue of generation. Any newly coined term is referred to as "Al-Mawlid."<sup>7</sup>

There is another definition, clearer than the previous ones, provided by Dr. Hassan Zaza, defining generation or "Al-Mawlid" as follows: "Al-Mawlid, an Arabic term, has taken on a meaning in modern language that differs from what was known to the Arabs, such as: newspaper, magazine, car, airplane."<sup>8</sup>

Perhaps the term generation is associated with what is known as transformation in terms of vocabulary or sentences. Dr. Ramadan Abdel-Tawab attempted to draw a clear distinction between generation and transformation, stating: "Generative linguistics sees that any language is capable of producing an infinite number of sentences that are actually used in the language. As for transformational linguistics, it is the science that studies the relationships between various elements of the sentence, as well as the possible relationships in a language."<sup>9</sup>

### 4. TYPES OF GENERATION

There are those who divide generation in lexical units into two types: spontaneous generation, which is unintentional generation that occurs among members of the linguistic community and is predominant in the oral language level. The second type is called intentional or artificial generation, which is carried out by individuals but often involves the work of groups and institutions. This type predominates in the written language level and in specialized lexical units. Intentional generation is further divided into two types: visual generation and semantic generation.

Another classification that leans towards is one that Arabic has relied on since ancient times in generating new lexical units to compensate for deficiencies or to fill gaps noticed by language users. Generation is divided according to importance and fame into five categories: morphological generation, semantic generation, borrowing-based generation, improvisational generation, and phonological generation.<sup>10</sup>

#### 4-1 Morphological Generation:

It involves "creating new lexical units as a result of changes or modifications to the fixed roots or bases, or stems."<sup>11</sup> Means of morphological generation include derivation, inflection, compounding, and glossing. These methods are intentionally employed to generate new lexical units, as seen in the creation of terminologies.

##### a- Derivation:

It involves "creating some words from others, tracing them back to a common origin that determines their material, and implying their common original meaning, as well as their new specific meaning."<sup>12</sup> It is the formation of a lexical unit with a simple morphological structure from an origin, either a root or a stem, where the derived branches remain connected to the origin.

There are many types of derivation, too numerous to mention here in detail because we are addressing phonological generation, not morphological.

##### b- Inflection:

It involves forming a lexical unit by combining two simple lexical units, such as Abdul-Rahman, meaning "servant of the Merciful," and Abdul-Shams, meaning "servant of the Sun."

It can also involve adding a foreign affix to one of the units, either by attaching it without deletion, as in adding the particle "la" to the noun "thing" to generate the word "la shay" (nothing), or by attaching it with deletion of one or more components of the phonological composition, in one or both units, such as attaching the noun "Abd" to the adjective "Qaisiyyun" with the deletion of the "daal" from the first and the "ya" from the second to generate "Abqaisiyyun." Inflection plays a significant role in generating terminologies by integrating two or more segments of one word.

##### c- Compounding:

It is one of the visual methods of generation because it produces new units at the level of form from existing elements in the language lexicon, either by combining or blending two or more lexical units, resulting in a compound or a blended compound, such as "Baalbek," or an attributive compound. These three types of compounding generate complex lexical units.

##### d- Glossing:

It is the generation of a new lexical unit from an expression or a sentence, or it is a transformative process in which a sentence or a phrase transitions from a compositional property to a lexical property.

Examples include "Al-Basmalah" from "In the name of Allah, the Merciful, the Compassionate," and "Al-Hawqalah" from "There is no power nor might except with Allah," and "Al-Ja'falah" from "I devote myself to you," and "Al-Sabahlah" from "Glory be to Allah," and "Al-Dam'azah" from "May Allah keep your honor," and "Al-Sam'alah" from "Peace be upon you," and "Al-Hasablah" from "Allah is sufficient for me," and "Al-Mush'alalah" from "Whatever Allah wills."

#### 4-2 Semantic Generation:

Semantic generation is defined as "assigning a new meaning to a referent that is already established in linguistic usage, or the transfer of a referent from an original meaning it was associated with to a new meaning to form a new lexical or conceptual meaning."<sup>13</sup> The observer

of this text sees that semantic generation involves those meanings and concepts derived from the language's vocabulary and structures when they enter various contexts. Semantic generation is a type of generation in the lexicon, and it has two types:

- **Figurative Generation:** It involves the transfer of a lexical unit from its original meaning to a new meaning, either broadening leading to generalization, such as "al-Kufr" (infidelity), or narrowing leading to specification, such as "al-Sayyara" (car), which originally meant caravan but later referred to a motorized vehicle.
- **Literal Translation:** It is a type of lexical borrowing where the referent, without the signifier, is transferred from a source language to a target language, such as Social Network.

#### 4-3- Generation by borrowing:

This involves borrowing a word from another language to denote a new concept. Some linguists do not consider this as a form of derivation because the borrowed word originates in another language through one of the forms of derivation, not from the borrowing language itself. This type of derivation is divided into two categories:

- **Arabized borrowing:** Words borrowed from another language and integrated into the linguistic system, subject to its rules. For example, the word "فيلم" (film) borrowed from English.
- **Non-Arabized borrowing:** Words that remain outside the linguistic system and are not integrated into its rules. For example, "الألمنيوم" (aluminum) borrowed from English.

#### 4-4- Generation by improvisation:

This type of derivation involves creating a lexical unit that possesses three necessary distinguishing features: phonetic membership, phonetic composition, and morphological structure. It is divided into two categories:

- **Genuine improvisation:** Involves creating a new general term or expression that has no existing usage in language, such as "الشيفران" (al-sheefran).
- **Imitative improvisation:** Involves forming a word by imitating another word or following a different structure.

#### 4-5- Phonetic Generation:

Phonological generation is defined as "the creation of new lexical units as a result of phonetic changes that occur to the vocabulary."<sup>14</sup> Phonological derivation in the Arabic language occurs "by creating new lexical units with independent phonetic compositions as a result of interactional phenomena between the sounds of the language, such as substitution, positional change, assimilation, and dissimilation."<sup>15</sup>

This indicates that replacing sounds within the lexical unit with other sounds, whether from within the same lexical unit or from outside it, is not merely for the sake of substitution, but rather to generate new lexical units with a different form from their predecessors. One aspect that aids in achieving this type of derivation is the proximity of sounds in quality or articulation. "Proximity in quality or articulation is a fundamental condition in phonological development, not just for the sake of substituting one sound for another."<sup>16</sup>

Modern linguists consider phonological derivation as a fundamental factor in lexical derivation. They view sounds as distinct units that allow for the generation of new functions due to the influence of sounds on each other during the articulation of successive sounds in a sequence.

It should be noted here that phonological derivation does not intend to introduce new sounds into speech that did not previously exist, as sounds in all languages represent a closed pattern. Rather, phonological derivation refers to the changes that occur to lexical units during their pronunciation. However, the level of colloquial usage may allow for the introduction of new sounds into dialects, originating from foreign languages with which they have come into contact.

## 5. PHONOLOGICAL GENERATION RULES

Phonological generation encompasses five rules: substitution, inversion, symmetry, contrast, and insertion.

### 5-1 Substitution Rule:

Substitution is a common linguistic phenomenon, thus it has been a subject of research and study by Arabic scholars, who have dedicated many works to it. Among the most famous of these is "The Substitution" by Ibn al-Sikkit, which is also known for inversion and substitution, and "The Substitution" by Abi al-Tayyib al-Lughawi.

In language, substitution means replacing one thing with another. In technical terms, it involves replacing one sound with another in certain words while the other sounds remain unchanged.

It can be "the placement of one letter in the place of another, either out of necessity or for aesthetic and craft reasons<sup>17</sup>." This sound has the same position in the sequence in both words, such as in (أجم وأجن) which differ in the sounds of 'm' and 'n', and similarly (أصيلان) and (أصيلال) which differ in 'n' and 'l'.

Among the practices of Arabic is the substitution of letters and placing some in place of others, as IbnFaris and Al-Tha'alibi have discussed. Substitution can also be the tendency of one of two close or identical sounds in articulation or characteristic to replace the other in a single word, creating a new lexical unit with a distinct phonetic composition.<sup>18</sup>

#### ➤ Examples of phonetic substitution in Classical Arabic include:

- **Substituting 'fa' with 'tha':**

'Fa' is a labiodental sound, articulated with the tips of the upper incisors and the inner part of the lower lip, and is also a gentle, voiceless, and fricative letter. The articulation of 'tha' is between the tip of the tongue and the tips of the upper incisors, and it is also a gentle, voiceless, and fricative letter.

Here we note that both letters are close in articulation and share the characteristics of gentleness and voicelessness, which allows for their substitution on a phonetic basis. It is known in phonetic studies that a sound may move from its original place of articulation to another and be replaced with the closest sound to it in the new place of articulation. So, when 'fa' moves towards the dental sounds ('tha'), it is replaced with 'tha' which shares with it voicelessness and gentleness, and closeness of articulation.<sup>19</sup>

Examples of this type of substitution include the Arabs saying "fum" instead of "thum," "fumma" instead of "thumma," "furwa" instead of "thurwa," and between "jadf" and "wajdath."

- **Substituting 'ha' with 'haa':**

This is among the sounds agreed upon by modern and ancient scholars in their place of articulation and characteristics. 'Ha' was turned into 'haa' due to the closeness of their articulations and characteristics; 'ha' is a pharyngeal, voiceless, fricative sound, and 'haa' is described by the ancients as pharyngeal, saying 'hamza' and 'habarya' instead of 'hamza', a masculine name, and 'habarya' for a type of bird.

The old Arabic dialects recorded the substitution of 'ha' with 'haa', saying 'kadha' and 'kadaha', 'qahaljilduh' and 'qahal': if it dried, and 'jalh' and 'jalah': hair receding from the forehead, and 'habash' and 'habash' meaning to gather, and 'haqhaq' in walking and 'haqhaq': if walking laboriously, and 'buhtur' and 'bahtar' for the short, and they say 'nahambanham' and 'nahamyanham' and 'namyanam' meaning to roar, and 'nahm' and 'nahim' is a sound like a roar, and 'anhyanah' and 'anahyanah' and in his voice is 'sahl' and 'sahl' meaning hoarseness, and he 'tafaihaq' in his speech: if he elaborates and articulates finely.<sup>20</sup>

- **Substituting 'dal' with 'ta':**

Both sounds are dental and have the same place of articulation. However, the former is emphatic and voiced, and the latter is emphatic and voiceless. The unity of articulation and the characteristic of emphasis justify the substitution between the two letters.

So, 'dal' was substituted with 'ta' in their speech: (fuzdu, and juddu) in 'fuztu' and 'juddu', and this is a dialect of some of the BanuTamim, who substitute the 'dal' for the 'ta' of the speaker or the addressed after 'zay' and 'dal', they say 'jaladdu' in 'jaladtu'<sup>21</sup>. In a narration by Al-Farra': That BanuAsad substitutes the 'dal' in 'aldafter' (notebook) with 'ta', saying 'altafter'. And Al-Farra' cited this substitution with a poem by a man from BanuAsad saying:

*"This in it 'altafter' is better 'tafter' \*\*\*\*in the hand of a noble, illustrious man"*<sup>22</sup>

This shows that the justification for the substitution between the two sounds is their unity in articulation and the characteristic of being emphatic, otherwise, 'ta' is voiceless and 'dal' is voiced.

The phonetic justification that led the tribe of Asad to deviate from its nomadic nature and turn a voiced sound into a voiceless one is the consideration of harmony between sounds for ease of pronunciation, as transitioning from a voiced to a voiceless sound and vice versa involves difficulty not suited for a nomad who does not carefully articulate.

## 5-2 The Rule of Positional Inversion:

**In the language**, inversion means transformation and variation. Al-Khalil said, "Inversion is the alteration of something from its state, inverted speech, I inverted it thus it got inverted, and I manipulated it thus it fluctuated, and I diverted someone from his way meaning I turned him away..."<sup>23</sup>

And in Lisan (the tongue), "Inversion is the transformation of something from its state, to invert it, and the thing has been inverted and turned inside out, like a snake turning over on hot sand"<sup>24</sup>. These definitions allow us to understand that positional inversion is the change



and transformation in the order of the letters of a single word from its known form by advancing some letters and delaying others.

**In technical terms**, positional inversion involves advancing some sounds of the word over others due to the difficulty of their original sequence to the linguistic taste; it is advancing and delaying that occurs in the letters of the word's structure, causing a change in the order of its letters<sup>25</sup>, to generate a new word branching from the original one that matches it in meaning<sup>26</sup> but differs in the order of the construction's letters.

It can be rationalized with the theory of ease and facilitation, and occurs by changing the position of the letter in the word's structure, either by advancing or delaying, provided that this letter is an original one.<sup>27</sup>

Examples of positional inversion in Arabic include (جذب, وجذب) where in (جذب) the 'ba' precedes the 'dal' to be closer to the 'jeem' sound, similar to it in the characteristics of loudness and strength (burst); to make the tongue's action from one side in terms of characteristics.<sup>28</sup>

The occurrence of positional inversion can be explained based on the idea of the stronger sound, as stated by Arabic scholars, which means that if sounds close in articulation are combined in the structure of a word, then the stronger, heavier in pronunciation is advanced over the weaker, lighter one; to achieve balance and facilitation in speech.

This indicates that (جذب) is lighter in pronunciation than (جذب), and this may also be due to the prevalence and frequency of these sounds and their rotation in the Arabic language. The close and similar characteristics of the letter sounds may harmonize and converge, but in the case of their variance in terms of strength and weakness, the strong characteristics dominate and distinguish over the weak ones.

Similarly, for (أيس) inverted from (يأس): the speaker prefers to advance the hamza in (أيس) over the ya' due to the strength (of the hamza) in pronunciation and its heaviness compared to the lighter ya' in pronunciation because the speaker at the beginning of his speech is more energetic and stronger in spirit.

Thus, we see that what justified the inversion in the verb (يئس) is that the prevalence of the phonetic chain (أيس) in Arabic speech is much more than the prevalence of the other chain (يئس)."

As for in (صاعقة) and (صاعقة), the positional inversion occurs to shorten distances, meaning that the inversion has led to making the pronunciation mechanism of the word's sounds go in one direction; the roots of this word are (the sad, the ain, and the qaf), and the pronunciation mechanism in it before inversion starts (with the sad) and its place of articulation is between the tip of the tongue and the base of the incisors (i.e., at the top of the vocal apparatus), then after (the sad) comes (the ain) and its place of articulation is in the middle of the throat (and this place of articulation is at the bottom of the vocal apparatus), then after that, the pronunciation mechanism moves upwards where the place of articulation of (the qaf), which is from the farthest part of the tongue and above it from the upper palate.

But after the inversion, the pronunciation process in (صقع) starts with (the sad), then moves downwards towards the place of articulation of (the qaf), then after that, it moves downwards towards the place of articulation of (the ain), and in this, there is ease in pronunciation. In summary, the justification for inversion in this word is the phonetic proximity between the letters of the inverted word.

### 5-3 Rule of Symmetry:

Delving into the field of phonetic research to understand the meaning imparted to the term symmetry, we realize that this phenomenon signifies the absolute influence of one sound by another. From the perspective of some linguists, it is those "adaptive modifications of a sound when it interacts with other sounds."<sup>29</sup> Others view it as "the transformation of differing phonemes into similar ones, either partially or completely."<sup>30</sup> Daniel Jones defines it as "symmetry is the substitution of one sound for another under the influence of a third sound close to it in the word or in the sentence."<sup>31</sup>

Ibrahim bin Murad considers symmetry as "the tendency of adjacent sounds in a single word to influence each other upon pronunciation, an influence that occurs when there is closeness in characteristic or articulation place, which the ancients addressed under the topic of assimilation and called it approximation."<sup>32</sup> Therefore, symmetry in this concept encompasses all the phonetic fluctuations that aim towards convergence and similarity. Thus, one of the researchers determines that symmetry is used to indicate any change by influence or deletion, thereby incorporating substitution, vocalization, and assimilation into its concept.<sup>33</sup> On this basis, symmetry can be divided into two types: progressive or anticipatory symmetry, and regressive or retrospective symmetry.

#### 5-3-1- Progressive or Anticipatory Symmetry:

This occurs when the direction of influence emanates from the first sound to the second<sup>34</sup>, or as "Bergsträsser" describes, where the movement of change is from the preceding sound to the following or subsequent one.<sup>35</sup>

The influence of the first sound in its contact or interaction results in a kind of convergence in the place of articulation or characteristics. The connection between them may deepen to the extent of complete similarity, where the latter is entirely absorbed into the former.<sup>36</sup> Modern scholars - both Arab and Orientalists - draw a host of words from the treatment of ancient grammarians and linguists on the issues of this phenomenon, then they present them as examples and evidence of progressive symmetry<sup>37</sup> like that which arises from the form (افتعل) from the likes of: زجر (to repel), صبر (to be patient), and ضرب (to hit), where the original construction of this pattern dictates the following forms: اضطر, اذتر, and اضطر, which are rejected for use because the Arab taste does not find them palatable due to the imbalance in descriptive balance between the زاي and تاء in the first word, and between the صاد, ضاد, and تاء in the second and third words.

Examples of this type of symmetry among Arabs also include the word اذتان where the second sound is influenced by the first, i.e., the تاء is influenced by the زاي to become اذدان, and the same thing with the word اضجع, where the تاء is influenced by the preceding ضاد to become اضطجع.

#### 5-3-2- Regressive or Retrospective Symmetry:

In this case, the direction of influence moves from the second (subsequent) sound to its preceding neighbor<sup>38</sup>. Scholars here present a range of words to exemplify this type of symmetry. Notably, some of these terms are derived from the ancients' research on the nuances of the assimilation phenomenon, while others are brought from both old and modern Arabic dialects.<sup>39</sup>



From the examples taken from the treatment by ancient grammarians, we mention what happens in the constructions (تَفَعَّلَ, وَتَفَاعَلَ), where the تاء is influenced by the فاء of the verb in the present tense form after its being silenced and lightened, then expelled in the past tense like in يَنْذَكُرُ (he remembers) and يَنْثَقِلُ (he becomes heavy).

The تاء and ذال in the first word, and the ثاء and تاء in the second word, are closely articulated sounds that are difficult to pronounce in succession. Arabic takes a specific path to overcome this phonetic challenge by silencing the تاء to facilitate its direct connection with its neighbor, then the تاء in the first word relinquishes its whisper and intensity, and in the second, it frees itself from its intensity in favor of its influential neighbors which occupy the beginning of the syllable in the words, while the تاء in both represents the end of a syllable, and as per Venderis, it's weakened as it is the end, susceptible to the influence coming from its strong neighbor.<sup>40</sup>

As a result of this process, the تاء in both words gradually aligns in a symmetrical path that ends with its complete absorption into the following sound, resulting in the forms: يَنْذَكُرُ (he firmly reminds) and يَنْثَقِلُ (he heavily burdens), then this is applied to the past tense as: اَنْذَرَ (I firmly reminded) and اَنْثَقَلَ (I heavily burdened).<sup>41</sup> The phonetic changes that these two words underwent in their direction towards regressive symmetry can be illustrated as follows:

يَنْذَكُرُ -> يَذْذَكُرُ -> يَنْذَكُرُ -> يَنْذَكُرُ (to remember) present tense تَفَعَّلَ form: يَنْذَكُرُ -> يَنْذَكُرُ, past tense: اَنْذَرَ.

يَنْثَقِلُ -> يَنْثَقِلُ -> يَنْثَقِلُ -> يَنْثَقِلُ (to be heavy) present tense تَفَاعَلَ form: يَنْثَقِلُ -> يَنْثَقِلُ, past tense: اَنْثَقَلَ.

Among the examples modern scholars cite from Arabic dialects, we mention what they reported about the word وَدَدَ (peg). They stated that the original form is وَدَدَ, which is the good Hijazi usage, but Banu Tamim prefers to silence the تاء and assimilate it into the دال, based on the phonetic principle that it falls in the middle of a voiced environment, resembling its neighbor. Generally, Arabic voids the juxtaposition of identical sounds, especially if the first is silent, and it's likely here that the تاء yields its whispering under the influence of the voiced دال<sup>42</sup>, transforming into a sound like it, then assimilating into it to avoid the juxtaposition of identicals and to reduce effort.<sup>43</sup>

Also, phoneticians have brought up the example of the word صَلَخَ (to skin) where the سِين is influenced by the خاء to become صَلَخَ, and similarly, the سِين is also influenced by the damma in words like سُرَّةَ (Surah) to become صُورَة (picture), and the same in سُرَّةَ (navel) to become صُرَّةَ (bundle).

Observing examples of both types of symmetry, it's seen that examples of progressive symmetry have replaced their originals in usage, becoming the actual lexical units and neglecting their originals due to their difficulty in use, while in the case of regressive symmetry, the original forms are predominantly used.

#### 5-4 The Rule of Contrast:

Arabic does not solely rely on symmetry as its only refuge for addressing phonetic disturbances in its structures; it might also opt for divergence or contrast between sounds as an alternative pathway to symmetry to achieve its desired goal of alleviating heaviness and repairing any cracks in its structures caused by symmetry, in pursuit of reinstating the linguistic unit's balance during its journey in the speech stream.

Modern phoneticians have not settled on a single term to define this phenomenon; their expressions for it vary and range between divergence, difference, contrast, distinction, and separation.

Contrast or divergence is "the tendency of one of the identical sounds in a word to transform into a different sound,"<sup>44</sup> or as Dr. Ahmad Mukhtar Omar says, "the modification of an existing sound in a speech chain by the influence of a neighboring sound, but it's a reverse modification that increases the difference between the two sounds."<sup>45</sup> Others see it as a law "that aims at two completely identical sounds in a word, changing one of them to another sound,"<sup>46</sup> and the new, differing sound often is one of the long vowels or a liquid sound.<sup>47</sup>

Most phonologists view contrast as the opposite and corrective aspect of the negative effects of symmetry, aiming in its direction to reduce or eliminate the distinctive differences of sounds. Examples of this contrast in Arabic include:

أترج from إرجاء / أنجاص from أنجاء / إنجانة from عُرْد / ذرنوح from اللد / عُرْد from اللد  
الخدق / لادق from خدرق / مفتح from حلق الرجل / طرح from جلط / طرمح from جلمط رأسه  
فقع from فطح / الفرقة from فرطح.

Observing these examples, it's evident that Arabic has veered in its escape from the heaviness of symmetry within it by seeking a sound from the liquid group, which phonetic studies, both ancient and modern, have shown to have a semblance and kinship with the long vowels.

Here, Arabic chose the نون as an alternative for one of the elements of gemination in the first six words, to avoid the succession of two لامs, راءs, or جيمs, as seen in the pattern of these words' appearance and settled on the ميم to replace one of the doubled sounds of لام and راء in the seventh and eighth words.

It preferred the لام as an alternative to the طاء and دال to avoid the accumulation of identicals in a single pronunciation, as in the ninth and tenth examples, and leaned towards the راء, favoring it over the pronunciation of the merged طاء, نون, and قاف in the eleventh, twelfth, and thirteenth examples.

From the above, it becomes apparent that the evolution of these words towards shedding one of the consecutive identical sounds is due to the fact that pronouncing the doubled sound strains the vocal apparatus because it requires greater muscular effort. Hence, in their path towards alleviation, they substituted one of the identical sounds with a liquid sound, as it does not necessitate the effort needed for producing the doubled sound.

Arabic may also refrain from contrasting with a familiar sound, either a vowel or a liquid, in its escape from the succession of similars, seeking other sounds from the Arabic system to achieve the same purpose. For example, its choice of the سين as an alternative to the تاء in expressions like some Arabs saying "استخذ فلان أرضاً"<sup>48</sup> meaning "اتخذ أرضاً" (someone took land), and Sibawayh explained this practice among them by saying, "They substituted the سين for the تاء in اتخذ... due to their dislike of gemination."<sup>49</sup> As a result, a new lexical unit with independent phonetic compositions is created.

### 5-5 Principle of Assimilation:

Researchers in linguistic heritage sometimes encounter significant confusion in the use of the term "assimilation." This often leads them to assert that scholars frequently confuse these terms, as studying these concepts poses one of the greatest challenges for researchers and

scholars alike. Therefore, before delving into this principle, it is necessary to define the term "assimilation" both linguistically and technically.

➤ **Principle of Assimilation in Language:**

Assimilation in language refers to insertion or addition. For instance, it is said: "He assimilated his horse into the river," meaning he led it into the river. Anything introduced or added in this manner is considered assimilated into it<sup>50</sup>. It can also denote an addition, as mentioned in Al-Mu'jam Al-Wasit: "It is said: 'a word with assimilation,' meaning an addition that does not fit the context, indicating that the meaning is not altered upon its removal<sup>51</sup>. Like other words, assimilated words lack contextual relevance and alter the meaning when removed.

➤ **In terminology:**

Assimilation is defined as "the insertion of an additional word or sound between two elements without changing the meaning of the speech."<sup>52</sup> The term assimilation often revolves around the concept of addition, as it involves introducing an additional clause in a complete expression<sup>53</sup>. This definition is synonymous with opposition, where a conflicting clause occurs between two concurrent elements.

Arabic scholars have addressed the concept of assimilation in scattered passages of their works, including Al-Khalil ibn Ahmad (d. 175 AH). For Al-Khalil, assimilation signifies stuffing and addition,<sup>54</sup> representing an addition to speech that can be dispensed with<sup>55</sup>. However, for Sibawayh (d. 180 AH), assimilation in linguistic terms does not imply the entry of a letter for a non-articulated purpose. Rather, its inclusion in the structure is for emphasis, as emphasis represents the true meaning. It corresponds to the concept of addition for many grammarians<sup>56</sup>.

Ibn Faris (d. 395 AH)<sup>57</sup> defined assimilation as a specific addition, while Al-Maliki (d. 702 AH)<sup>58</sup> stated that assimilation signifies addition of meaning.

Assimilation can also denote opposition among rhetoricians,<sup>59</sup> representing an obstacle that impedes the syntactic structure of a sentence, preventing its parts from connecting properly to fulfill the requirements of syntactic cohesion. Ibn Junayd (d. 392 AH)<sup>60</sup> described assimilation as encompassing and enabling, providing examples without explicitly stating the term.

In summary, anything introduced into a structure that occurs between two concurrent elements, with a removable meaning that does not alter the original meaning, is called assimilation.

All this discussion pertains to the general definition of assimilation. Phonetic assimilation, however, involves adding a non-original sound to the structure of the original word, intending to generate a new lexical unit. This type of assimilation does not occur by the weakening of consecutive identical consonants but rather by the shift from one consecutive stop to another, especially if they shift from symmetry to contrast, resulting in the second one becoming a vowel accompanied by two phenomena:

- Introduction of a consonant in phonetic composition, which is necessary.
- Providing the new form with a new meaning, which is imperative.

Phonetic assimilation in Arabic can be divided into three types:

- **Initial Assimilation:** Adding a non-original consonant to the beginning of a word. This addition is called the prefix. For example, "لَبَزَ" (labaza) means "to trample," but "بَلَبَزَ" (balbaza) means "to corrupt" or "to deviate."
- **Medial Assimilation:** Introducing a non-original sound in the middle of a word, termed the infix. For example, "دَرَجَ" (daraja) means "to walk," but "دَهْرَجَ" (dahraja) means "to speed up in walking."
- **Final Assimilation:** Adding a non-original sound at the end of a word, known as the suffix. For example, "شَمَخَ" (shamakha) means "to rise," but "شَمَخَرَ" (shamkhara) means "to become arrogant."

## 6. CONCLUSION

After researching, analyzing, and commenting on the issues related to this research paper, I have reached several conclusions summarized as follows:

- ✓ Lexical units generated by the first four rules lack distinctive semantic properties; they are merely alternatives to the original units. However, they are significant as they have the potential to occupy specific positions in the lexicon due to their unique feature of phonetic composition. Yet, their semantic subordination to the original units grants them a supplementary or fill-in property in the lexicon.
- ✓ Lexical units generated by the insertion rule fundamentally differ from those produced by the preceding rules in three distinctive characteristics that set them apart from their origins, which are:
  - **Phonetic Composition:** By including inserted sounds;
  - **Morphological Form:** By transitioning from a trilateral form, for example, to a quadrilateral one.
  - **Meaning:** All the insertions mentioned possess new meanings, closely related to the meanings of their altered origins but containing features that diverge from those of their origins. Thus, these generated units are not merely verbose or filler in the lexicon.
- ✓ The phenomenon of symmetry cannot be attributed solely to the speaker's inclination toward harmony and phonetic compatibility or to the economy of muscular effort, commonly known as facilitation. It goes beyond that to produce new lexical units.
- ✓ Phonetic generation in the lexicon does not deviate from the rules established by the Arabic language. What is newly generated does not depart from or contradict the language's system. The study relied on Arabic models and analyzed the rules of phonetic generation in the lexicon as they appear in the Arabic language.

Finally, I do not claim to introduce anything new; rather, this is a serious scientific attempt seeking general scientific benefit. I hope that Allah accepts this work from us and that it benefits others. If what we presented is correct, it is from Allah, but if not, it is from ourselves and the devil.

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