

**Morphological Study of Suppletion in English With Reference to Arabic By**

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**Abstract:**

This study investigates the morphological phenomenon of suppletion in English and Arabic. Specifically, it will look at how these languages handle words with similar meanings but come from entirely different sources, which goes against standard morphological patterns. The study tries to answer the following question: what are the basic rules of language that govern these irregular forms? What are the limits that shape them? The study uses examples like "go" to "went" and "good" to "better" in English and " (khail, horses) in Arabic to show how various " خيل (faras, horse) to " فرس English and " languages handle suppletion in both similar and different ways. The results show that English uses a mix of full and partial suppletion in different types of grammar. It is because language changes over time, making it essential to remember.

On the other hand, Arabic has a root-and-pattern morphology, meaning that the roots of nouns change in a planned way. The roots stay the same in partial

suppletion but change to completely different ones in total cases. This comparison shows how complicated and flexible each language's approach to morphological errors is. It helps us learn more about how languages are structured and how our minds work when we learn a language.

Keywords: Suppletion, Morphology, English Language, Arabic Language, Linguistic Irregularities,

### المستخلص:

تهدف هذه الدراسة إلى التحقيق في ظاهرة الإبدال الجذري في اللغتين الإنجليزية والعربية، مع التركيز على كيفية تعامل هذه اللغات مع الكلمات ذات المعاني المتقاربة التي تنحدر من جذور مختلفة تمامًا، متجاوزة بذلك الأنماط المورفولوجية التقليدية. تعالج الدراسة مشكلة رئيسية تتمثل في فهم المبادئ اللغوية التي تحكم هذه الأشكال الشاذة وفحص القيود التي تشكلها. باستخدام أمثلة مثل "go" إلى "went" و "good" إلى "better" في الإنجليزية، و"فرس" إلى "خيل" في العربية، تكشف الدراسة عن استراتيجيات مشتركة ومختلفة في معالجة الإبدال بين اللغات. وتظهر النتائج أن اللغة الإنجليزية تستخدم مزيجًا من الإبدال الكامل والجزئي عبر فئات نحوية مختلفة، متأثرة بالتغيرات اللغوية التاريخية، مما يتطلب الحفظ. في المقابل، تعرض اللغة العربية، المبنية على نظام الجذور والأوزان، تغييرات منتظمة للجذور في إطار الأسماء، حيث تحافظ على حروف الجذر في حالات الإبدال الجزئي وتستخدم جذورًا مختلفة تمامًا في حالات الإبدال الكامل. تسلط هذه المقارنة الضوء على تعقيد وتكيف كل لغة في التعامل مع الشذوذات المورفولوجية، مما يسهم في فهم أوسع لبنية اللغة وعمليات الإدراك المعرفي في تعلم اللغة.

الإبدال الجذري، علم الصرف، اللغة الإنجليزية، اللغة العربية، الشواذ اللغوية: الكلمات المفتاحية

## 1. Introduction

Morphology, the study of word forms and their structured relationships within a language, examines how words evolve and change over time. At the heart of this field is the analysis of morphological alternations, which typically involve the addition of affixes to a root or changes to the root itself, adding layers of meaning. For example, regular morphological processes turn "talk" into "talked" and "small" into "smaller" through predictable modifications such as affixation.

However, not all morphological changes are so predictable, i.e., suppletion represents a significant departure from these regular patterns, where related word forms use completely different roots instead of deriving from a common root. This phenomenon can be seen in various parts of speech and particularly pronounced in inflections—such as the transformation of "go" to "went" and "good" to "better," and "person" to "people" where the original roots are entirely replaced rather than modified. These suppletive patterns challenge the regularity of morphological derivation and provide a fascinating window into the idiosyncrasies of language development.

The study of suppletion is intriguing because it breaks the conventional rules of morphology, employing entirely different roots to express related grammatical or semantic functions. For instance, the past tense of "go" is "went," which is not derived from the same root as "go." Similarly, "good" and "better" serve as comparative forms for "well" and "ill," yet they do not share common roots with these adjectives. Such instances highlight the complexity of language and suggest a deeper level of linguistic intuition and shared understanding among speakers.

English speakers, for example, intuitively understand that "better" functions as the comparative form of "good," similar to how "longer" relates to "long." Despite the regular semantic relationship, the form of the root changes dramatically, indicating a unique aspect of English morphology. This irregularity in suppletion across languages raises questions about the limits of linguistic diversity and the underlying regularities that govern language structures.

By exploring suppletive forms in English and comparing them with examples from , this study aims to "خيل" to "فرس" another language, such as Arabic's transformation of "construct a comprehensive, cross-linguistic analysis that challenges the notion that languages differ without limit and in unpredictable ways. Suppletion enriches our

understanding of linguistic diversity and underscores human language's complexity and adaptability.

The results show that English employs both complete and partial suppletion, influenced by diverse linguistic sources, resulting in irregular forms that require memorization. In contrast, Arabic utilizes its root-and-pattern morphology to maintain root consonants in partial suppletion and employs entirely different roots in complete suppletion. This systematic approach, despite the irregularities, aids in cognitive processing and language learning.

The comparative analysis illustrates that suppletion operates within and across language systems, reflecting a universal aspect of language structure where even irregular forms are systematically integrated. This exploration enriches our understanding of the broader linguistic mechanisms governing morphological change, highlighting each language's unique strategies to manage these irregularities and providing valuable insights into cognitive processes involved in language learning and usage.

### **1.1 Theoretical Framework**

Suppletion has been explored from various angles, highlighting its significance in linguistic studies:

Verbal Suppletion: Investigated by (Mel'čuk, 1994) (1976, 1994), focusing on the complexities and patterns in verb morphology.

Ordinals and Quantifiers were analyzed by (Barbiers, 2007), who examined how suppletion affects numerical expressions across languages.

Adjectival Gradation: Explored by (Bobaljik, 2012), studies changes in adjectives across comparative and superlative forms.

Cross-Linguistic Diversity: (Postma, 1995) and (Veselinova, 2006) discuss the universal and diverse aspects of suppletion in different languages.

## 1.2 Literature Review

The phenomenon of suppletion in linguistics has attracted considerable scholarly attention due to its implications for understanding the complexities of language structure and evolution. Hermann Osthoff pioneered the foundational work in this field in the late 19th century. Osthoff's seminal contributions laid the groundwork for understanding how words with standard grammatical or semantic functions might arise from entirely disparate roots. This concept fundamentally challenged the prevailing notions of regular morphological derivation.

Following Osthoff's pioneering work, the study of suppletion gained momentum throughout the 20th and 21st centuries, with scholars such as Joan Bybee and Carol Moder further expanding the scope of research. Bybee's work has been instrumental in integrating the concepts of suppletion within broader linguistic theories, especially in her explorations of morphological processes. She has argued that suppletion should be viewed within the context of a language's complete grammar system, suggesting that suppletive forms are systematic rather than exceptional phenomena within languages.

Carol Moder has also contributed significantly to the study of suppletion by examining its role in syntactic and semantic frameworks. Her research has emphasized the predictability of suppletion in specific linguistic environments,

reinforcing the idea that suppletion, while appearing irregular, follows discernible patterns that can be scientifically analyzed and anticipated.

Recent studies have also delved into the cognitive and psycholinguistic aspects of suppletion. Researchers such as Adele Goldberg have examined how speakers of different languages process and understand suppletive forms, contributing to a more nuanced understanding of their impact on everyday language use and acquisition. This line of inquiry has demonstrated that suppletion is not merely a linguistic curio but an integral part of how speakers learn and understand languages.

Additionally, cross-linguistic comparisons have become vital to suppletion studies, offering insights into how different language families handle the phenomenon. These comparative studies have revealed that suppletion is a common feature across diverse languages, suggesting universal underlying principles in how languages evolve to efficiently accommodate semantic and grammatical needs.

Despite the advances in understanding the mechanisms and implications of substitution, it remains a challenging study area due to its apparent irregularity. However, ongoing research reveals that these irregularities are governed by specific linguistic constraints, which are becoming more explicit by applying modern linguistic theories and methodologies.

The literature on suppletion highlights the concept's evolution and illustrates a shifting paradigm—from viewing suppletion as a mere anomaly to recognizing it as a fundamental and systematic language feature. This evolution in thought underscores the dynamic nature of linguistic research and its continual quest to decode the complexities of human language.

## 2. Methodology

### 2.1 Data Collection

The data collection process for this study was comprehensive and methodologically rigorous, designed to ensure a robust and informative dataset suitable for an in-depth analysis of suppletive patterns in both English and Arabic. The primary data sources were well-established linguistic databases and historical grammar, which provided a wealth of information on the usage and evolution of both languages.

The linguistic databases selected for this study are among the most respected in the field, known for their comprehensive coverage and reliability. These include the Oxford English Dictionary (OED), the Cambridge English Corpus for English data, the Arabic Linguistic Corpus (ALC), and the Kitab Corpus for Arabic. These databases offer extensive lexical entries and provide contextual usage examples crucial for identifying suppletive forms.

In addition to digital databases, historical grammars of both languages were consulted. These grammars—such as "A Comprehensive Grammar of the English Language" for English and "Al-kitab fi ta'allum al-'Arabiyya" for Arabic—offer insights into the historical development of suppletive forms and their grammatical categorisations over time. Such historical perspectives are vital for understanding how suppletive forms have evolved and stabilized in the languages.

### 2.2 Selection Criteria

Specific criteria guided the data selection to maximize the information's relevance and reliability. The primary criterion was the frequency of usage, as high-frequency words often exhibit more stabilized suppletive patterns, making them ideal candidates

for study. This approach ensures that the findings are statistically significant and applicable to a broader linguistic context.

Another critical criterion was the clarity of suppletive patterns. Only words that demonstrated suppletion—where the derived form cannot be predictably inferred from the base form—were included. This helped to focus the study on the most unequivocal instances of suppletion, thereby avoiding ambiguous cases that could compromise the clarity and reliability of the analysis.

### **2.3 Data Collection Method**

Data were extracted using a combination of automated queries and manual verification, i.e., automated queries allowed for the efficient extraction of large amounts of data based on the defined criteria, such as word frequency lists and examples of use. Manual verification was then employed to ensure the accuracy of the data, particularly in assessing the clarity of suppletive patterns and contextual usage. This dual approach helped to balance efficiency with accuracy, ensuring a high-quality dataset for analysis.

This study's meticulous data collection process laid a solid foundation for analysing morphological irregularities across English and Arabic. By carefully selecting sources and criteria, the study ensured that the data gathered were comprehensive and precise, allowing for a detailed exploration of the complex phenomenon of suppletion in these two linguistically rich languages.

### **2.4 Analysis**

The phenomenon of suppletion represents one of the most intriguing aspects of morphological change, highlighting irregularities that defy straightforward morphological derivation. This analysis compares the suppletive forms in English and

Arabic, revealing the complexities and unique strategies each language employs to manage these forms.

### 2.4.1 English Morphological Suppletion

In English, suppletion occurs across various speech parts, demonstrating .١ complete and partial transformations. The verb "go," transforming to "went," and the adjective "good," changing to "better," exemplify complete suppletion where the suppletive forms bear no resemblance to their base forms. Below is a list of each word's base form and the suppletive forms for different grammatical categories. Also, provide sentences to illustrate each form.

#### **Be – Was/Were – Been .١**

Paradigm: be, am/is/are, was/were, been

Sentences: "I am happy." "Yesterday, I was happy." "I have been happy."

#### **Go – Went – Gone .٢**

Paradigm: go, went, gone

Sentences: "I go to the park every day." "Yesterday, I went to the park." "I have gone to the park many times."

#### **Good – Better – Best .٣**

Paradigm: good, better, best

Sentence: "This cake is good." "This cake is better than the one I had yesterday."

"This is the best cake I've ever had."

**Bad – Worse – Worst .٤**

Paradigm: bad, worse, worst

Sentence: "This weather is bad." "Today's weather is worse than yesterday's."

"This is the worst weather I've ever seen."

**Far – Further/Farther – Furthest/Farthest .٥**

Paradigm: far, further/farther, furthest/farthest

Sentences: "The beach is far from here." "The park is farther than the beach."

"The mountain is the farthest of all."

**Many – More – Most .٦**

Paradigm: many, more, most

Sentences: "I have many books." "She has more books than I do." "He has the most books in the class."

**Much – More – Most .٧**

Paradigm: much, more, most

Sentences: "There is much water in the lake." "There is more water in the river."

"There is the most water in the ocean."

**Little – Less – Least .٨**

Paradigm: little, less, least

Sentences: "I have little money." "She has less money than I do." "He has the least money of all."

### **Old – Elder/Eldest .٩**

Paradigm: old, older/elder, oldest/eldest

Sentences: "My grandmother is old." "My grandmother is older than my grandfather."

"She is the oldest in the family."

### **Buy – Bought .١٠**

Paradigm: buy, bought, bought

Sentences: "I buy groceries every week." "I bought groceries yesterday." "I have bought groceries for the past month."

### **Think – Thought .١١**

Paradigm: think, thought, thought

Sentences: "I think about my future often." "I thought about my future yesterday." "I have thought about my future for years."

### **Teach – Taught .١٢**

Paradigm: teach, taught, taught

Sentences: "I teach math to my students." "I taught math yesterday." "I have taught math for many years."

## **2.4.2 Arabic Morphological Suppletion**

١. Arabic suppletion is primarily observed in the noun paradigm, where changes can completely alter the root structure or partially modify it. The transition from " (naqah, single ناقه) (khail, horses) and from " خيل" (faras, single horse) to " فرس" (ibil, camels) illustrates complete suppletion with no shared root camel) to " consonants between the singular and plural forms. Below is a list of each word base form and the suppletive forms for different grammatical categories. Also, provide sentences to illustrate each form.

١. امرأة - (woman) نساء (women)

Paradigm: امرأة (singular), نساء (plural)

Sentences: "هناك امرأة تنتظر" "هناك نساء ينتظرن".

٢. فرس - (horse) خيل (horses)

Paradigm: فرس (singular), خيل (plural)

Sentences: "ركبت فرسًا في المزرعة" "الخيال تجري بسرعة".

٣. ناقه - (camel) إبل (camels)

Paradigm: ناقه (singular), إبل (plural)

Sentences: "رأيت ناقه في الصحراء" "الإبل تعيش في الصحراء".

٤. إنسان - (human) ناس (people)

Paradigm: إنسان (singular), ناس (plural)

Sentences: "كل إنسان يحتاج إلى الراحة" "الناس يتحدثون عن الأخبار"

٥. فم - (mouth) أفواه (mouths)

Paradigm: فم (singular), أفواه (plural)

Sentences: "الفم يتكلم" "الأفواه تغني".

We have to note that the concept of suppletion (Ibdāl) in Arabic Morphology and its types can be as follows:

Linguistically, replacement is defined as "change"; "He replaced it" means "He changed it." Technically, it is known as placing one letter in the position of another after removing it without assimilation or transformation. Replacement typically occurs to facilitate the pronunciation of the word. Replacement comes in several types, which are:

" form: (افتعل)" in the "Ifta'ala (تReplacement of the "tā' (

د: Replacement with "dāl ( .١

," then the "tā'" was ادتعى (claimed), which initially is "ادعى)": For example, "دAfter "dāl ( replaced with a "dāl," and merged with the following "dāl."

," then the "tā'" اذتكر (remembered), which initially is "اذكر)": For example, "ذAfter "dhāl ( was replaced with a "dāl."

," then the "tā'" ازتجر (reprimanded), which initially is "ازجر)": For example, "زAfter "zāy ( was replaced with a "dāl."

ط: Replacement with "tā' ( .٢

" (i.e., الإطباق This occurs after the letters with the characteristic of "Iṭbāq ( emphatic or pharyngealised sounds):

, then the "اصْتَبِرَ" (was patient), which initially is "اضْطَبَّرَ": For example, "صAfter "šād ( "tā" was replaced with a "ṭā'."

. "اضْتَرَبَ" (was disturbed), which initially is "اضْطَرَبَ": For example, "ضAfter "ḍād (

" (continued), which initially are "اُطْرِدَ" (examined) and "اطَّلَعَ": For example, "طAfter "ṭā' ( "اطتلع" and "اطترد".

. "اُظْلِمَ" (oppressed), which initially is "اِظْلَمَ": For example, "ظAfter "zā' (

٣. Replacement of "wāw (و) "yā' (ي) or "tā' (ت):

)) in the "Ifta'ala" form: فاءThis occurs when they are the first radical (fa' (

. "اوتصف" (was characterized by), which initially is "اتَّصَفَFor example, "

"ن:ن" with "nūn (ن)Replacement of "mīm (م

) " and occurs under الإقلاب This is known in the rules of Quranic recitation as "Iqlāb ( two conditions:

The "nūn" is sakin (nūn sukoon).

)" in the word.بThe "nūn" comes before "bā' (

## 2.5 Comparative Analysis

### 1. Nature of Suppletion:

**English:** In English, suppletion involves both verbs and adjectives, with changes that can be either complete (e.g., "go" to "went") or partial (e.g., "good" to "better"). The irregular forms often bear no resemblance to their base forms.

**Arabic:** Suppletion in Arabic is predominantly observed in nouns, where the singular "نساء" (woman) to "امراة" and plural forms can be entirely different words, such as "خيول" (horses), "خيل" (horse) to "نساء" (women), and "فرس" (horse).

## 2. Patterns and Regularity:

**English:** English suppletive forms are irregular and do not follow a predictable pattern, requiring memorization. They can occur across various grammatical categories, including verbs, adjectives, and adverbs.

**Arabic:** Arabic suppletive forms, while irregular, are mainly found in the nominal paradigm. These forms often involve significant changes to the root structure, making the connection between singular and plural forms less apparent.

## 3. Linguistic Strategies:

**English:** The strategies in English involve a mix of complete lexical and partial changes, which are unpredictable and must be memorized individually.

**Arabic:** Arabic employs a systematic approach with defined but irregular patterns of change in its suppletive forms. The changes in root structures are significant but follow a certain morphological logic within the language.

## 4. Cognitive Processing:

**English:** The diversity of suppletive forms across different parts of speech in English can present more challenges in cognitive processing and language learning.

**Arabic:** Focusing on nominal morphology in Arabic suppletion requires a different cognitive approach, emphasizing the memorization of root alterations for pluralization.

## 5. Examples and Usage:

**English:** Examples like "be – was/were – been" and "good – better – best" illustrate the complete and partial suppletive changes in verbs and adjectives.

" show how suppletion completely "امرأة – نساء" and "فرس – خيل" **Arabic:** Examples like " alters the root structure in nouns, making the connection between forms less direct.

Suppletion in both English and Arabic showcases the complexity and diversity of linguistic strategies for handling irregular morphological changes. English exhibits a broader range of suppletive forms across various parts of speech, while Arabic primarily focuses on nominal suppletion with significant root alterations. This comparative analysis highlights key differences: English, influenced by diverse linguistic sources, uses both complete and partial suppletion across lexical categories, whereas Arabic, with its root-and-pattern morphology, maintains root consonants in partial suppletion but uses entirely different roots for complete suppletion.

Understanding these patterns provides valuable insights into cognitive processes in language learning and the unique morphological strategies of different languages. This exploration of suppletive forms reveals specific irregularities in English and Arabic, enhancing our understanding of broader linguistic mechanisms governing morphological change. The analysis illustrates that suppletion operates within and across language systems, demonstrating the complexities of morphological evolution and indicating a systematic integration of even irregular forms in language structures.

### 3. Discussion

#### Patterns and Regularities

The analysis revealed that suppletion, though rare, follows specific regular patterns across languages. These patterns suggest that even the most irregular morphological processes are subject to universal constraints and rules. For instance, high-frequency verbs and adjectives in both languages often exhibit suppletion.

The findings support the notion that formal constraints on grammatical rules limit language variability. These constraints are evident even in the most irregular domains of morphology, such as suppletion. Regular patterns in suppletive forms across unrelated languages like English and Arabic support the idea of universal grammar principles.

#### 3.1 Results and Findings

**English:** Demonstrates a broader range of suppletive forms across various parts of speech, including verbs, adjectives, and adverbs.

Examples of complete suppletion include "go" transforming to "went" and "good" changing to "better."

The irregular forms often bear no resemblance to their base forms, requiring memorization and challenging cognitive processing and language learning.

**Arabic:** Primarily exhibits suppletion in the noun paradigm, with significant root alterations.

Examples include "امرأة" (woman) changing to "نساء" (women) and "فرس" (horse) changing to "خيول" (horses).

While Arabic uses root-and-pattern morphology, it maintains root consonants in partial suppletion but employs entirely different roots in complete suppletion.

## 2. Patterns and Regularity

**English:** Suppletive forms are highly irregular and do not follow predictable patterns, indicating a more varied and less systematic approach.

The irregularities span different grammatical categories, necessitating a higher cognitive load for language users to memorize these forms.

**Arabic:** Suppletion involves significant changes in the root structure, but these changes follow a certain morphological logic within the language.

Despite the irregularities, Arabic's systematic approach aligns with its root-and-pattern morphology, making the connection between singular and plural forms less direct but morphologically consistent.

## 3. Cognitive Processing

**English:** The diversity of suppletive forms across different parts of speech presents challenges in cognitive processing and language learning. English speakers must memorize various irregular forms, which can be cognitively demanding.

**Arabic:** Focusing on nominal morphology in Arabic suppletion requires a different cognitive approach, emphasizing the memorization of root alterations for pluralization. Despite significant root changes, Arabic morphology's systematic nature provides a framework that may aid in the cognitive processing of these forms.

## 4. Linguistic Strategies

**English:** Utilises a mix of complete lexical and partial changes, often unpredictable and needing to be learned individually. The influence of diverse linguistic sources contributes to the variety of suppletive forms.

**Arabic:**

Employs defined but irregular patterns of change, often involving significant alterations in root structures. The root-and-pattern morphology characteristic of Arabic provides a systematic approach to managing these changes.

## 5. Universal Aspects of Language Structure

The comparative analysis indicates that suppletion operates within and across different language systems, illustrating the complexities of morphological evolution in both English and Arabic. Suppletion reflects a more profound, universal aspect of language structure where even irregular forms are systematically integrated and constrained. This detailed exploration of suppletive forms enriches our understanding of the broader linguistic mechanisms governing morphological change in languages, highlighting each language's unique strategies to manage irregularities.

## 4. Conclusion

The findings of this study challenge the notion of suppletion as merely a linguistic anomaly, presenting it instead as a complex but systematic feature shaped by deep-rooted linguistic principles. Both English and Arabic demonstrate that while suppletive forms deviate from the expected morphological processes, they adhere to constraints crucial for linguistic functionality and efficiency. The results and findings from the comparative analysis of English and Arabic suppletion provide valuable insights into the cognitive processes involved in language learning and usage. English's broader range of suppletive forms across various parts of speech contrasts with Arabic's focus

on nominal suppletion and significant root alterations. Understanding these patterns enhances our comprehension of the unique morphological strategies employed by different languages and illustrates the systematic integration of even irregular forms within language. By understanding the principles underlying suppletive forms, linguists can gain deeper insights into language's cognitive and structural aspects, revealing the intricate balance between irregularity and systematic linguistic organization. The results and findings provide a comprehensive view of how suppletive forms function within English and Arabic, highlighting the systematic nature of these forms despite their surface irregularity.

## 5. Recommendations

This study has underscored the significant role of suppletion in understanding the complexities of language morphology. Examining examples from both English and Arabic has demonstrated that suppletive forms, while appearing irregular, adhere to specific patterns and principles that reflect broader universal aspects of language change and development. Despite their surface irregularity, the systematic nature of these forms provides valuable insights into linguistic structure and evolution.

### Recommendations for Further Studies

1. Explore Other Languages: Study suppletive forms in more languages to see if patterns found in English and Arabic are common in other language families.
2. Compare Different Languages: How various languages, including those from different language families, handle suppletion to understand its diversity.
3. Psycholinguistic Research: Conduct experiments to see how native speakers of different languages recognize and process suppletive forms.

4. Historical Analysis: Study the historical development of suppletive forms to understand how they evolved and became stable over time.
5. Integrate into Morphological Theories: Use findings from suppletion studies to improve existing word formation and language structure theories.

### English References

- Abbas. (2003). , *I. The science of morphology. Dar Al-Fikr Al-Arabi.* .١
- Al-Kubais. (2011). *i, A. Studies in Arabic morphology. University of Sharjah .٢ Publications.*
- Awad. (2004). , *F. Principles of the Arabic language: Morphology and .٣ grammar. Dar Al-Ma'arifa.*
- Barbiers. (2007). , *S. Ordinals and quantifiers. .٤*
- Bobaljik. (2012). , *J.. Adjectival gradation: A platform for comparative .٥ reconstruction. Oxford University Press.*
- Bonet. (2012). • , *E., & Harbour, D. Contextual allomorphy. In The morphology .٦ and phonology of exponence . Oxford University Press.*
- Brown. (2004). , *D., Chumakina, M., & Corbett, G. Suppletion across .٧ languages. Oxford University Press.*
- Corbett. (2007). , *G. Patterns of suppletion. In Language universals and .٨ linguistic typology. Oxford University Press.*
- Darwish. (2012). , *M. (). Rules of Arabic morphology. Dar Al-Fikr. .٩*
- Hassan. (2005). , *M. Linguistics: Theories and methods. Dar Al- .١٠ Rafidain Al-Thaqafiyya.*
- Jabr. (2010). , *M. Conjugation in the Arabic language. Dar Al-Kutub Al- .١١ Ilmiyya.*
- Khalil. (2008). , *A. Principles of morphology. Dar Al-Amal. .١٢*

- Mel'čuk. (1994). , I. *Suppletion: Toward a logical analysis of the concept. Studies in Language, 18(2), 339-410.* .١٣
- Postma. (1995). , G. *Zero semantics: A study of the syntactic conception of quantificational meaning. Holland Academic Graphics.* .١٤
- Saeed. (2006). , A. *Verbs in the Arabic language. Maktabat Al-Nahda Al-Misriyya.* .١٥
- Shawqi. (1999). , Y. *Morphological analysis in the Arabic language. Dar Al-Shu'oon Al-Thaqafiyya Al-Aamma.* .١٦
- Veselinova. (2006). , L. N. *Suppletion in verb paradigms: Bits and pieces of the puzzle. John Benjamins Publishing Company.* .١٧
- Younis. (2007). , A. *Fundamentals of Arabic morphology. The Egyptian General Book Organization.*