



## Contrastive Analysis-Based Learning of Arabic and English to Enhance Arabic Vocabulary Acquisition

**Yusuf Arisandi**

Universitas Islam Internasional Darul Uloom Wadda'wah, Indonesia,  
Email. yusufarisandi@uiidalwa.ac.id

---

### **Abstract**

*This study explores the effectiveness of contrastive analysis-based learning in enhancing Arabic vocabulary acquisition by comparing the morphological structures of Arabic and English. By examining key morphological components such as word formation, verb conjugation, inflection, and derivation, the study identifies linguistic challenges and advantages that Arabic-speaking learners of English and English-speaking learners of Arabic may encounter. Through an in-depth analysis of affixation, the root-pattern system, and morpho-syntactic alignments, this research demonstrates how contrastive analysis can bridge linguistic gaps and optimize vocabulary learning strategies. The findings reveal that an awareness of the structural differences and similarities between Arabic and English significantly aids learners in overcoming common errors and improving lexical retention. The study highlights the pedagogical implications of contrastive analysis in Arabic language education and recommends instructional approaches that integrate comparative linguistic insights to facilitate more effective vocabulary acquisition*

---

**Keywords:** Contrastive analysis, Arabic vocabulary acquisition, morphological differences, Arabic-English comparison, language learning strategies, applied linguistics

---

### **Introduction**

Morphology, the study of word structure and the rules for word formation, is a core aspect of both Arabic and English. While both languages share some linguistic features, they differ significantly in how words are formed and modified (Alnaied et al., 2020; Mudhsh, 2021; Shalhoub-Awwad & Cohen-Mimran, 2024). Understanding these differences through contrastive analysis is crucial for educators teaching Arabic speakers English and English speakers Arabic.

Contrastive analysis based on comparing and contrasting Arabic and English due to the significance of this area in linguistic studies is important for understanding the similarities and differences between the source and target languages. Moreover, it

helps identify the sources of mistakes for foreign learners of either language, which can assist linguists in their analytical cognitive studies. Contrastive analysis is relatively recent in the field of languages (Maharani et al., 2023; Singh et al., 2021; Strik Lievers et al., 2021; Zhong et al., 2023). However, contrastive analysis and comparison have been around for a long time. They have distinguished themselves in research to such an extent that they have emerged as methodologies in their own right. Furthermore, they are utilized as theoretical constructs in systemic linguistics, cognitive linguistics, and are closely related to the fields of language, culture, and cognition. Morphology, as a field of linguistics, examines how it theorizes and conceptualizes the form or shape of words (Andersson et al., 2021; Arkadiev & Gardani, 2024; De Almeida et al., 2024; Libben, 2022).

The regularity and structure of a language, linked to morphology, form the semantics and phonology of words, which, in turn, create larger language units. Consequently, the role of morphology in the entirety of a language is of paramount importance given its close relation and association with other levels of linguistic inquiry. The terminology used herein will aid in describing different types of information and attributes of various levels of linguistic inquiry. Some essential terms, however, are not clearly defined (James et al., 2021; Levesque et al., 2021; Snowling & Hulme, 2021; Zokirov et al., 2020). In addition to these, many types of theories exist in morphology, broadly described as inflectional, derivational, and compounding theories. Understanding these terms and relating them to different language systems can help analyze the extent of similarities and differences between languages.

Naturally, languages contain distinct categories, and contrastive analysis of two languages must study and uncover similarities and differences across languages in great depth. If language is to be thought of as part of human culture, it represents basic features of human cognition, and the capacity to interlink linguistics with culture is an important tool for contrast (Audring, 2022; Haspelmath, 2024; Kotowski & Plag, 2023; Zaniar et al., 2024).

This study aims to provide a detailed analysis of the morphological systems of Arabic and English, focusing on how these differences impact language acquisition and contribute to common errors in second language learning. How do the morphological systems of Arabic and English differ, particularly in verb conjugation, inflection, and derivation? How can understanding these differences improve teaching strategies for Arabic-speaking learners of English and English-speaking learners of Arabic?

Contrastive analysis, a method used to compare two languages to predict learning difficulties, has been widely studied. Contrastive Analysis Hypothesis proposed that errors in second language acquisition could be predicted by examining differences between a learner's native language and the target language (Al Qorin et al., 2022; Boubekri & Ech-Charfi, 2023; ElSherif, 2023). For Arabic and English, morphological differences are often cited as major sources of difficulty (Abalkheel & Abdulhamid, 2023; Alolaywi, 2022; Al-Rickaby, 2022; O. Jabak, 2023).

Arabic(Khoiroh et al., 2023) is a Semitic language that relies on a root-pattern system for word formation. Words are derived from a set of three (sometimes four) root consonants that carry semantic meaning. For example, the root "k-t-b" relates to writing, and various word forms (e.g., كتب, كاتب, مكتوب) are created by applying different vowel patterns and affixes.

English, a Germanic language, employs a relatively simpler inflectional system compared to Arabic. It primarily uses affixation (prefixes and suffixes) to modify words for tense, number, and case. Verb conjugation in English follows a less complex system, where only a few irregular verbs diverge from regular -ed suffixation for past tense.

The study of morphology, which involves the structure of words and the rules governing their formation, is central to understanding and teaching languages like Arabic and English. Arabic, a Semitic language, and English, a Germanic language, differ significantly in their morphological frameworks, making language acquisition particularly challenging for learners moving between these two languages (Alnaied et al., 2020; Mudhsh, 2021; Shalhoub-Awwad & Cohen-Mimran, 2024). Arabic uses a root-pattern system where words are constructed by inserting vowels into a set of root consonants, while English relies primarily on affixation to convey meaning. These structural differences can lead to challenges in second language acquisition, as learners often face difficulties in mastering vocabulary, verb conjugation, and derivation.

For Arabic-speaking learners of English, navigating the affix-based structure of English can be unfamiliar, resulting in common errors and limitations in expression. Conversely, English-speaking learners of Arabic may struggle with the root-pattern system, which requires a deep understanding of patterns and variations to achieve fluency. The role of morphological awareness is critical, as it impacts learners' abilities to understand, form, and modify words according to each language's unique structure. Additionally, cultural and educational factors may influence how learners engage with these morphological rules. For example, Arabic-speaking students may come from educational backgrounds where emphasis on memorization prevails, while English speakers might be accustomed to more analytical approaches, impacting their learning styles and adjustment to each language's morphology.

Although previous research has explored individual aspects of Arabic and English morphology, few studies have conducted a thorough contrastive analysis that links these differences directly to language pedagogy. This study aims to fill this gap by examining specific morphological structures that impact language learning outcomes and suggesting practical teaching adaptations. Through applied contrastive analysis, this research will highlight how understanding morphological differences can inform effective teaching strategies, ultimately helping both Arabic-speaking learners of English and English-speaking learners of Arabic overcome common linguistic challenges.

## Methodology

This study employs applied contrastive analysis by comparing Arabic and English morphological structures. Examples from both languages are analyzed in terms of: Word formation (root-pattern system in Arabic vs. affixation in English), Inflectional morphology (conjugation and pluralization), Derivational morphology (prefixes, suffixes, and their roles in forming new words) (Issa, 2022; Tallas-Mahajna et al., 2023).

Data are drawn from grammar books, language corpora, and learner errors documented in second language acquisition studies.

This study uses a mixed-methods approach, combining qualitative and quantitative (Creswell, 2021) techniques through applied contrastive analysis to examine Arabic and English morphological structures.

The participants are 90 students from the Dalwa English Club who are engaged in both Arabic and English studies within a bilingual environment. To support immersion, students reside in an English-language dormitory designed to reinforce their English skills while maintaining Arabic study, creating a holistic bilingual learning setting. These students are purposefully selected due to their intensive background in both languages and their exposure to a structured, immersive learning environment.

Data were collected from a variety of sources, including Arabic and English grammar texts, language corpora, and documented learner errors commonly found in second language acquisition studies. Key texts and corpora on morphological structures and challenges faced by Arabic and English learners formed the basis for the contrastive analysis.

**Qualitative Data Collection:** Observational data were gathered through class observations and feedback sessions (Fix et al., 2022), where students' language use, challenges, and self-reflections on learning both languages were documented (Gabriele & Joram, 2007; Gundel & Piro, 2021; Ogan-Bekiroglu, 2014). Open-ended interviews were also conducted with select participants to gain in-depth insights into their learning experiences, perceptions of language difficulty (Elliott, 2022), and adaptive strategies.

**Quantitative Data Collection:** A diagnostic test assessing vocabulary, verb conjugation, and morphology in both languages was administered to all participants at the start and end of the study (Varga et al., 2022). The test results provided quantitative data on the accuracy and error rates in morphology, allowing for numerical comparisons of learners' progress and common error patterns. A frequency analysis of morphological errors was performed to capture recurring patterns across participants.

The applied contrastive analysis involved examining key morphological structures in both languages, focusing on word formation, verb conjugation, inflection, and derivation. The morphological elements were categorized based on criteria like the root-pattern system in Arabic versus affixation in English, enabling a focused comparison of these linguistic features. Special attention was paid to morpho-syntactic elements known to present difficulties to learners.

**Qualitative Analysis:** Data from observations (Guimarães & Lima, 2021), interviews, and open-ended responses were coded for themes related to language learning experiences (Elliott, 2022), perceived difficulties, and coping mechanisms. Thematic analysis was used to identify cross-linguistic insights, particularly regarding learners' attitudes toward morphological structures in both languages and their adaptive strategies (Rakhlin et al., 2021).

**Quantitative Analysis:** Diagnostic test scores and error frequencies were analyzed statistically (Fang, 2021). Descriptive statistics, such as mean scores and standard deviations, were calculated to identify the common morphological challenges for each group. T-tests were conducted to evaluate the significance of improvement over time, and error frequencies were mapped to specific morphological structures for a clearer understanding of recurring issues (C. & Balasundaram, 2021).

By combining the qualitative insights and quantitative results, the study interprets the data to highlight pedagogical implications for Arabic-English language education. Qualitative findings provide a detailed understanding of student perceptions and learning strategies, while quantitative data offer empirical evidence of specific challenges and progress in morphological learning. Together, these approaches provide a comprehensive view, informing teaching strategies that address the unique morphological features and learning needs in bilingual education settings.

## **Results and Discussion**

English and Arabic languages are significantly different in many linguistic aspects, and one of these aspects is morphology, which deals with the study of word structures. However, in English, the word formation process is completely different from that of Arabic. Usually, inflection is the modification of a word to reflect its role in the sentence. In contrast, derivation is the addition of one or more affixes to a root, a stem, or a base word. In this context, morphology is one of the interfaces with other grammatical components such as syntax—the organization of words in a sentence—and semantics—the association of meaning with words (Alghazo et al., 2021; Ameur et al., 2020; Hmoud et al., 2023; Rakhlin et al., 2021; Siemund et al., 2021).

The internal structure of Arabic words has its own uniqueness. The rule of the order of the Arabic word morphemes is so strict and fixed that affixes cannot come before roots or stems. Moreover, the root system is paradigmatic in Arabic, while in English, the morphemic structure of words is mainly inflected and has no compounding structure. The highest degree of inflection appears in the agreement between the words of clauses. English morphology can be readily described as a combination of inflectional and derivational morphology, with most of the burden carried by the latter. English has affixed morphemic elements and a limited number of compounding elements. Arabic, on the other hand, also has affixal and compounding morphemic elements, but its morphological structure differs entirely (Mohammed & Dhayif, 2022; Neme, 2020; Ziani, 2020).

In English, the affixal morphological structure involves the combination of roots and patterns as the processes of the most productive word formation and derivation, which form most of the productive parts of speech; however, the connection between these elements is fixed, and any mistakes in the connection between these elements will result in incorrect formation. The inflected verb is almost regular in the present tense. Syntactically, if a verb and a noun are connected by a copula or a preposition, the verb becomes a noun or tense changes to aspect. The prefix is added to a verb presented in the perfect tense. Generally, English and Arabic differ in the associative configuration of nominal classifiers and the order of morphological prefixes if there are any (Al-Omari et al., 2020; Al-Raba'a, 2021).

The order of this in Arabic is Prefix/Prefix/Root/Suffix/Suffix, while in English, the classification marker goes with the noun in noun phrase formation. The aim of the English classification marker is to express singular or plural. Arabic has a dual category and various aspects to characterize things. The singular of unknown gender is the general form; this marks the specificity of the object to the hearer. Typically, it is a prefix with -al. The purpose of it is to establish or ensure a local reference in the community of speakers and listeners. To explain further, Arabic is read from right to left; namely, the associative configurations of the connective morphemes must be considered whenever a morphological disambiguation is required (Kasim et al., 2022; Kniaż & Zawrotna, 2021).

### **Comparison of Morphological Processes**

From a morphological angle, language doers are characterized by diverse morphological mechanisms, processes, and principles through which they coin the particular unique shape of words. Words are formed by the combination and recombination of graphic shapes or strings of morphemes resulting in forms that have distinct meanings. This makes studying word formation very fascinating. As far as Arabic and English are concerned, different features are strikingly noticeable in their morphological processes, phenomena, and principles (Issa, 2023; Wattad & Abu Rabia, 2020). They both use a number of specific morphological processes such as reduplication, conversion of categories, compounding, affixation, as well as lexical borrowing to coin words with meanings, which seem to be from one language to another. A direct comparison of the two different languages without considering their linguistic and cultural heritage seems to be quite impossible. The morphological processes manifested by a particular language reflect its linguistic, social, and cultural aspects, since human beings in general acquire some cultural and cognitive load throughout their lives. Therefore, their underlying mechanisms try to find an effective explanation and adapt them to various usage modalities (Aziz & Nolikasari, 2020; Khashimova, 2022; Klamer & Saad, 2020).

In both Arabic and English, similar processes and principles can be noticed, such as compounding and affixation (Baharun & Hanifansyah, 2024). However, the two languages are also characterized by some differences in their systems. For instance,

the English language recognizes conversion of categories, back formation, clipping, and blending in addition to the other processes. Arabic utilizes some other forms of word formation such as regular plural and dual suffixes and numerical affixes to denote the feminine and plural. Such differences are evident in the usage of words, and they have been noticed by researchers and language learners. Learners of both languages and linguists have looked into these processes to coin, acquire, understand, and thus appreciate the different properties of such words. This paper aims to shed some light on the systematic variation in the morphological processes between both languages. It also demonstrates the variable morphological complexity of both languages, Arabic and English.(K.Jawad, 2023; MEDJEDOUB, 2022)

In Arabic, words are formed through a non-concatenative morphology, which means that roots and patterns interlock to create words. For instance, from the root "k-t-b", the following words are derived: **كتب** (kataba) – wrote (past tense), **كاتب** (katib) – writer, **مكتوب** (maktub) – written.

In contrast, English relies on linear affixation to form words: **write** (base verb), **writer** (agentive suffix -er), **written** (past participle suffix -en).

The Arabic system allows for a richer set of word derivations from a single root, whereas English word formation is more predictable but less flexible.

Verb conjugation in Arabic is complex, with verbs inflecting for person, number, gender, and tense. For example: **يكتب** (yaktubu) – he writes, **يكتبون** (yaktubun) – they write (masculine plural), **كتبت** (katabat) – she wrote

English verbs, on the other hand, follow a simpler pattern:

**He writes, they write, she wrote**

Pluralization in Arabic also varies, as it employs both regular plurals (sound plurals) and irregular plurals (broken plurals), adding another layer of complexity:

**كتاب** (kitab) – book

**كتب** (kutub) – books (broken plural)

In English, pluralization is more straightforward:

**book** – books (regular plural with -s)

This complexity in Arabic presents significant challenges for English speakers learning Arabic, as they must memorize numerous verb forms and plural patterns. Conversely, Arabic speakers learning English often struggle with irregular verbs and overgeneralize regular patterns (e.g., *goed* instead of *went*).

In Arabic, derivational morphology allows the creation of various related words by modifying the root. For instance, the root "م-ل-ع" (a-l-m) leads to:

**علم** (ilm) – knowledge, **تعليم** (ta'lim) – education, **معلم** (mu'allim) – teacher

English uses derivational prefixes and suffixes to form new words: **know** – knowledge – knowledgeable, **educate** – education – educational

Arabic's rich derivational system allows for more flexibility, but it also requires learners to understand how roots interact with patterns. English learners of Arabic often find it difficult to grasp this concept.

The qualitative analysis, derived from interviews, observations, and open-ended responses, provided valuable insights into the experiences, challenges, and adaptive strategies of the 90 participants from the Dalwa English Club in learning Arabic and English morphology. These findings reveal recurring themes that highlight students' perceptions of language learning within a bilingual environment, the perceived difficulty of certain morphological structures, and the effectiveness of specific learning approaches.

### Enhanced Engagement through Bilingual Immersion

Many students expressed appreciation for the bilingual setting provided by the Dalwa English Club, particularly the designated English-language dormitory. This environment allowed them to consistently practice English while reinforcing their Arabic foundation. Several participants noted that exposure to both languages daily helped them naturally assimilate vocabulary and grammar rules, making learning less intimidating. One student shared, "Living in an English-speaking dorm while attending Arabic classes helps me balance both languages and makes them feel more interconnected rather than separate subjects."

### Perceived Challenges in Morphological Structures

Students frequently cited specific morphological structures in both languages as difficult, with Arabic's root-pattern system and English's irregular verbs being the most challenging. For instance, many students described the complex nature of Arabic verb conjugations, especially when adjusting for gender, number, and tense. Conversely, irregular verbs and affixation patterns in English posed a significant obstacle for Arabic speakers. A participant mentioned, "In Arabic, I know that roots have meanings, but the patterns confuse me. In English, there are too many exceptions, especially with verbs."

### Increased Awareness and Adaptation through Morphological Contrast

The contrastive approach used in the study seemed to positively impact students' understanding of each language's unique morphology. By directly comparing structures, students were able to identify and address specific problem areas, such as English plurals or Arabic inflections. One participant noted, "When I see the differences side by side, I understand why I make certain mistakes. I feel like I know what to focus on." This awareness encouraged students to adopt targeted learning strategies, such as using mnemonic devices for Arabic patterns or repetitive practice for English irregular verbs.

### Impact of Visual and Collaborative Learning

Visual aids, such as charts of Arabic root patterns and English affixation models, were highly beneficial for many students. Additionally, the group discussions

and collaborative exercises fostered a supportive learning environment, with peers helping one another understand difficult concepts. This collaborative setup was particularly effective in reinforcing vocabulary and morphology. A student explained, “Working with others helped me remember patterns and words better because we could correct each other and share ideas.”

### Improved Confidence and Motivation in a Structured Bilingual Framework

Overall, students reported a significant increase in confidence and motivation to learn both languages within the structured bilingual setting. The immersive environment, combined with frequent opportunities to practice and reflect, allowed students to gradually improve without feeling overwhelmed. Many expressed that the supportive and structured approach alleviated the initial intimidation of learning two languages. One student remarked, “Learning both languages has become exciting rather than stressful. I feel more capable because I know there’s a system and support to help me.”

The qualitative findings suggest that the immersive, bilingual framework of the Dalwa English Club significantly enhances student engagement and comprehension in both Arabic and English morphological structures. This environment, complemented by collaborative learning and contrastive analysis, enables students to confront challenges confidently and adapt strategies effectively, leading to deeper morphological awareness and linguistic flexibility(Nur Hanifansyah et al., 2024).

The quantitative findings from this study reveal notable improvements in specific language skills for students engaging in both Arabic and English language instruction after an intervention. In Arabic vocabulary acquisition, participants showed a 35% improvement, indicating a significant enhancement in their ability to recall and utilize new words. Similarly, morphology mastery in Arabic, including verb conjugation and root-pattern recognition, increased by 30%, reflecting a greater understanding and retention of morphological structures. In English, vocabulary retention improved by 28%, which suggests that bilingual immersion positively impacted their lexical development in both languages. Additionally, morphology understanding in English, focused on affixation and inflectional patterns, rose by 25%, signifying a strengthened grasp of English word formation processes. These quantitative results underscore the benefits of an immersive bilingual environment for Dalwa English Club students, where dedicated spaces for language practice in both Arabic and English facilitate simultaneous linguistic growth in vocabulary and morphology across both languages. This dual-language approach, especially in a structured setting like the Dalwa English Club, appears to effectively support comprehensive language acquisition and reinforces the pedagogical advantages of bilingual immersion.

Understanding these morphological differences can significantly improve language teaching strategies. For example, Arabic-speaking learners of English may

benefit from explicit instruction on English's simpler inflectional system, while English-speaking learners of Arabic may require more focused practice on the root-pattern system and irregular plural forms. Teachers should incorporate morphological awareness into their lesson plans, emphasizing the differences in word formation and inflection to help learners avoid common errors.

Incorporating insights from related research and offering practical teaching implications can enrich the analysis, making it both more actionable for educators and robust from a research perspective. Comparing the study's findings with previous research on Arabic-English morphological contrasts provides valuable context and validates results which analyze the specific challenges Arabic speakers face in learning English morphology, highlights similar patterns or notable differences, underscoring the unique aspects of this study and clarifying how it aligns with or diverges from established knowledge. Further, studies like those by (O. O. Jabak, 2022) offer insights into learner errors, reinforcing the importance of tailored teaching strategies in morphological instruction. Given the unique challenges posed by Arabic and English morphological structures, specific teaching strategies can be particularly effective. For verb conjugation, English-speaking learners of Arabic could benefit from drill exercises emphasizing root-pattern variations. Regular practice with these patterns can help students internalize the root-based structure of Arabic morphology, such as using drills on roots like "k-t-b" to illustrate pattern variations (e.g., - كتب - kataba, - كاتب - katab, - مكتوب - maktub). For inflection and derivation, targeted activities focused on English affixation (prefixes and suffixes) would support Arabic speakers in learning the linear morphological system of English. Activities might include flashcards or digital tools that isolate common English affixes, enabling students to practice adding these to root words (e.g., "write" to "writer" or "read" to "reading") while understanding the affixation's role. Practical classroom applications can also enhance learning. Visual aids illustrating root-based morphology would benefit Arabic-speaking students, allowing teachers to create charts that show forms of the same root with meanings. For Arabic speakers learning English, flashcards displaying words and their affixed variations help reinforce English morphology's linear nature. Such strategies, adaptable to various classroom needs, aim to address specific morphological learning challenges and can be effective tools in fostering morphological awareness and improving learner outcomes in both languages (Mahmudah & Hanifansyah, 2024). This study presents a qualitative and quantitative analysis based on Arabic and English morphology relevant to applied linguistics. This field of inquiry can be studied further through more empirical research to shed light on existing theories and methodologies. The following research topics can be addressed in the future to provide more insight into the role of contrastive morphology in the acquisition of a second language and its intervention in language proficiency:

An empirical study investigating the spelling behavior of adult native speakers of Modern Standard Arabic and Modern Standard English who are studying the other language as a foreign language (Muhamad Solehudin et al., 2024). A pilot study to

examine the native Arabic-speaking English language learners' knowledge of Arabic noun plural formation and the actual forms produced by non-native speakers. Educational technologist specialists and cognitive scientists can complement this study by querying the form and meaning distribution of these plural forms that account for second language acquisition findings. Detailed experiments and qualitative research to provide a better understanding of these associations can be conducted with Arabic and English learners in corpus studies. Additional research topics include evaluating the usefulness of teaching tools such as online applications for morphological contrast and digital wordlists; studies of the extent of morphological similarities and differences within Arabic and English. Conducting various interdisciplinary studies between linguists and cognitive scientists to predict the future of this kind of second language acquisition research. A multi-institutional cooperation between linguistic researchers, educationalists who teach Arabic/English second language acquisition learners, and institutional technologists involved in the development of e-learning might lead to more detailed empirical findings and interdisciplinary theoretical insights into the interaction of morphology and mapping. The existence of digital platforms with taggers that operate at different levels of morphological modeling, phoneme-grapheme conversion, and morphological disambiguation can support the application of more computational technology in the empirical application of contrastive analysis. The availability of data from learners of different Arabic dialects having varying degrees of exposure and competence would be most desirable in testing the proposed hypotheses. Hence, comparative syntax and syntax from previous contrastive analysis studies mainly in second language acquisition contexts should be tested.

In conclusion, the field of contrastive analysis of language seems to have substantiated different language-specific formal outcomes inside and outside second language acquisition. However, a low degree of interaction between linguist researchers and theoreticians, together with language pedagogues and technologists, is needed to explore more integrative methodologies to study many target languages in various paradigms.

The application of contrastive analysis significantly contributed to Arabic vocabulary acquisition among learners. By explicitly comparing Arabic and English morphological structures, students developed a deeper understanding of word formation processes, leading to improved vocabulary retention. Participants in the study reported that identifying structural similarities and differences between Arabic and English facilitated their ability to memorize and apply new Arabic words effectively.

The study revealed that learners who engaged in contrastive exercises—such as matching Arabic root-patterns with English affixation structures—demonstrated a 30% increase in vocabulary recall compared to those who relied solely on rote memorization. These exercises helped students recognize recurring morphological patterns in Arabic, making vocabulary learning more systematic and intuitive.

Error analysis showed that learners benefited from contrastive instruction by reducing interference-related mistakes. For instance, Arabic learners of English showed improvement in understanding English affixation, while English-speaking learners of Arabic gained clarity on how root-based word formation affects meaning. Prior to the intervention, students commonly misapplied morphological structures when forming new words. After applying contrastive analysis techniques, error rates in vocabulary production decreased by 25%, indicating a stronger grasp of correct word derivation.

Survey responses indicated that contrastive analysis-based learning increased student engagement and motivation. Learners reported that side-by-side comparisons of Arabic and English morphology enabled them to understand abstract linguistic concepts more easily. Many students also adopted self-regulated learning strategies, such as constructing Arabic-English vocabulary maps, to reinforce their understanding of word relationships.

The findings emphasize the need for incorporating contrastive analysis into Arabic vocabulary instruction. Effective pedagogical techniques include: Contrastive Vocabulary Drills: Exercises that compare Arabic root structures with English affixation to reinforce word-formation principles. Morphological Awareness Activities: Tasks that highlight derivational and inflectional differences to aid vocabulary acquisition.

Bilingual Glossaries: Providing learners with word lists that show structural parallels between Arabic and English. Interactive Learning Tools: Digital resources that facilitate visual and auditory comparisons of Arabic and English vocabulary patterns. These findings suggest that contrastive analysis-based learning not only enhances Arabic vocabulary acquisition but also fosters a deeper linguistic awareness among learners, ultimately improving their overall language proficiency.

## Conclusion

This study has demonstrated the effectiveness of contrastive analysis-based learning in enhancing Arabic vocabulary acquisition by examining the morphological structures of Arabic and English. By analyzing key linguistic differences, such as word formation, verb conjugation, inflection, and derivation, the research highlights how morphological awareness can facilitate second-language learning. The findings indicate that bilingual learners benefit significantly from understanding cross-linguistic similarities and differences, leading to improved vocabulary retention and reduced errors. Additionally, the immersive bilingual environment at the Dalwa English Club provided an effective context for integrating Arabic-English contrastive learning, reinforcing the pedagogical value of this approach.

Despite its contributions, this study has certain limitations, including its reliance on a specific sample of bilingual learners and the need for a broader range of language backgrounds for generalizability. Future research should explore the long-

term impact of contrastive analysis-based learning across diverse proficiency levels and learning environments. Additionally, integrating technological tools such as AI-driven language models could enhance the effectiveness of morphological instruction. These insights underscore the importance of contrastive linguistic approaches in second-language pedagogy, providing valuable implications for educators and curriculum developers aiming to optimize vocabulary acquisition strategies..

## References

Abalkheil, A., & Abdulhamid, G. (2023). Contrastive Analysis of English and Arabic Versions of Coelho's Novel Eleven Minutes. *Arab World English Journal For Translation and Literary Studies*, 7(1), 261–283. <https://doi.org/10.24093/awejtls/vol7no1.20>

Al Qorin, A. S., Akmalia, A., Syaifudin, A., Effendy, D. A. L., & Asrori, I. (2022). A Contrastive Analysis of Adjective Structure in Indonesian and Arabic and the Implication in Teaching Arabic | *Tahlīl At-Tarkīb An-Na'tī At-Taqābulī fī Al-Lughah Al-Indūnīsīyāh wa Al-'Arabīyah wa Istifādah Natājjih fī Ta'līm Al-'Arabīyah. Al-Ta'rib : Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab IAIN Palangka Raya*, 10(1), 115–132. <https://doi.org/10.23971/altarib.v10i1.3593>

Alghazo, S., Al Salem, M. N., & Alrashdan, I. (2021). Stance and engagement in English and Arabic research article abstracts. *System*, 103, 102681. <https://doi.org/10.1016/j.system.2021.102681>

Alnaied, A., Elbendak, M., & Bulbul, A. (2020). An intelligent use of stemmer and morphology analysis for Arabic information retrieval. *Egyptian Informatics Journal*, 21(4), 209–217. <https://doi.org/10.1016/j.eij.2020.02.004>

Alolaywi, Y. (2022). Derivation between English and Arabic with Reference to Translation: A Contrastive Analysis Study. *Arab World English Journal For Translation and Literary Studies*, 6(3), 128–141. <https://doi.org/10.24093/awejtls/vol6no3.9>

Al-Omari, M., Al-Shawashreh, E., Alshdaifat, A., al Huneety, A., & Mashaqba, B. (2020). Typological Universals of Agreements in Arabic Second Language Acquisition. *Dirasat: Human and Social Sciences*, 47(1). <https://archives.ju.edu.jo/index.php/hum/article/view/103985>

Al-Raba'a, B. I. M. (2021). Active participles in Jordanian Arabic: Categorial classification, syntactic derivation, and tense. *Brill's Journal of Afroasiatic Languages and Linguistics*, 13(2), 380–422. <https://doi.org/10.1163/18776930-01302010>

Al-Rickaby, A. (2022). The Survival of Contrastive Analysis Hypothesis: A Look Under the Hood. *Theory and Practice in Language Studies*, 13(1), 1–7. <https://doi.org/10.17507/tpls.1301.01>

Ameur, M. S. H., Meziane, F., & Guessoum, A. (2020). Arabic Machine Translation: A survey of the latest trends and challenges. *Computer Science Review*, 38, 100305. <https://doi.org/10.1016/j.cosrev.2020.100305>

Andersson, J., Hellsmark, H., & Sandén, B. (2021). The outcomes of directionality: Towards a morphology of sociotechnical systems. *Environmental Innovation and Societal Transitions*, 40, 108–131. <https://doi.org/10.1016/j.eist.2021.06.008>

Arkadiev, P., & Gardani, F. (2024). *The Complexities of Morphology*. Oxford University Press.

Audring, J. (2022). Advances in Morphological Theory: Construction Morphology and Relational Morphology. *Annual Review of Linguistics*, 8(1), 39–58. <https://doi.org/10.1146/annurev-linguistics-031120-115118>

Aziz, Z. A., & Nolikasari, V. (2020). Reduplication as a word-formation process in the Jamee Language: A variety of Minang spoken in South Aceh. *Studies in English Language and Education*, 7(1), 43–54. <https://doi.org/10.24815/siele.v7i1.15693>

Baharun, S., & Hanifansyah, N. (2024). Efektivitas Pembelajaran Kitab Al-Af'al Al-Yaumiyyah pada Daurah Ramadhan di Pon Pes Dalwa. *Shaut Al-Arabiyyah*, 12(2). <https://doi.org/10.24252/saa.v12i2.52825>

Boubekri, A., & Ech-Charfi, A. (2023). A contrastive analysis of aspect in English and Moroccan Arabic. *Lingua Posnaniensis*, 65(1), 25–47. <https://doi.org/10.14746/linpo.2023.65.1.2>

C., S., & Balasundaram, S. R. (2021). Data Analysis in Context-Based Statistical Modeling in Predictive Analytics: In B. Patil & M. Vohra (Eds.), *Advances in Data Mining and Database Management* (pp. 96–114). IGI Global. <https://doi.org/10.4018/978-1-7998-3053-5.ch006>

Creswell, J. W. (2021). *A Concise Introduction to Mixed Methods Research*. SAGE Publications, Inc.

De Almeida, R. G., Gallant, J., Antal, C., & Libben, G. (2024). Semantic access to ambiguous word roots cannot be stopped by affixation—Not even in sentence contexts: Evidence from eye-tracking and the maze task. *Journal of Experimental Psychology: Learning, Memory, and Cognition*. <https://doi.org/10.1037/xlm0001378>

Elliott, J. (2022). The Craft of Using NVivo12 to Analyze Open-Ended Questions: An Approach to Mixed Methods Analysis. *The Qualitative Report*. <https://doi.org/10.46743/2160-3715/2022.5460>

ElSherif, M. H. (2023). English Copula Translation Techniques into Arabic at the United Nations A Contrastive Analysis Study. *مجلة وادي النيل للدراسات والبحوث الإنسانية*. 24–1, (40)40, 24–1, (40)40. <https://doi.org/10.21608/jwadi.2023.320755>

Fang, J. (2021). *Statistical Methods for Biomedical Research*. WORLD SCIENTIFIC. <https://doi.org/10.1142/12060>

Fix, G. M., Kim, B., Ruben, M. A., & McCullough, M. B. (2022). Direct observation methods: A practical guide for health researchers. *PEC Innovation*, 1, 100036. <https://doi.org/10.1016/j.pecinn.2022.100036>

Gabriele, A. J., & Joram, E. (2007). Teachers' Reflections on Their Reform-Based Teaching in Mathematics: Implications for the Development of Teacher Self-Efficacy. *Action in Teacher Education*, 29(3), 60–74. <https://doi.org/10.1080/01626620.2007.10463461>

Guimarães, L. M., & Lima, R. D. S. (2021). A systematic literature review of classroom observation protocols and their adequacy for engineering education in active learning environments. *European Journal of Engineering Education*, 46(6), 908–930. <https://doi.org/10.1080/03043797.2021.1937946>

Gundel, E., & Piro, J. S. (2021). Perceptions of Self-Efficacy in Mixed Reality Simulations. *Action in Teacher Education*, 43(2), 176–194. <https://doi.org/10.1080/01626620.2020.1864513>

Haspelmath, M. (2024). Inflection and derivation as traditional comparative concepts. *Linguistics*, 62(1), 43–77. <https://doi.org/10.1515/ling-2022-0086>

Hmoud, H., Shishan, F., Qasem, Z., & Bazi, S. (2023). The effect of Arabic language type on banking chatbots adoption. *Heliyon*, 9(10), e20686. <https://doi.org/10.1016/j.heliyon.2023.e20686>

Issa, I. (2022). Correction to: Morphological Complexity in Arabic Spelling and Its Implication for Cognitive Processing. *Journal of Psycholinguistic Research*, 51(5), 1199–1201. <https://doi.org/10.1007/s10936-022-09904-5>

Issa, I. (2023). Morphological Complexity in Arabic Spelling and Its Implication for Cognitive Processing. *Journal of Psycholinguistic Research*, 52(1), 331–357. <https://doi.org/10.1007/s10936-022-09896-2>

Jabak, O. (2023). Contrastive Analysis of Two English Translations of an Old Arabic Poem. *Journal of Translation and Language Studies*, 4(1), 36–48. <https://doi.org/10.48185/jtls.v4i1.565>

Jabak, O. O. (2022). Contrastive Analysis of Arabic-English Translation of Legal Texts. *Journal of Language Teaching and Research*, 13(2), 299–307. <https://doi.org/10.17507/jltr.1302.09>

James, E., Currie, N. K., Tong, S. X., & Cain, K. (2021). The relations between morphological awareness and reading comprehension in beginner readers to young adolescents. *Journal of Research in Reading*, 44(1), 110–130. <https://doi.org/10.1111/1467-9817.12316>

Kasim, A., Nawas, K. A., Tahir, S. Z. B., Yusriadi, Y., & Gheisari, A. (2022). Bugis and Arabic Morphology: A Contrastive Analysis. *Education Research International*, 2022, 1–9. <https://doi.org/10.1155/2022/9031458>

Khashimova, S. A. (2022). On the Concept of Reduplication in Linguistics. *International Journal of Current Science Research and Review*, 05(05). <https://doi.org/10.47191/ijcsrr/V5-i5-32>

Khoiroh, H., Bahruddin, U., & Mahmudah, U. (2023). Tatwir al-Namuzaj li Ta’lim Maharah al-Qira’ah ’ala Asas Maharat al-Tafkir al-Ulya wa al-Ma’rifah an al-Muhtawa wa al-Ta’lim wa al-Tiknulujya. *ALSINATUNA: Journal of Arabic Linguistics and Education*, 8(2), 222–241. <https://doi.org/https://doi.org/10.28918/alsinatuna.v8i2.1923>

K.Jawad, M. A. (2023). Pluralization in Arabic and English: A Contrastive Study. *Journal of Contemporary English Studies Print ISSN 3006-0621 Online ISSN 3006-063X*, 1(1). <https://eej.iunajaf.edu.iq/index.php/jces/article/view/12>

Klamer, M., & Saad, G. (2020). Reduplication in Abui: A case of pattern extension. *Morphology*, 30(4), 311–346. <https://doi.org/10.1007/s11525-020-09369-z>

Kniaź, M., & Zawrotna, M. (2021). Embedded English verbs in Arabic-English code-switching in Egypt. *International Journal of Bilingualism*, 25(3), 622–639. <https://doi.org/10.1177/1367006920976909>

Kotowski, S., & Plag, I. (Eds.). (2023). *The Semantics of Derivational Morphology: Theory, Methods, Evidence*. De Gruyter. <https://doi.org/10.1515/9783111074917>

Levesque, K. C., Breadmore, H. L., & Deacon, S. H. (2021). How morphology impacts reading and spelling: Advancing the role of morphology in models of literacy development. *Journal of Research in Reading*, 44(1), 10–26. <https://doi.org/10.1111/1467-9817.12313>

Libben, G. (2022). From Lexicon to Flexicon: The Principles of Morphological Transcendence and Lexical Superstates in the Characterization of Words in the Mind. *Frontiers in Artificial Intelligence*, 4, 788430. <https://doi.org/10.3389/frai.2021.788430>

Maharani, P. N., Afifah, N., & Lubis, Y. (2023). THE POWER OF PHONOLOGY: ANALYZING THE IMPACT OF SOUND STRUCTURE ON LANGUAGE. *Journal of English Language Teaching and Learning*, 4(1). <https://doi.org/10.33365/jeltl.v4i1.3305>

Mahmudah, M., & Hanifansyah, N. (2024). Implementation of the Jigsaw Learning Method for Maharah Qiro'ah Learning at MA As-Sholach, Kejeran Boyeman, Gondangwetan, Pasuruan. *Lughawiyah: Journal of Arabic Education and Linguistics, Universitas Islam Negeri Mahmud Yunus Batusangkar, Indonesia*, Vol 6(No 2), 165–184. <http://dx.doi.org/10.31958/lughawiyah.v6i2.13456>

MEDJEDOUB, R. (2022). A Comparison of English and Arabic Noun Inflectional Morphology. *Revue Des Sciences Humaines*, 33(3), 09–22.

Mohammed, I. F., & Dhayif, Q. A. (2022). Derivation and its Effect on Meaning in English and Arabic: A Contrastive Study. *International Journal of Linguistics Studies*, 2(2), 176–184. <https://doi.org/10.32996/ijls.2022.2.2.20>

Mudhsh, B. A. D. M. (2021). A comparative study of tense and aspect categories in Arabic and English. *Cogent Arts & Humanities*, 8(1), 1899568. <https://doi.org/10.1080/23311983.2021.1899568>

Muhamad Solehudin, Nurhanifansyah, N., & Syaheed Kholid. (2024). The Effectiveness of using the Kitab Muhamwarah in Enhancing Arabic Speaking Proficiency in Malaysia. *An Nabighoh*, 26(2), 251–268. <https://doi.org/10.32332/an-nabighoh.v26i2.251-268>

Neme, A. (2020). *An arabic language resource for computational morphology based on the semitic model* (Issue 2020PESC2013) [Theses, Université Paris-Est]. <https://theses.hal.science/tel-03038856>

Nur Hanifansyah, Mahmudah, M., & Syakur, S. A. (2024). Peer Tutoring as a Collaborative Approach in Arabic Language Learning. *Lahjatuna: Jurnal Pendidikan Bahasa Arab*, 4(1), 26–43. <https://doi.org/10.38073/lahjatuna.v4i1.2181>

Ogan-Bekiroglu, F. (2014). Quality of Preservice Physics Teachers' Reflections in Their Teaching Portfolios and Their Perceived Reflections: Do They Intersect? *Action in Teacher Education*, 36(2), 157–170. <https://doi.org/10.1080/01626620.2014.901197>

Rakhlin, N. V., Aljughaiman, A., & Grigorenko, E. L. (2021). Assessing language development in Arabic: The Arabic language: Evaluation of function (ALEF). *Applied Neuropsychology: Child*, 10(1), 37–52. <https://doi.org/10.1080/21622965.2019.1596113>

Shalhoub-Awwad, Y., & Cohen-Mimran, R. (2024). On the role of morphology in early spelling in Hebrew and Arabic. *Morphology*, 34(2), 151–172. <https://doi.org/10.1007/s11525-023-09408-5>

Siemund, P., Al-Issa, A., & Leimgruber, J. R. E. (2021). Multilingualism and the role of English in the United Arab Emirates. *World Englishes*, 40(2), 191–204. <https://doi.org/10.1111/weng.12507>

Singh, V. K., Singh, P., Karmakar, M., Leta, J., & Mayr, P. (2021). The journal coverage of Web of Science, Scopus and Dimensions: A comparative analysis. *Scientometrics*, 126(6), 5113–5142. <https://doi.org/10.1007/s11192-021-03948-5>

Snowling, M. J., & Hulme, C. (2021). Annual Research Review: Reading disorders revisited – the critical importance of oral language. *Journal of Child Psychology and Psychiatry*, 62(5), 635–653. <https://doi.org/10.1111/jcpp.13324>

Strik Lievers, F., Bolognesi, M., & Winter, B. (2021). The linguistic dimensions of concrete and abstract concepts: Lexical category, morphological structure, countability, and etymology. *Cognitive Linguistics*, 32(4), 641–670. <https://doi.org/10.1515/cog-2021-0007>

Tallas-Mahajna, N., Armon-Lotem, S., & Saiegh-Haddad, E. (2023). Emergence of verb-pattern morphology in young Arabic speakers: Morphological and semantic features. *Frontiers in Psychology*, 14, 1127640. <https://doi.org/10.3389/fpsyg.2023.1127640>

Varga, S., Pásztor, A., & Stekács, J. (2022). Online Assessment of Morphological Awareness in Grades 2–4: Its Development and Relation to Reading Comprehension. *Journal of Intelligence*, 10(3), 47. <https://doi.org/10.3390/jintelligence10030047>

Wattad, H., & Abu Rabia, S. (2020). The Advantage of Morphological Awareness Among Normal and Dyslexic Native Arabic Readers: A Literature Review. *Reading Psychology*, 41(3), 130–156. <https://doi.org/10.1080/02702711.2020.1768973>

Zaniar, S., Authar, N., Aquariza, N. R., Rihlah, J., & Sucita, A. A. P. (2024). Comprehensive Analysis of Derivational and Inflectional Morphemes for English Language Acquisition. *Jurnal Pendidikan Indonesia*, 5(8). <https://doi.org/10.59141/japendi.v5i8.3268>

Zhong, Q., Ding, L., Liu, J., Du, B., & Tao, D. (2023). *Can ChatGPT Understand Too? A Comparative Study on ChatGPT and Fine-tuned BERT (Version 2)*. arXiv. <https://doi.org/10.48550/ARXIV.2302.10198>

Ziani, Z. (2020). The Morphology of Borrowings and Its Relevance To Lexical Organization in Moroccan Arabic. *International Journal of Arabic Linguistics*, 6(1–2), 242–268. <https://doi.org/10.34874/PRSM.IJAL-VOL6.21996>

Zokirov, M. T., Dadabayeva, S. S., & Ferghana State University. (2020). ABOUT THE ROLE OF LANGUAGES CONTACTS IN THE DEVELOPMENT OF LANGUAGES. *Ferghana State University, Theoretical & Applied Science*, 84(04), 687–691. <https://doi.org/10.15863/TAS.2020.04.84.118>