Derivation in English and Modern Standard Arabic

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ARTICLE INFO	ABSTRACT
	This article explores the morphological derivation of Arabic and English from the perspective of similarities and differences. The differences between Arabic and English languages can be the main reason for errors made by Arabic learners of English. Predicting the sources of errors can help teachers and learners overcome these problems. By identifying the morphological differences between the two languages, teachers can, on the one hand, decide how and what to teach, and students, on the other hand, know how to learn and what to focus on when learning the target language.

Objectives of the Study:

This article contains both comparing and contrasting Arabic and English derivational morphology to discover the similarities and differences between them. The aim of this article shows the solutions about linguistic problems, which Arab learners of English language do in regards with the differences between the two languages in terms of derivational morphology. The tutors and learners will be aware of these problems and plan for their solutions.

Limitations of the Study

The limit of this article is about Arabic and English derivational morphology. However, the theoretical outcomes and results can help the tutors and Arab learners of English language, and also helps them to reconsider the points of difficulty that may lead to fails for learners in derivational morphology.
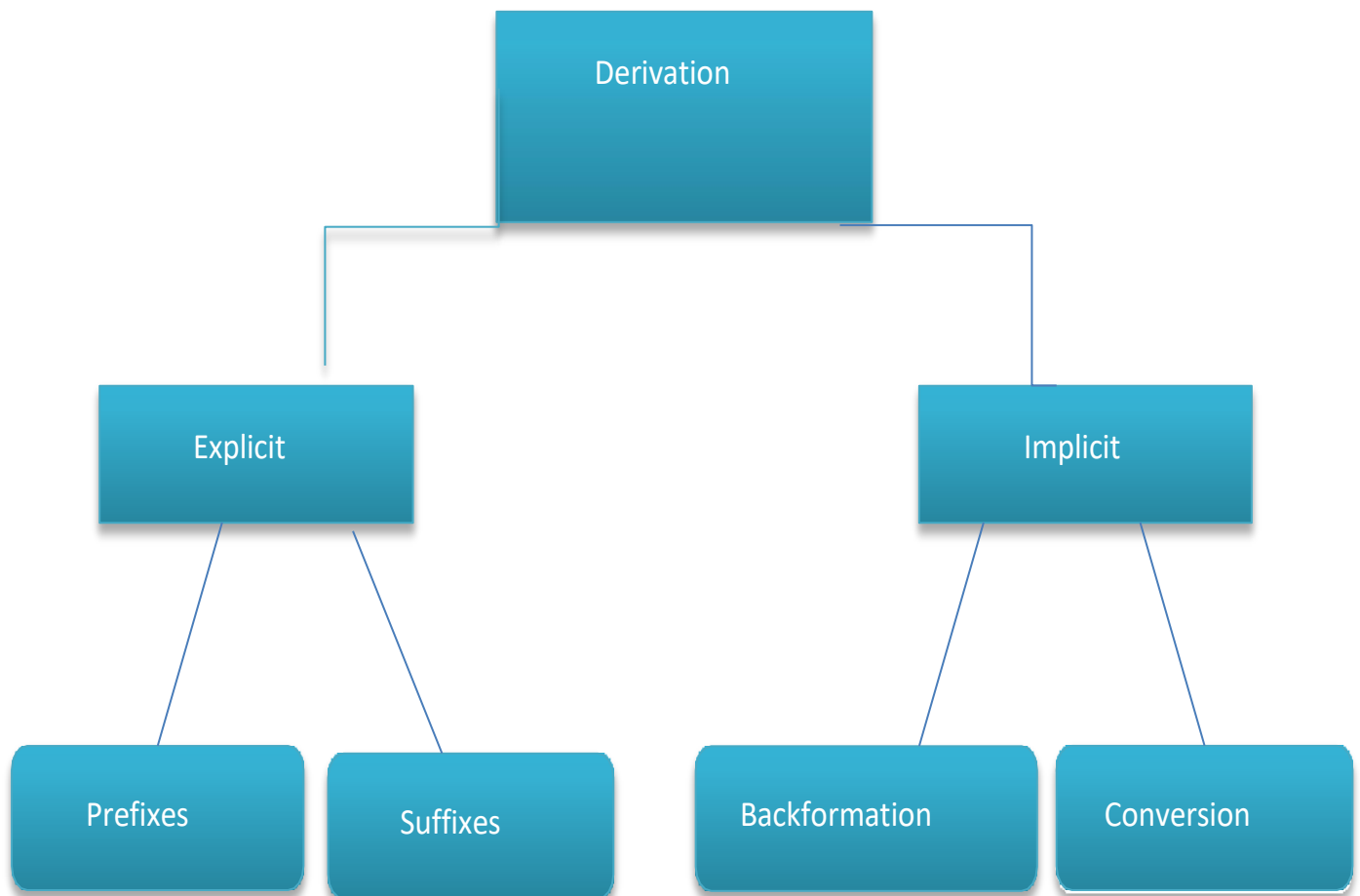
Methodology

This article is primarily focusing on theoretical aspects. Various texts on modern standard Arabic and English morphology and syntax have been examined. A descriptive approach has been employed to analyze the data, applying the principles of contrastive linguistics**.**

1. Derivation in English

The process of derivation involves utilizing numerous small components of the English language that typically aren't listed separately in dictionaries. These components are commonly referred to as *affixes. Familiar examples include the prefixes un-, mis-, pre- and the suffixes -ful, -less, -ish, -ism, and -ness, which can be found in words such as unhappy, misrepresent, prejudge, joyful, careless, boyish, and sadness (Yule, 2014, p. 57). According to McCarthy (2002), the term -derivation- encompasses all aspects of word structure related to affixation that do not involve inflection. In essence, derivational morphology focuses on how lexemes are interconnected or how one lexeme is derived from another through processes like affixation. For instance, the verb (PERFORM) is derivationally linked to the nouns (PERFORMANCE) and (PERFORMER) (McCarthy, 2002, p. 142).

Bussmann (1990) distinguishes between (explicit derivation), where new words are formed by adding prefixes and suffixes to root words, and (implicit derivation), which involves creating new words through backformation or conversion into a different lexical category. Explicit derivation can be further categorized into two types: prefixes and suffixes, which can be explained as follows:

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                        │     Derivation      │
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              ┌────────────────────┴────────────────────┐
       ┌──────┴──────┐                           ┌───────┴──────┐
       │  Explicit   │                           │   Implicit   │
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  │ Prefixes │ │ Suffixes │              │ Backformation  │ │ Conversion │
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1.1- Prefixes

Prefixes are morphemes attached to the beginning of another morpheme, such as (re-) in words like redo, rewrite, and rethink. The morpheme to which a prefix is attached is referred to as the base (or stem) morpheme. A base morpheme can either be free (e.g., tree, which is both a free morpheme and a free base) or bound (e.g., cran- in cranberry) (Akmajian, 2010, p. 20).

According to (Abdulhameed, 1999, p. 107), prefixes are affixes added to the beginning of a word, such as un-,

pre-, and mis-. In English, words can be formed using prefixes, suffixes, or a combination of both. For example, misunderstand contains a prefix, understandable contains a suffix, and misunderstanding contains both. Morphologists use specific terms to describe affixes based on their position within a word. Affixes that precede the main part of the word are called prefixes. For instance, the prefix un- in unhappy changes the meaning of the word to its opposite (Haspelmath, 2010, p. 20).

This process of attaching prefixes is a common and familiar method of creating new words or lexemes. Through derivational processes, prefixes are added to various types of bases. English, in particular, has a vast number of lexemes formed through this method. Examples include unlocked and rewrite, which demonstrate how prefixes contribute to word formation (Farida, 2013, P.6).

1.2- Suffixes

According to (Plag, 2002, p. 97), -nominal suffixes- are commonly used to derive abstract nouns from verbs, adjectives, and other nouns. These abstract nouns can represent actions, the results of actions, or related concepts, as well as properties and qualities. Additionally, a significant group of nominal suffixes is employed to create (person nouns) of various types.

Interestingly, the meanings of these suffixes often extend to other related senses, allowing each suffix to express multiple meanings. This results in overlapping semantic domains among different suffixes, showcasing their versatility in word formation.

(Bussmann, 1990, p. 1146) defines a -suffix- as a morphological element that is attached to the end of free morpheme constructions but does not typically occur as a free morpheme itself. Derivational suffixes play a key role in systematic semantic differentiation. For example, they can create abstract nouns (father → fatherhood) or diminutives (book → booklet). Additionally, they are instrumental in determining word class, as seen in examples like read (verb), reader (noun), and readable (adjective).

It is also explained that, unlike prefixes, suffixes are closely tied to specific word classes. For instance, noun suffixes include (-er, -ity, -ness, and -tion) while adjectival suffixes include (-able, -ive, -ish, and -ous). This distinction highlights the functional and structural importance of suffixes in

word formation.

According to (Stagaberg, 1981, p. 94), *derivational suffixes* possess three key characteristics:

1- -Arbitrary Combination with Words-, The choice of derivational suffixes is often specific to the word they combine with. For example, to form a noun from the verb -like- or -adorn-, one must add –ment- (e.g., likement or adornment), while the verb (fail) combines only with (-ure) to form the noun (failure). No other suffixes can be substituted in these cases.

2- Change in Part of Speech, in many instances, though not always, a derivational suffix alters the part of speech of the word it is added to. For example, the noun -act- becomes the adjective -active- with the addition of -ive-. Furthermore, adding -ate- to -active- transforms it into the verb -activate-.

3- Ability to Add Additional Suffixes, Derivational suffixes do not typically "close off" a word, meaning that additional suffixes can often be added afterward. For instance, the word (fertilize) ends with the derivational suffix -ize-, but another derivational suffix, -er, can be added to form (fertilizer). Additionally, inflectional suffixes can be appended, as in -fertilizers-, which closes off the word.

Through the use of derivational suffixes, new words are created with new meanings, often accompanied by a change in part of speech. However, the new meaning remains related to the original word. Moreover, it is possible to stack multiple suffixes, as demonstrated in examples like (fertilizers). This process highlights the flexibility and productivity of derivational suffixes in word formation.

derive (verb) + ation → derivation (noun) + al → derivational (adjective)

1.3- Backformation:

(AKMAJIAN, 2010, p. 43) States that backformation is a particularly interesting case involves a phenomenon, in which a morphologically simple word is misanalysed.

Backformation can be illustrated with several examples, historically, in the English language, nouns such as peddler, beggar, hawker, stoker, scavenger, swindler, editor, burglar, and sculptor existed prior

to the verbs to peddle, to beg, to hawk, to stoke, to scavenge, to swindle, to edit, to burgle, and to sculpt. Each of these nouns referred to a general profession or activity, leading speakers to mistakenly assume that the final sound was the agentive suffix (-er). This assumption allowed them to remove the -er and generate a new verb, similar to how one can remove the -er from (writer) to form the verb (write).

In essence, backformation is the process of analyzing a morphologically simple word as if it were complex, resulting in the creation of a new, simpler form. This involves creating new words by removing part of a morphologically simple word that has been incorrectly analyzed as a morpheme, particularly an affix.

According to Yule (2010, p. 56-57), backformation typically involves reducing a word of one type (usually a noun) to create a word of another type (usually a verb). A notable example of this process is how the noun *television* led to the formation of the verb (televise).

1.4- Conversion:

a conversion many scholars defined it in many ways according to how they understand the meaning of the item, in which Bussmann (1996, p. 255) defined conversion as the process of word formation can occur when there is a shift in the lexical category of a base word, such as transforming "to drive" into "a drive." Additionally, compound stems can also undergo this change. According to Crystal (2011, p. 109), "conversion" is defined as a derivational process where a word transitions into a new word class without the addition of an affix. Examples include:

- Verbs to Nouns: smell, taste, hit, walk, bottle, brake

- Adjectives to Verbs: dirty, empty, lower.

"Conversion" can be described as a derivational process that connects lexemes of the same form but belonging to different word classes, such as nouns, verbs, and adjectives. When we shift from one class to another, we are effectively changing the word class. This process allows certain words to function as verbs, as illustrated in the following sentences: "He's papering the bedroom walls" and "Have you buttered the toast?" In linguistics, conversion, also known as -zero derivation- or -null derivation-, involves creating a new part of speech from an existing word without altering its form.

This means that a word can transition between classes -like from noun to verb- without any changes in spelling or pronunciation.

Conversion can also involve verbs transforming into nouns, as seen in examples like guess, must, and spy, which become a guess, a must, and a spy. Similarly, adjectives such as dirty, empty, total, crazy, and nasty can shift to verbs (to dirty, to empty, to total) or nouns (a crazy, a nasty). Additionally, other forms like prepositions or adverbs can also undergo conversion to become verbs. For instance, in sentences like -They up the prices- or -We down a few beers-, the words up and down are used as verbs. This demonstrates the flexibility of conversion as a word-formation process, allowing words to adopt new grammatical roles without any change in their form. Conversion refers to a change in the function of a word, such as when a noun is used as a verb without any alteration in form. This process is commonly known as conversion, but it is also referred to as category change or functional shift. Many nouns, including paper, butter, bottle, and vacation, can be converted into verbs. For example, in the sentences "He's papering the bedroom walls," "Have you buttered the toast?" "We bottled the home-brew last night," and "They're vacationing in France," these nouns take on verb functions.

This process is particularly productive in modern English, with new usages emerging frequently. Conversion can also involve verbs becoming nouns, as seen with guess, must, and spy, which can be used as a guess, a must, and a spy. Additionally, adjectives like dirty, empty, total, crazy, and nasty can transform into verbs (to dirty, to empty, to total) or nouns (a crazy, a nasty). Other forms, such as up and down, can also function as verbs, as illustrated in sentences like "They up the prices" or "We down a few beers." This flexibility highlights the dynamic nature of conversion in the English language.

1- Modern Standard Arabic (MSA)

MSA is the diversity understood by the entire Arabic- speaking world and taught in schools to the language native speakers. This form of the language is often used by all educated people on formal occasions and as a means of communication in mass media, public information and formal correspondence. It is also heard in Arabic broadcast. Thus, people often look upon this type of language as enjoying high prestige among other types (Ezzat, 1973, p. 76)

1- Derivation in Arabic

In the Arabic language, the concept of derivation encompasses numerous definitions The process of Arabic derivation may be defined as the act of extracting a particular form from another form. Both ejections concur regarding the semantic interpretation and configuration of the primary root The Arabic derivational system comprises a range of components, including active and passive participles, intensive active participles, diminutive nouns, adverbial expressions denoting time and place, nouns of instrument, manner, and superlative adjectives (Fehri, 2012).

Derivation can be defined as the process by which one word is derived from another or shares a common origin, as suggested by Al- Radi's statement, "By derivation, we mean that one of the two words is taken from the other or being derived from the same origin.

"This notion may be understood as a means of investigating the etymology a nd linguistic development of related words and their interconnectedness. (Ibn al- Adil al-Dimashqi, 2010, p. 23).

One of the meanings attributed to the term "derivation" includes the definition proposed by Abdullah Amin whereby a word is derived from one or more other words in a manner that maintains proportionality in terms of both linguistic structure and semantic content. (Muhammad Abdul Rahman Hussein, 2018, p. 23)

Ibn Jinni and al-Jurjani espouse a common definition of derivation, which posits it as "the process of extracting a word from another, on the condition that the words are congruent in meaning and structure, while differing in form". This definition has been adhered to by numerous scholars of antiquity, and Abdullah Amin concurs with this view by explicating derivation as involving the extraction of one or more words from

a source word, while maintaining a degree of proportional symmetry between the extracted words and their source with respect to both form and connotation. (Mahmoud Shams Al-Haq, 2012, p. 23)

Erwin (2004, p. 60) asserts that derivational affixes serve the purpose of generating novel words, thereby creating a fresh lexical category. Long vowels, including al- jaa., al-waw, and al-alif, as well as short vowels, such as diacritics or signs, referred to as al-harakat, are utilized in Arabic language.

Regarding types of derivation, Stetkevych (2006, p. 7) posits that derivation based on Arabic roots is considered the most organic means of language development. The Arabic language is often referred to as the language of "ishtiqaq", denoting its unique capacity for self-growth and development, resulting in a rare intrinsic homogeneity that is much admired by Arab writers and philologists who are fervent in safeguarding it.

Classical Arabic philology categorizes three primary forms of derivation namely: the simple derivation, also known as the small derivation (termed al-ishtiqāq al-saghīr), root transformation (known as ibdāl or al-ishtiqāq al-ʔakbar), and fanally the metathesis or large derivation (described as qalb or al-ishtiqāq al-kabīr),. (Iman Farhan Mohammed and Qassim Abbas, 2022, p. 179).

3.1- Simple or Small Derivation (al-ishtiqāq al-saghīr)

According to (Mohammed, 2005, p. 8) this type of derivation is common in Arabic, it refers to derive a word from another with changing in the formula of the word, but it keeps the similarity with meaning and agreement in the number of letters and their ordering. For example, the root SLM has the broad lexical sense of

'peace' (alslam) from which the words 'peaceful' (musalim), 'deliver' (salim), the name of Salman are derived.

(Watson, 2002, p. 3) states that in Arabic, a -root- typically consists of two, three, or, less commonly, four consonants from which various words are derived. For example, the triconsonantal root -KTB- conveys the broad lexical meaning of "writing." This root serves as the foundation for several related words, such as *kitab* (meaning "book"), which reflects its connection to the concept of writing.

Other words derived from this root include terms for "office," "writer," and "record," all of which share this fundamental meaning associated with writing. 3.2- Root Transformation (known as ibdāl or al-ishtiqāq al-ʔakbar)

The -Al-Ibdal phenomenon- in Modern Standard Arabic (MSA) is a morphological process where one letter in a word is substituted with another. This process has been analyzed in various Arabic morphological studies, including works by Al-Galaayiini (1991) and Al-Raagihi (1984). They define Al-Ibdal as "removing a letter and replacing it by another."

One example of this substitution occurs when the consonant /t/ is replaced by /d/ if it is preceded by /d/, /ð/, or /z/. For instance, in the word -ztaha-, the /t/ is replaced by /d/ because it follows the sound /z/. As a result, the word becomes -zdaha-, meaning "flourished".

Al-Ibdal is a phonologically conditioned process, meaning that the substitution is influenced by the surrounding phonetic environment. This phenomenon is part of the broader derivational processes in Arabic morphology, where changes in word structure often retain the root's basic meaning while adapting to phonological rules. The concept of Al-Ibdal is not limited to Modern Standard Arabic but is also observed in Classical Arabic and other dialects. It reflects the dynamic and systematic nature of Arabic morphology, where consonantal roots undergo transformations while maintaining semantic coherence.

Al-Ibdal not only involves the substitution of letters but also has implications for the (meanings of words) derived from the affected roots. According to Al-Galaayiini and Al-Raagihi, while the substitution changes one of the radicals (root consonants), the basic meaning of the root is retained either wholly or partially.

Nahaqa and Naqqa: Both words share the meaning of "animal cry" or "croaking," demonstrating how Al-Ibdal can produce variations of a root while preserving its core semantic field. Latama and Lamata: Under the process of qalb (metathesis), the root undergoes a transformation, yet the meaning "to beat" remains intact. Al-Ibdal further affects this root, producing forms like Ladama and Lakama, all of which retain the same fundamental meaning of "to beat.

Al-Ibdal showcases the flexibility and systematic nature of Arabic morphology. By altering radicals while maintaining semantic coherence, this process enriches the language's lexicon and demonstrates the intricate relationship between phonological changes and meaning.

Arabic roots are described as discontinuous morphemes, meaning that while the root consists of a fixed sequence of consonants, vowels can be inserted between these consonants to form different words. According to (Ryding, 2005, p. 45-48), the consonants in a root must always appear in the same order. For example, in the root /k-t-b/, which conveys the general meaning of "writing," the consonants /k/, /t/, and /b/ must always appear in that sequence, even as vowels are added to create words like *kitab* ("book") or *kataba* ("he wrote")

While the majority of Arabic roots are triconsonantal (three consonants), there are also roots with:

1- Two consonants (biliteral): These are less common but still exist.

2- Four consonants (quadriliteral): Examples include roots like z-l-z-l ("to shake"), b-r-h-n ("to prove"), and t-r-j-m*("to translate").

Five consonants (quinquiliteral): These are rare but include roots like b-r-n-m-j ("program").

The discontinuous nature of Arabic roots is a hallmark of -nonconcatenative morphology-, a system where word formation involves modifying the root by inserting vowels or applying specific patterns, rather than simply stringing morphemes together sequentially. This structure allows for a highly productive and systematic way of generating a wide variety of words while maintaining the semantic core of the root.

This morphological system is a defining feature of Arabic and other Semitic languages, displaying their unique approach to word formation and lexical expansion.

In Arabic, the *pattern* is termed *discontinuous* because it integrates vowels among the root consonants. For example, in kaatib ("writer"), the root /k-t-b/ maintains its consonant order while allowing for vowel insertion. Arabic uses -derivational affixes- to create new words and mark grammatical functions. Common prefixes include "mu-" for participles (e.g., muhandis for "engineer") and "ma-" for nouns of place (e.g., maktab for

"office"). The suffix "-iyy" is used for relative adjectives (e.g., misriyy for "Egyptian").

Key consonants involved in Arabic pattern formation include /ʾ/ (hamza), /t/ (taaʾ), /m/ (miim), /n/ (nuun), /s/ (siin), /y/ (yaaʾ), and /w/* (waaw). These can function as prefixes, suffixes, or infixes, contributing to the language's rich morphological structure.

The discontinuous nature of Arabic roots and the use of affixes illustrate the -nonconcatenative morphology- of the language, allowing for flexible word formation while preserving the semantic integrity of the roots. This system is a hallmark of Arabic and other Semitic languages.

3.3- Metathesis (Qalb)

Al-ishtiqāq al-kabīr (large derivation) refers to a process in Arabic where the positions of root consonants are altered while retaining the original meaning. For example:

-Jadhaba (جنب) ("to draw, to attract") can be alternated into Jabadh (جبذ).

-Madaha (مدح) ("to praise") can transform into Hamida (حمد).

-Jeasa (أيس) can alternate into Jea'sa (يئس).

This derivation is based on three-consonant roots, where the rearrangement of consonants, combined with the use of (diacritics), plays a significant role in altering word forms and meanings. Diacritics, such as (ḥarakāt) (vowel marks), are crucial in distinguishing meanings and grammatical functions.

Al-ishtiqāq al-kabīr showcases the (flexibility of Arabic morphology), allowing for the creation of semantically related words through systematic consonant rearrangement. This process highlights the intricate relationship between root consonants, diacritics, and meaning in Arabic grammar.

Conclusion:

1. Derivation refers to the process of creating new words by adding affixes to existing words or morphemes.

2. There are two primary types of derivation which are explicit derivation and implicit derivation.

3. Explicit derivation involves the formation of new words through the addition of prefixes (known as prefixation) and suffixes (known as suffixation) to root words.

4. A prefix is a morphological element added at the beginning of a root or stem. It helps in forming new lexical items (e.g., para-, mini-, un-), although English does not typically inflect words using prefixes.

5. A suffix is a morphological component that is attached at the end of free morpheme constructions.

Unlike prefixes, suffixes do not usually function as free morphemes. Derivational suffixes play a crucial role in both semantic differentiation and in determining the word class.

6. Implicit derivation refers to the creation of new words through processes such as backformation or conversion into a different lexical category.

7. Backformation is the process of shortening a word, such as transforming a noun into a verb (e.g., "babysit" from "babysitter").

8. Conversion is a derivational process where a word shifts to a new word class without the addition of any affix.

9. In Arabic, there are three main forms of derivation:

   a-Simple or "small" derivation (al-ishtiqāq al-saghīr) / b- Metathesis or "large" derivation (al-ishtiqāq al-kabīr) /c-Root transformation or "largest" derivation (al-ishtiqāq al-akbar)

10. Both English and Arabic view derivation as the process of forming new words by adding affixes to existing words or morphemes.

References

1. Akmajian, A., Demers, R., Farmer, R. and Harnish, R. (2010). Linguistics: An introduction to language and communication. Cambridge: The MIT Press.

2. Bussmann, H. (1999). Routledge dictionary of language and linguistics. New York: Routledge.

3. Crystal, D. (2011). A dictionary of linguistics and phonetics. Oxford: Blackwell Publisher Ltd.

4. Erwin, W. (2004). A short reference grammar of Iraqi Arabic. Washington: Georgetown University Press.

5. Ezzat, A. G. E. (1973): Aspects of language Study. Bouheiry Brothers, Beirut.

6. Fehri, A. (2012). Key features and parameters in Arabic grammar. The Netherlands: John Benjamins Publishing.

7. Haspelmath, M. and Sims, A. (2010). Understanding morphology. London: CPI Antony Rowe.

8. Ryding, K. (2005). A reference grammar of modern standard Arabic. New York: Cambridge University Press.

9. Stagaberg, N. (1981). An introductory English grammar. New York: Holt, Rinehart and

Winston, Inc.

10. Stetkevych, J.(2006).The modern   Arabic   literary   language: Lexical and stylistic developments. Washington: Georgetown University Press.

11. Yule, G. (2014). The study of language. London: Oxford University.