

## Verb Inflection in English and Arabic: A Contrastive Analysis Study

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### **Abstract:**

*Inflection, the change of word form to mark grammatical distinctions, occurs in a variety of grammatical classes: nouns, verbs, adjectives, pronouns, etc. The purpose of the present paper is to describe the verb inflectional morphology in English and Arabic and to conduct a contrastive analysis of both of them. The research question which is put forth is: how do the verb inflectional morphology in English and Arabic differ from/resemble each other? To answer this question, a systematic descriptive comparative study is carried out with a unique focus on the verb inflectional categories. Eventually, it was found that the Arabic verb inflectional morphology is richer and varied from that of the English. Such a study has implications in fields like foreign language teaching/learning, translation, electronic dictionaries, natural language processing, and the like.*

**Keywords:** Verb ; Inflection ; Contrastive Analysis ; Arabic ; English.

## 1. INTRODUCTION

Plainly, Arabic is a Semitic language whereas English belongs to the Germanic group. This fact suggests that their morphological systems vary to a great extent. At the outset, it is fundamental to explain the morphemic composition of verb forms especially that Arabic is a templatic language. Indeed, the current study portrays the verb inflectional systems of both languages. It provides exhaustive pertinent information backed with examples (that are transliterated in the case of Arabic) for every single case within the investigated inflectional categories. The facts are arranged systematically in a way that will be of some help to linguists, hopefully. Furthermore, this paper explores the similarities and differences in the verb inflection of each language by taking advantage of the contrastive analysis hypothesis whose

applications are within the Second Language Acquisition area. Of note, contrary to the traditional Arabic morphology which usually refers to semantics and derivation, the current work tightly sticks to inflectional elements; some morphosyntactic features cannot be neglected, though.

## 2. Theoretical Background

### 2.1. Verb Inflectional Morphology

In Linguistics, inflection is the process of altering word form to show some characteristics as number, gender, tense, etc. Verbs are inflected by taking different forms depending on the grammatical function they fulfil. Put otherwise, verb inflection is basically contextual not inherent. Tense, aspect, person, number, gender, mood, voice, case and agreement are the usual categories for which verbs inflect in many languages. Changes can

touch the internal structure of the stem or may be introduced by a prefix, an infix or a suffix. Syncretism is also a phenomena that is sometimes concomitant with inflection: it entails that one morpheme serves as a marker of a considerable number of categories.

## 2.2. Contrastive Analysis

In its essence, contrastive analysis is the systematic study of a pair of languages with the aim to identify their structural differences and similarities (Lado, 1957). The assumption beneath is that the differences stand for the hindrances that second language learners meet because of a negative transfer from the mother tongue to the target language, and the similarities represent the linguistic elements that should be facile for acquisition due to a positive transfer. Lado (1957, p.02) contended that "individuals tend to transfer the forms and meanings and the distribution of forms and meanings of their native language and culture." Via contrastive analysis, various problems can be predicted and accounted for in processes of syllabus design. Notwithstanding, the errors predicted by contrastive analysis do not always seem to be problematic for the students and vice versa. In other words, some errors are in no way caused by the linguistic differences between the languages; they may result from psychological factors.

## 2.3. Arabic Language

Being a Semitic language, Arabic has unique features. A specific characteristic of this group of languages is "their basic consonantal root, mostly trilateral, variations in shades of meaning are obtained first by varying the vowel ling of the simple root and secondly by the addition of prefixes, suffixes and infixes" (Haywood & Nahmad, 1965 as cited in Salim, 2013, p. 123). In other terms, vowel and consonant alterations within a root play a key role in the Arabic morphology and lay at the core of its complexity and richness.

In the Arab world, today, two varieties are used: Modern Standard Arabic and dialectal Arabic; it is a case of diglossia. The former is the spoken form and the latter is the form used in approximately all writings as well as in speeches, ceremonies, news and the like. What this study is concerned with the Modern Standard Arabic only.

## 3. Methodology

Information about the methodological approach that guided this research must be supplied to guarantee an understanding of the paper.

### 3.1. Aims of the study

Depicting the verb inflectional morphology in Arabic and English separately and illustrating each instance with examples is only one objective of the current study. The other goal is to carry out a comparison between the verb inflectional systems in the languages under scrutiny.

### 3.2. Research Question

With the above aim in mind, we developed a research question to give this paper clarity and specificity: how do the verb inflectional morphology in English and Arabic differ from/resemble each other?

### 3.3. Research Design

In order to answer the research questions, the researcher opted for a theoretical description of both the Arabic and English verb inflectional systems followed by a contrastive method to analyse and compare both systems. The entire endeavour is subscribed within the qualitative paradigm.

### 3.4. Data

The data which concern the morphology and inflectional morphemes in each language are gathered with a huge reliance on the researcher's knowledge of both

languages being a native speaker of Arabic, an advanced user of English and a translator. Reference to the existing theoretical background was made when required.

#### 4. Arabic Verb Inflectional Morphology

Catford and Palmer (1974) viewed that the Arabic verbal morphological system is the most complex of the grammatical classes. Mosel (1980), on his part, proclaimed that the word 'verb', in Arabic, denotes that class of words whose function is to express actions. It is the class which "corresponds to that of the finite verb in European linguistics" (Mosel, 1980, p. 32). Numerous morphemes are utilised in Arabic to inflect a verb for one or many of the following categories at once: number, tense and aspect, mood, voice, transitivity and agreement. The selection of (a) particular morpheme(s) is principally contingent on the structure of the verb root (simple مجرد *mudjarrad*) or complex مزيد *mazeed*) and its component letters (regular صحيح *sahih*), irregular معتل *(mu'tal)*). It is worthy to note that the Arabic (verb) morphology is grounded on the traditional Semitic notions of roots and patterns. A root can only be consonants (e.g.; فصل *fassala*) or consonants and a long vowel (e.g.; قال *qaala*). Neme (2013, p. 222) defined a pattern as "a template of characters surrounding the slots for the root letters. These slots are shown in the pattern by indices, like in 1u2a3. Between and around the slots, patterns contain short vowels, and sometimes consonants or long vowels." In other words, the pattern is a particular predetermined structure that a verb takes to fulfil a given function. Often, the root is stable across the various forms of the lexeme.

##### 4.1. Tense and aspect

Arabic has the past and the present tenses. There is no future tense; the meaning of the future is conveyed by means of the future particles سوف *(sawfa)* and س *(sa)* as in

سوف يذهب *(sawfa yadhabu)* and سيذهب *(sayadhabu)*. Regarding aspect, Arabic has two aspects: the perfect and the imperfect. The perfect refers to the past time or a completed action and the imperfect refers to the present time or unfinished acts (Wright, 1996). In Arabic, aspect/tense are shown by the addition of a suffix to the base form of the verb to get the perfect form; this suffix could be: -ت، -نا، -تما، -و، -تن، -ا، -و، -ت. To form the imperfect, we add both a prefix and a suffix as in يكتبان *(taktubu)*, يكتبان *(yaktubaani)*, etc.

Each of the perfect and the imperfect takes on two forms: a regular form with sound, hamzated and doubled verbs and an irregular form with defect verbs. By defect verbs is meant those containing long vowels (ا /a:/, و /u:/ or ي /i:/) in the composition of their roots. The regular form entails the addition of the above affixes without any internal change in the base form. However, in the conjugation of defect verbs a change takes place in the radicals of the base forms; therefore, they take on suppletive forms. For instance, a medial ا changes into و or ي (e.g.; قال *qaala*), يقول *(yaqoulu)*, قيل *(qiila)*, تقولان *(taqoulaani)*; a final 'ا' changes to 'و' or 'ي' (e.g.; مشى *mashaa* 'walked', مشيت *(mashaytu)* 'walked', مشوا *(mashuu)* 'walked') or initial 'و' is changed into 'ي' as in وهب *(wahaba)* 'granted' and يهب *(yahabu)* grants (Guilati, 2009). In fact these changes are rule-based but we cannot mention all of them in this paper because of their length and complexity.

##### 4.2. Mood

There are five moods in Arabic; they are: the indicative *(elkhabarii)*, the imperative *(elamr)*, the subjunctive *(elmansoub)*, the jussive *(elmadzoum)* and the energetic *(ettawkiid)* (Wright, 1996). The indicative is expressed as mentioned above with the pronominal affixes. Similarly, the imperative is marked with prefixes and suffixes (e.g.; اذهب



#### 4.7. Agreement

Verbs agree with nouns in number and gender in nominative phrases as in الطالبات تدرسن *(ettaalibaatu tadrussna)* and يدرسون الطلاب *(ettollabu yadrusuuna)* but in verbal phrases agreement is displayed only in gender as in تدرس الطالبات *(tadrusu ettaalibaatu)* or يدرس الطلاب *(yadrussna ettaalibaatu)*.

### 5. English Verbs Inflectional Morphology

Two types of verbs exist in English: regular and irregular. Depending on the grammatical environment in which they occur; verbs can be inflected for number, tense, aspect, mood, voice and agreement.

#### 5.1. Number

English verbs are inflected for number only with the third person singular using the morpheme {-s}; for example, *he/she/it leaves*.

#### 5.2. Tense and Aspect

Tense and aspect are combined; they cannot be discussed separately. Obviously, tense is the inflection on a verb with reference to the time of the utterance (Quirk, 2010). Two tenses exist in English: the past and the present. Since the expression of the future time does not involve any inflection of the verb, no reference is made to the future tense. To start with, the simple past form takes on two forms: the regular form which ends with the suffix *-ed* and the irregular one which takes different unpredictable forms. As far as the present simple is concerned, only the third person singular is marked for tense using the suffix *-s* (as in *he/she/it/meets*). We turn now to aspect. It is a term used to describe the state of the verb action as beginning, in progress, or completed (Al-jarf, 1994). Regarding the English language, it has the progressive and the perfective aspects. The progressive, or the continuing aspect, is indicated by the use of a form of the auxiliary

word 'be' and the morpheme {-ing} as in *are/were running*. As for the perfective, it is expressed by a form of 'have' and the past participle form of the verb as in *has/had played*.

#### 5.3. Mood

Mood is a meaning signalled by a verb to express the subject's attitude or intent. The English moods are: the indicative, the imperative and the subjunctive. Other minor moods can also be mentioned as the tag, the exclamative, the optative and the curse. Among all of these categories, only the indicative mood is marked in the third person singular in the present by the suffix *-s*.

#### 5.4. Voice

Voice is a modification of the verb to reveal the relation of its subject to the action performed (Al-Jarf, 1994). The English voices are the active and the passive. The passive voice is shown by the use of an auxiliary word and the past participle of the verb; the agent can be omitted. All transitive verbs with an appropriate lexical meaning (i.e. able of having a human agent) have passive forms. For instance, verbs like *to rain* have no passive: *it is rained\**.

#### 5.5. Agreement

Number and person agreement with verbs is limited in English. Only the *-s* of the third person singular present indicates agreement of the verb with the subject.

### 6. Comparison between the Arabic and English Verb Inflectional Systems

Because English is an Indo-European language and Arabic is a Semitic language, a comparison between their linguistic systems is difficult but plausible. The distinctions resemblances spotted between the English and Arabic verbs regarding their inflectional systems are outlined in what follows.

#### 6.1. Convergences

To begin with, verbs in both languages inflect for some common categories: aspect, number, tense, voice and agreement. Second, it is noticed that the Arabic inflectional morphology, like the English one, is not fully regular. Arabic exhibits irregularity in the defect verbs which are subject to an internal change within the root when conjugated in the perfect and imperfect tenses (like باع <baa'a>/بيع <yabii'u>). A good example of irregularity in English is the verbal inflection in the past tense (e.g.; stick/stuck) and the past participle (e.g.; swim/swum). Those words do not possess the required stem shape that can allow them to be combined with the appropriate inflectional morphemes.

Another similarity between the verb inflectional morphology in Arabic and English is that both of them display syncretism. Baerman (2004, p. 41 as cited in Eades, 2014, p. 19) stated that syncretism, a morphological aspect, involves "the expression of two or more distinct morphosyntactic feature values by a single form." In short, syncretism is manifested when one morpheme occurs to reflect different grammatical functions. For instance, to the suffix {-ed} is used with the simple past and the past participle forms. The inflected forms of the verb 'put' are 'put' and 'put': the same for both the past simple and past participle. Concerning Arabic, the imperfect second person masculine singular (أنت تذهب <anta tadhabu> meaning you go) and third person feminine singular (أنت تذهب <hiya tadhabu> meaning she goes) are represented by the same morphological form. Often, the same terminations mark each of the indicative, subjunctive and jussive moods.

Like English, Arabic tolerates a few lexical items that have no special grammatical paradigm at all. An instance of this would be verbs which keep the same form in the present, past and past participle. In Arabic, for example, partially conjugated verbs lack the imperative

(e.g.; كاد <kaada>, يكاد <yakaadu>), others lack the past tense (e.g.; دع <da'>, يدع <yad'u>) while another category lacks the present and the imperative (e.g.; نعم <na'am>). All this may lead us to say that paradigms can be defective; that is, one or more forms can be missing for certain words (Bickel & Nichols, 2001). Let's shift to English; some English defective verbs like modal verbs are not subject to any inflection and cannot express moods like the subjunctive and the imperative. *Must* and *ought* do not have a preterite.

Suppletion is the name for the case when the diflectional paradigm of a word diverts from the root of that word. An example of this phenomenon in English is the verb to be; its forms are am, is, are, was, were. The verb 'go' is also a good instance since its distinct past form is went. A note deserves a mention here. These forms are not predictable. Suppletive forms are not only found in the English irregular verbs but also in the Arabic defective verbs; however, in Arabic, suppletion in verbs is rule-based; it occurs with a sub-category called Hollow verbs.

## 6.2. Divergences

Catford and Palmer (1974) stated that, morphologically speaking, the Arabic verbal system is the most complex of the grammatical classes. The morphological structure of the Arabic verb is changeable to exhibit a set of distinctions for number, gender, person, case, tense, aspect, mood, voice and, one may add, transitivity (Al-jarf, 1994). Most of them will be dealt with here.

Regarding tenses, the Arabic perfect and imperfect tenses seem to be parallel to the English past and present tenses with few exceptions like the equivalent of *I knew* (English past) is كنت أعرف <kuntu a'rifu> which is not the Arabic perfect. In contrast to English, Arabic past tense inflection is more regular and almost

applies the same pattern of inflection with all verbs. Arabic inflects for the past tense through attaching suffixes to the end of the verb stem. However, English contains about 200 irregular verbs; the verb form is subject to an internal change in order to get the past.

English verbs are inflected by the addition of a suffix (paint, painted), vowel change (choose, chose) or consonant change (build, built) whereas the Arabic verbs, most commonly, inflect by prefixation and a suffixation.

Furthermore, English and Arabic share two aspects: the perfect and the progressive in English which is parallel to the Arabic imperfect (e.g.; *is studying* vs. *يدرس* ⟨yadrusu⟩). The only difference is that the English progressive aspect is marked with a free morpheme and a past participle form of the verb while the Arabic imperfect aspect is marked by a set of prefixes and suffixes.

In addition, English has three moods: the indicative, the imperative and the subjunctive. The three are existent in Arabic. Yet, this latter has two extra others: the jussive and the energetic. It is necessary to point out that the three shared moods are not inflected in the same way: the English imperative and subjunctive moods are unmarked at all while the Arabic ones show full inflection.

Concerning the passive voice, it is indicated in English by a free morpheme and the past participle form of the verb whereas in Arabic diacritics are used instead.

Besides, the English verb form does not indicate transitivity because we cannot tell whether or not a verb is transitive by looking at it in isolation. Put implicitly, English verbs are not inflected for transitivity. By contrast, one can know if an Arabic verb is transitive or intransitive by looking at its form i.e.; there are suffixes that are used to transform an intransitive verb to a transitive one or vice versa.

For example, *فعل* ⟨fa'ala⟩ or *استفعل* ⟨istafa'ala⟩ are patterns for transitive verbs and *افتعل* ⟨fta'ala⟩, *انفعل* ⟨enfa'ala⟩, *تفاعل* ⟨tafaa'ala⟩, *فعل* ⟨fa'ala⟩ and *افعل* ⟨f'alla⟩ are patterns for intransitive verbs because they imply the meaning of reciprocity and reflexiveness.

Unlike the English verbs, some Arabic ones can become transitive just by applying some inflections to the stem.

So far, it is proved that Arabic is a highly inflected language unlike English which is slightly inflected. The former is moderately analytic; the latter is said to be fusional. This is due to the fact that the English verbs have only three inflectional categories and three inflectional morphemes: -s, -ed, and -ing. Arabic, however, about 62 different inflected forms for verbs. Additionally, the choice of suffixes for and structural changes in verb morphology are dependent on the type and syllable structure of the root respectively.

Additionally, from the aforementioned comparisons, it is crystal clear that English is predominantly suffixing whilst Arabic embodies both infixes and suffixes. Yet, we do not deny the fact that there is a general preference for suffixes because it is hard to detach prefixes from stems and identify the lexical item.

To push further on these lines, in Arabic, inflected word forms appear sometimes as a result of superimposing on a consonantal skeleton (e.g.; *مَرَّ* ⟨marra⟩ which becomes to be treated as *مَرَّ* ⟨marara⟩ and both of them mean 'pass'). In such cases, various vocalisms which must indicate agreement, aspect, mood and voice would give rise to such forms as *مَرَرْنَ* ⟨mararna⟩ 'they passed' and *يَمُرُّ* ⟨yamurru⟩ 'he passes'. As a consequence, Arabic, like other Semitic languages, is non-concatinative. By contrast, English is concatinate since it mostly involves a linear string of morphemes put together.

Contrary to Arabic, English comprises some inflectional affixes which overlap with the derivational ones *-ing* and *-ed*. In other terms, participles can be forms of a verb (in progressive, perfect or passive constructions), but sometimes behave like adjectives (Matthews, 1974). The word 'worried,' for example, is an adjective in *I am worried about her* and a participle in *His behavior has worried me*. This is not found in the Arabic verb inflectional morphology.

Overall, both languages exhibit irregularities, defective forms, syncretism and suppletion in their verb inflectional systems. Yet, they differ in a range of ways. Arabic is concatenative while English is not. Transitivity, an inflectional category for the Arabic verbs, is absent in English. More moods exist in English and fewer aspects appear in Arabic. Preverbal forms appear in inflected Arabic verbs but it is not the case in English.

### 7. Implications of the Study

After examining and comparing the verb inflectional morphology of Arabic and English, several implications are volunteered. Theoretically speaking, the comparison of the verb inflectional systems in Arabic and English supports language universals. It proves Greenberg's universals with reference to point 30 (Brown, 2005). It argues that if a verb inflects for person, number or gender, it also inflects for tense-mood which is true for both Arabic and English. From the practical perspective, such studies serve as a source for building not only morphological analysers and synthesisers but also generators of Arabic inflected forms as this language exhibits a rich inflectional morphology. Dictionaries that relate irregular forms to their lexemes are much required in the area of Natural Language Processing. Zbib and Soudi (2012, p. 2 as cited in Neme, 2020, p. 6) suggested that: "Recent attempts to build data-driven systems to translate from and to Arabic

have demonstrated that the complexity of word and syntactic structure in this language prompts the need for integrating some linguistic knowledge."

Studies of the kind undertaken here are also helpful in translation studies and particularly in machine translation. The field which benefits most from linguistic contrastive studies is second language acquisition. Learners' awareness of the similarities between the morphological structures of their mother tongue and the target language facilitates learning. Their knowledge about the differences could help them avoid negative transfer. Furthermore, the second language student can learn a lot about the orthographical variations of morphemes. Hence, this comparison could be helpful in the elaboration of textbooks for language learners.

### 8. Conclusion

The morphological structure of the Arabic verb is changeable to exhibit a set of distinctions for number, gender, person, case, tense, aspect, mood, voice and, one may add, transitivity. Most of them have been dealt with here. English verbs are inflected for a fewer categories: person, case, tense, aspect, mood and voice. An exhaustive survey of the verbal inflection was presented of two genetically unrelated languages: Arabic and English. Both were compared. It was found that morphologically complex forms of verbs are more available in Arabic than in English. Several differences were detected at the level of concatenation, transitivity, moods, prefixation and suffixation. Yet, some closeness is detected in both systems since each incorporates features pertinent to defective constructions, syncretism, suppletion, and inconsistencies in the application of rules and conventions.

From this study, it is clear that reference to verb inflection does not require pure lexical information but syntactical



knowledge as well. These findings can be used for pedagogical purposes as well as in machine language processing systems. Future research can tackle other morphological aspects like word formation from a contrastive analysis perspective.

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