



ISSN 1989 – 9572

DOI: 10.47750/jett.2022.13.06.061

The order of Cardinal, ordinal and multiplicative Adjectives in English and Arabic:A comparative study

Dr. Hassan Musa Mohammad Aldaw

Journal for Educators, Teachers and Trainers, Vol. 13 (6)

<https://jett.labosfor.com/>

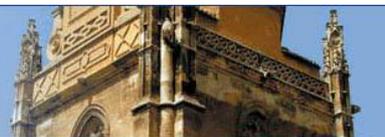
Date of reception: 14 Oct 2022

Date of revision: 21 Nov 2022

Date of acceptance: 25 Dec 2022

Dr. Hassan Musa Mohammad Aldaw (2022). The order of Cardinal, ordinal and multiplicative Adjectives in English and Arabic:A comparative study *Journal for Educators, Teachers and Trainers*, Vol. 13(6). 593-610.

¹Assistant Professor of Language and Linguistics, Department of English Language and Literature, College of Arts and Science –Wadi-addawisir, Prince Sattam bin Abdulaziz University



The order of Cardinal, ordinal and multiplicative Adjectives in English and Arabic: A comparative study

Dr. Hassan Musa Mohammad Aldaw

Assistant Professor of Language and Linguistics, Department of English Language and Literature, College of Arts and Science – Wadi-addawasir, Prince Sattam bin Abdulaziz University

Email: h.aldaw@psau.edu.sa

ABSTRACT

It is noticed that Arabic speakers of English and English speaker of Arabic encounter some difficulty in the order of the adjectives especially when there are numerals. This study aims to compare and contrast the construction, behaviour and order of the different types of numeral adjectives among the other adjectives in the languages in question. In order to achieve the objectives of the study and find out answers to the questions under investigation, the study follows the prescriptive method. It examines analytically the similarities and differences in order to find out what is linguistic specific for Arabic and for English with regard to the order of numerals and other adjectives. It is hoped that the study will contribute in enriching the morpho-syntactic field and computational linguistics. Definitions, structures and current examples including numerals and other adjectives in English and in Arabic are presented and analysed structurally. The data are compared and contrasted in order to find out reasons behind the problems and difficulties that face Arabic and English speakers in the order of numeral and other adjectives. Results and recommendations will set the remedies needed for these major challenges towards the perfection of the linguistic knowledge.

Keywords: structure; attributive; agreement; masculine; feminine; behaviour

1 INTRODUCTION

Adjectives in general and numerals in specific constitute a complicated area in English and in Arabic languages. One of the main differences between the two languages relies behind how many and what parts of speech are there in each language. English language has a number of parts of speech unlike Arabic; there are about eight parts of speech. On contrary in Arabic, it encompasses only three major parts of speech, namely, noun, verb, and preposition. The other parts of speech such as the adjective, the adverb, pronouns, conjunctions and interjections are treated in Arabic under others categories.

Relevant studies

Till date not many studies have been conducted on the numerals as a sub-category of adjectives and most of the existing studies discuss the notion of numerals from a different point of view. The researcher has managed to review previous studies that focus on structure, behaviour, position and order of numerals in both Arabic and English. Some of these studies deal with numerals from a computational point of view but they serve language and linguistics. The studies include; Amer (2013), Dryer (2018), Sadler (2010), Dada (2007), Alqarni (2021) and Al-Bataineh and Branigan (2020).

The contrastive study of Amer (2013) is an investigation into the differences between English and Arabic position and order of adjectives. It focuses on the errors that students commit with regard to the position and order of English adjectives. The study ends with some recommendation for pedagogical remedies to solve the problem under investigation. Dryer (2018) conducted a typological study on the order of demonstratives, numeral adjectives and noun on a sample of (576) languages. He concludes that the frequencies of the different orders of the demonstratives, numerals and nouns can only be explained in terms of semantic notions, independent of their syntactic realization. The study of Al-Bataineh and Branigan (2020) investigates the internal morphological structure of numerals (simple, compound and complex). They concluded that order, case assignment, and agreement are realised with remarkable complexity in the Arabic numeral system. The analysis suggests that the determiners phrase 'DP' contains a single Numeral head which can express additive and multiplicative operations. They identify a recurrent pattern found inside complex numerals and in the structural relations between numeral and the nouns they quantify. Sadler (2010) studies the behaviour of the different types of the numeral-noun constructions in some Arabic vernacular dialects. She focuses on the patterns of agreement within NP, interaction with placement of nominal modifiers and complements, as well as with coordination, and headedness arguments to propose a lexical functional grammar analysis from the results. The

discussion deals with the numerals from three to ten. The study has found that there are interesting interactions with numerals as the overall structure is plural despite there being a singular noun. Dada (2007) studies the numerals from a computational point of view in order to benefit from the results in a grammar library for Arabic implement. He states that the Arabic numeral system is rich in morpho-syntactic variety but lacks of a good source of computation to describe it so as to be reused, which requires the use of rules of the Arabic numeral system to be re-implemented each time, 'or use simplified, imprecise rules' as a result there is a low quality applications. It is found that the Grammatical Framework (GF) is the solution. The study also describes the implementation of the numeral system of Arabic and the reuse of the system by accessing a simple language-independent API rule. Alqarni (2021) discusses the issue of gender polarity as a morphological phenomenon in Arabic with regard to the numerals (three to ten). His paper provides insights to the concept of gender polarity on the whole. That the numerals (three to ten) interact with the morphology of the count noun instead of reacting to its gender, whether this count noun bears the morpheme /-at/ or /-a:tu/, /-a:ti/ in its structure. Accordingly, he suggests that in Arabic 'gender polarity' is a misnomer and the phenomenon is 'morpheme polarity'.

2 Adjectives of Numbers

Cardinal, ordinal and multiplicative numerals behave like adjectives. Arabic has adjectives but they are not treated as a separate part of speech, they are classified under the noun. Multiplicative adjectives can be adjectives or adverbs. In English adjectives constitute a separate part of speech; the numerals are treated as determiners or adjectives. Sometimes a noun can be modified by another noun in this case the result is (noun plus noun) or a compound noun, the structure is not adjective plus noun. Nikolaeva and Spencer (2019:15) state that syntactic construction with noun, often are used before nouns and the term attributive adjective is common syntactically, attributive adjectives are limited to the noun phrase. Dahami (2012: 82 -117) gives a detailed description, pointing out adjectives of number referred to as numerals and they can be definite or indefinite;

- a- Definite numeral adjectives are cardinal and ordinal numbers, the cardinals denote an exact number such as 'one, two, three etc. The ordinals denote order such as 'first, second, third and so'.
- b- Indefinite numeral adjectives are the ones that do not denote an exact number; as: all, few, some, many, etc.
- c- Multiplicative numerals are like (once, twice, three times or thrice, four times) mentioning the number of times of the occurrence of some action.

This study investigates cardinal, ordinal and distributive numerals, behaviour, order and agreement. The uses of these numerals seem to be difficult for the Arabs who use English and English who use Arabic (Khan et al., 2021). Aziz (1985: 159) explains that, in Arabic, adjectives are considered as a noun subclass, being distinguished from noun as (a noun which is not an adjective), and the other as, (a noun which is an adjective). Few distinctions can separate the nouns from the adjectives in Arabic language, but the similarities are more than the differences. Corbett (1978: 355-368) states that that the properties of one grammatical category are not shown by simple numerals in many languages. Adjectives share syntactic and morphological properties with lower numerals. The properties of higher numerals tend to exhibit properties associated with nouns.

3 Problem of the study

The study deals with advancing towards the perfection of linguistic competence and performance with regard to the structure, use and order of numerals. Numerals, compared to the other adjectives are different even within the one language, and this is also true when they are compared to the other languages. This creates structural problems to speakers of Arabic and English and lead to ambiguity at times. Linguistically, Arabic and English are languages belonging to different language families and the linguistic and cultural behaviour of each language exhibiting each one's own identity. The lack of competence in the use of numeral adjectives can be referred to structural interlingual and cultural differences between both languages. This study is an attempt to examine analytically the similarities and differences of numeral adjectives in both English and Arabic focusing on the types, supported with examples of usage with respect to the differences and similarities, as well as the difficulties faced. The study is prepared to contribute in enriching the field of syntax because of the lack of researches in this area. It attempts to answer the following main questions:

1. What are the types, behaviour and order of numerals in Arabic and in English?
2. What are the linguistic cross-cultural differences and similarities between Arabic and English related to numerals?
3. What are the linguistic difficulties and challenges related to numerals that face the users of both Arabic and English?

4 Objectives of the study

This study examines analytically the similarities and differences of numerals in both Arabic and English and Arabic adjectives focusing on the types, supporting with examples of usage and pinpointing the differences and similarities. It is prepared to contribute in enriching the field of study because of the lack of researches in this area.

The main objectives of the study are to:

- investigate the types, behaviour and order of numerals in Arabic and in English.
- find out the linguistic difficulties and challenges that face the users of both languages.
- minimize the linguistic cross-cultural gap between Arabic and English by identifying the types of interlingual errors related to numeral adjectives.
- develop a level of proficiency and accuracy and bring the learners of both languages to syntactic confidence related to numeral adjectives.

5 Significance of the study

This study is significant because it seeks forward to find and sort out the differences and similarities between the construction and use of Arabic and English numerals. The similarities constitute linguistic facilitators while the differences constitute linguistic barriers that users of both languages face. It is expected that the results will raise language users' awareness to the linguistic and cultural differences between the speakers of Arabic and the speakers of English. It idealizes the linguistic performance through the perfection of competence. The study is also significant because it is the first of its kind to be carried out in Prince Sattam bin Abdulaziz University within the limits of the researcher's knowledge. The fact that Kingdom of Saudi Arabia is the destination for a great number of Non-Arab man power and visitors to the holy sites, regardless of their mother tongues. Most of them use English as a communication platform, which puts accurate use of English language in the list of the important considerations (Paulmony et al., 2022; Yunus). Moreover, the study provides information to linguists, researchers and educators, may further, constitute a key-factor to help in providing an insight for accurate communication.

6 Literature Review

Generally speaking, taking adjectives form a morpho- syntactic perspective; Pustet (2006: 61) mentions that most languages do not have independent class for adjective. So when it is used in syntactic context, lexicons can be combined with any types of grammatical items by investigating the position from other constituents in the higher-order syntactic configurations. From a semantic point of view, adjectives refer "to express property concepts". This shows the distinguished features of adjectives which are different from other parts of speech such as nouns and verbs, "whose most prototypical representatives denote object concepts and event concepts, respectively" Pustet (2006:61). Adjectives are treated as functions that can be either attributive or predictive. Arabic main word classes include only three; noun, verb and particle and adjectives are categorized as a sub class under the noun, as Owens (1988: 130) states:

Morphological, syntactic and semantic criteria were also used to define sub-classes. I will not go into great detail here, because under the careful examination of the Arabic grammarians the three individual word classes became perhaps more notable for their internal differences than for their coherency as classes (emphasis mine).

Hurford (1987) also states that studies the numeral systems in various languages:

There are a large number of non-trivial universals (however they may be identified) which apply only conditionally to languages. The point has to be made because almost all of the properties of numeral systems that I shall discuss are universal tendencies. That is, they are intuitively non-trivial statements true of strikingly large number of languages, though not completely exception-free.

Amer (2013) clarifies that when more than one adjective modify the same noun, Arabic Syntax does not have a specific order for adjectives, so that their appearance can be governed semantically, however, numeral adjectives take the first position. Swan (2005, 11) argues about the order of adjectives, stating that there is no specific and agreeable criteria for ordering a cluster of attributive adjectives.

When several adjectives come before a noun, they usually have to be put in a particular order. The rules for adjective order are very complicated, and different grammars disagree about the details.

In many languages order is not fixed. Dryer (2018) listed the twenty-four logically possible orders of four elements, followed by the number in a sample language. Dealing with adjective noun agreement a type of agreement is found in Arabic but not found in English. Abushquier and Sembok (2007) clarifies that, Arabic, requires adjectives to agree in number gender, case and definiteness with nouns. In their agreement, definiteness has a role to play: it is one of the features of agreement between adjectives and the nouns they modify. In Arabic, a noun may or may not have an article, if the noun has an article it must be an attributive adjective. This is what is referred to by definiteness agreement. Michalski (2016) mentions that out of the four agreement configurations three were described by classical Arabic grammarians, while one is non-classical. In some instances, due to the syncretism of declension forms, agreement in case is indeterminate. Numerals are found in both Arabic and English, Dahami (2012) notes that, three types of numeral adjectives are distinct; the definite numeral (cardinals and ordinals) and the indefinite numeral adjectives that denote no exact number such as: all, no, few, some, many, any, several, sundry, and certain. The third and last group is distributive numeral adjective.

7 Methodology

In order to investigate the problem, the study follows the qualitative analytical method. Different texts containing the types, behaviour and order of numeral adjectives in both Arabic and English languages were collected from different sources such as directive boards, mass media, social networks, films and T.V movies. Structural linguistic analysis of the sentences with regard to the adjectives is applied to find out about the structure and order of numeral adjectives. These structures are classified systematically and analysed in terms of content (quality) according to their level of adequacy. Results will establish the platform for what is language specific and what is universal to perfect the linguistic performance and other inter-personal abilities.

8 Data Analysis and discussion:

English and Arabic adjectives generally share semantic properties but not syntactic ones, because in Arabic an adjective follows the noun it modifies while in English it is dependent. The English adjective possesses six types according to Kachru and Nelson (2006:129), while Arabic adjective possesses only two types according to Yaziji (1985: 95). At the level of sentence, Arabic adjective is positioned after the noun while English, Adjective is positioned before noun.

The behaviour of Adjectives in Arabic

According Goldenberg (1998: 53-54) adjectives are defined as words of quality or state. Attributive adjectives modify attributive nominal reference. Arabic adjectives can be free or affixed for gender, dual or plural and they are syntactically independent. Yaziji (1985: 95), states that an attributive adjective is supposed to specify some qualities of the noun. Dealing with Arabic, gender is of great importance to the study of adjectives in general and numerals in specific. For both humans and non-humans Arabic cardinals are bound to gender. Flotow and Kamal (2020:106) and Alhawary (2011:38) distinguish between three types of languages. One type follows the grammatical gender, another group follows the natural gender and the third group is genderless. Arabic exhibits grammatical gender and English exhibits natural (biological) gender. In Arabic there are two genders masculine and feminine, the noun can be replaced by 'he' or 'she' but in English there are three genders masculine human, feminine human and animals, the noun can be replaced by 'he' 'she' or 'it'. According to Ryding (2005:168) in English it is clear that a singular or a plural noun belongs to a specific inflectional class. In Arabic, there are suffixes for number (duals and plurals) and there is the broken plural pattern that can shift a noun inflectional class into another but the declension of the noun depends on its nature.

Agreement

According to Aziz (1985: 165) Arabic adjectives only come after the noun they describe. Inflection and infixing are responsible for adjective agreement in four aspects; gender, number, case and definiteness as the following examples show.

E.g. salih and saliha	meaning useful (singular-a is a feminine marker)
salih-an- and saliha-tan	(dual) an/ ein and tan /tan and tein are dual and case markers)
salih-uun and salih-at	(-uun and -at are suffixes they are plural gender markers)

The Arabic cardinals (1 and 2)

In Arabic, as a rule of thumb, following the nouns they modify, adjectives are marked for singular, dual, and plural. Singular adjectives remain singular i.e., the base form, and the numeral (one) is implicitly found in the stem singular (e.g., 'tall man' means one tall man - rajul-un taweel). When the number (one) is mentioned, it is only for emphasis (as in -Whalad-un whahid-un and bint-tun whaid-atun- one boy and one girl, respectively). The numeral 'one' follows the counted singular of both genders. The agreement requires the Arabic suffix, (at) (with tanween; at-un) to agree in case and gender (add feminine marker), to the masculine noun to be feminine e.g Taweel, taweel-at-un (tall) Karim kareem-at-un (generous). As for the dual, it is also not important to use the numeral (two) inflection is enough to express the dual, dual suffix is attached to a singular stem to mark duality. Dual suffixes are - an and ayn, as in walad-an (two boys) and bint-an (two girls) in nominative case and walad-ayn (two boys), Bint-tayn (two girls) in genitive/accusative cases; Walad-an and bint-an imply the numeral two (uthnan).

The plural in Arabic means more than two. The plurals (like duals) are also driven from a basic singular stem, by means of inflecting (uun and een) to a singular masculine stem, e.g. (sadiġ) in the nominative case (sadiġ-uun) and (sadiġ-een) in genitive/accusative cases. Another type of plurals which is not marked by the suffixes (uun or een) is found in Arabic, (broken plural) like: walad (boy), plural awlad (boys) and kitab (book) plural kutub (books).

The Arabic numbers (wahid) meaning one is used for singular and (authnan) meaning two takes the dual or the plural. These cardinals have masculine and feminine forms and they are in complete agreement with the NPs they modify in post nominal position and follow the required syntactic case, which the following examples illustrate:

1-

- | | | | |
|-------|-----------------------------|----------------------------------|-----------------|
| i. | Wald-un
inD-N-Msc | wahid-un
inD-Nm-Cd-Msc | (one boy), |
| ii. | Bint-tun
inD-N-Fm | wahid-atun
inD-Nm-Cd-Fm | (one girl) |
| iii. | Wald-un
inD-N-Msc | wahid-un
inD-Nm-Cd-Msc | (The one boy) |
| iv. | Bint-tun
inD-N-Fm | wahid-atun
inD-Nm-Cd-Fm | (The one girl) |
| v. | Walad-an
inD-N-Msc-Dl | uthan
inD-Nm-Msc-Dl-Cd | (two boys) |
| vi. | Bint-tan
inD-N-Fm-Dl | uthna-tan
inD-Nm-Fm-Dl-Cd | (two girls) |
| vii. | Al- wlad-an
DfA N-Msc-Dl | al- uthn-an
DfA Nm- Msc-Dl-Cd | (the two boys) |
| viii. | Al- bintan
DfA N-Fm-Dl | al- uthnatan
DfA Nm-Fm-Dl-Cd | (the two girls) |

The examples 1(i-v) above from Arabic show that the cardinals one and two (wahid and uthnan) agree with the noun they modify in gender, indefiniteness, number and case. The example 1(v-viii) from Arabic show that the cardinals one and two (wahid and uthnan) agree with the noun they modify in gender, definiteness, number and case.

The cardinals (3 to 9)

Corbett (1978:366) mentions that cardinals from three to nine have masculine/feminine forms; these forms are taken in reverse agreement in gender with their modified nouns. This means- in post nominal position- they take the masculine form when they modify a feminine noun and take feminine form when they modify a masculine noun. They modify plural nouns.

2-

- | | | | | |
|-------|-------------------------------|--------------------------|---------------------------|-------------------------------|
| i- | Qraatu
[v+sb(I)] | thalathata
inD-Nm- Fm | kutub
inD-N-Pl-Msc | (I read three books) |
| ii- | Ishtaraitu
[v+ sb(I)] | thalath
inD-Nm- Msc | dajajat
inD-N-Pl-Fm | (I bought three hens). |
| iii- | Qabalna saba'at
[v+sb(we)] | rijal
inD-Nm- Fm | | (We met seven men) |
| iv- | Hafthtu sab'
[v+sb(I)] | qasa'id
inD-Nm- Msc | | (I memorized seven poems) |
| v- | Qraatu
[v+sb(I)] | thalathata
Nm- Fm | al-kutub
DfA -N-Pl-Msc | (I read the three books) |
| vi- | Ishtaraitu
[v+ sb(I)] | thalath
Nm- Msc | al-dajajat
DfA-N-Pl-Fm | (I bought the three hens). |
| vii- | Qabalna saba'at
[v+sb(we)] | al-rijal
Nm- Fm | | (We met the seven men) |
| viii- | Hafathtu qasa'id
[v+sb(I)] | al- sab'
N-Pl-Fm | | (I memorized the seven poems) |

The examples 2(i-v) above, from Arabic, show that the cardinals (thalatha to tisa'a) three to nine agree with the noun they modify in number (always plural) and case but they don't agree with it with regard to gender i.e. in reverse agreement. They also do not agree in definiteness, as for the examples 2(v-viii) from Arabic, they show that the numerals (thalatha to tisa'a) three to nine agree with the noun they modify in number case and gender. Examples 2(v to viii) show that in phrases or sentences where the simple cardinals (one to ten) modify nouns, the definite (al-) can be attached to the noun they modify without being added to the numeral, definiteness agreement is violated.

The cardinal (10)

According to Nima (1973:91-92), the numeral (ten) has two cases; simple and complex. When it is used as simple; it disagrees with the noun it modifies in gender like the cardinals (3-9), as in:

3-

- | | | | | |
|-----|---------------------|--------------|----------------------------|-------------------------|
| i- | Katabt
[v+sb Fm] | Muna
(N)] | asharat astur
inD-Nm-Fm | (Muna wrote ten lines) |
| ii- | Akalna shar | | tamr-at | (we ate ten dates) |

	[sb(we)+v]	inD-Nm- Msc	inD-N-Pl-Fm	
iii-	Ishtareina	shar-at	al-	kutub (we bought the ten books)
	[sb(we)+v]	inD-Nm-Fm	DfA	N-Pl-Msc

The numeral ashara (ten) is in reverse agreement with the noun (astur) lines which is masculine and the noun tamrat (dates) which is feminine. When the cardinal (ten), it agrees with the accusative noun it modifies, the examples above 3(i, and ii) illustrate. The example 3(iii) shows that the definite (al-) is attached to the modified noun (the genitive), not the cardinal (ashara) ten violating the definiteness agreement. The cardinals from three to ten modify plural nouns. They follow the required syntactic case.

The cardinals (11 and 12)

These numerals are compounds; they contain 'ones' and 'tens' digits. Al-Sharkawi (2017: 158-162) states that the numerals (ahad-ashr and uthna-ashr) eleven and twelve, show gender agreement in the ones digit. The cardinal (uthna ash) twelve, always shows gender and case agreement on the dual digit.

4-

i-	Ahad-ashr	walad-un'	(eleven boys)
	Nm-Msc- Cd	N-Sg- Msc	
ii-	Ihda-ashr-at	bint-tun	(eleven girls)
	Nm-Fm-Cd	N-Sg-Fm	
iii-	Uthna-ashr	walad-un	(twelve boys)
	Nm-Du-Msc- Cd	N-Sg- Msc	
iv-	Uthnata-ashr-at	bint-tun	(twelve girls)
	Nm-Du-Fm- Cd	N-Sg- Fm	

The examples 4(i-iv) above from Arabic show that the cardinal eleven and twelve (ahad-ashr and uthna-ashr) both parts of the cardinal, agree with the noun they modify in gender and number.

It is worth mentioning that in Arabic as in 4(i to iv) the noun modified by eleven and twelve comes in the singular form (waldun and bintun) and follow the required syntactic case.

The cardinals (13 to 19)

Numerals from 13 to 19 are always subject to accusative case, this is with regard to ones digits. The tens digit agrees with the indefinite accusative singular counted nouns they modify.

5-

i-	Thalata-ashr	walad-an (thirteen boys).
	Nm-Pl-(Fm-Msc)-Cd-	N-Sg-Msc
ii-	Thalath-ashrata	bint-an (thirteen girls)
	Nm-Pl(MscFm)- Cd	N-Sg- Fm

The examples 5(i and ii) from Arabic show that the in cardinals (thalathata-ashr to atisa'ata-ashr) the (ones) digit disagree in gender with the noun they modify while the (tens) digit agrees with the noun they modify in gender. They disagree with modified noun which is always singular in definiteness while the case remains accusative.

The cardinals (20 to 90)

Alosh and Clark (2021:117) clarify that Arabic ten-fold numerals (from 20 to 90) and, behave like nouns, they are bound to the required syntactic case (nominative/accusative). They modify singular nouns. Examples:

6-

i-	Raaitu	ishreen	walad-un.	(I saw twenty boys)
	[sb(1)v]	Nm-Pl-Msc- Cd	N-Sg-Msc	
ii-	Raaitu	ishreen	bint-un.	(I saw twenty girls)
	[sb(1)v]	Nm-Pl-Msc- Cd	N-Sg-Fm	
iii-	Raaitu	wahid	wa ishreen	walad-un (I saw twenty-one boys)
	[sb(1)v]	Nm-Sg-Msc- Cd	Cj Nm-Pl- Cd	N-Sg-Msc
iv-	Raaitu	ihda	wa ishreen	bint-un. (I saw twenty-one girls)
	[sb(1)v]	Nm-Sg-Fm- Cd	Cj Nm-Pl-Cd	N-Sg-Fm

The structure, behaviour and agreement of the cardinals from (thalatha wa ishreen to tis'aa wa tis'een) twenty three to ninety nine.

v-	Raaitu	thalatha	wa ishreen	walad-un.	(I saw twenty-three boys)
	[sb(1)v]	Nm-Sg-Fm- Cd	Cj Nm-Pl-Cd	N-Sg-Msc	
vi-	Raaitu	thalath	wa ashreen	bint-un	(I saw twenty-three girls)
	[sb(1)v]	Nm-Sg-Msc- Cd	Cj Nm-Pl-Cd	N-Sg-Fm	
vii-	Raaitu	khamsata	wa tis'een	walad-un.	(I saw ninety-five boys)
	[sb(1)v]	Nm-Sg-Fm- Cd	Cj Nm-Pl-Cd	N-Sg-Msc	
viii-	Raaitu	khams	wa tis'een	bint-un	(I saw ninety-five girls)

[sb(1)v] Nm-Sg-Msc- Cd Cj Nm-Pl-Cd N-Sg-Fm

Ranginwala (2013:160-162) mentions that in the structure of the Arabic numerals (21 and on) the singular numbers (thalataha to tisa'a) that are attached to the words of ten-fold (ishruun to tis'uun), twenty to ninety for example: twenty-one, and thirty-four. It is in conjunction with the singular number that preceded it, and case is determined according to the modified singular masculine noun in its syntax as in 6(i, iii, v, vii) or case is determined according to the modified singular feminine noun in its syntax as in 6(ii, iv, vi, viii). The simple numerals from (thalatha to tis'aa) three to nine are in reverse agreement with the modified noun while the ten-fold digit remains constant.

The cardinals (100 to 1000 and on)

Corbett (1978:366) states that the Arabic cardinals from (me'at) one hundred and on follow a genitive singular noun; they have dual and plural forms and they also constitute part of complex numeral structures.

7-

- | | | | | |
|------|----------|------------|-------------|---|
| i- | Raaitu | me'at | wlad-un | (I saw one hundred boys) |
| | [sb(1)v] | Nm-Pl-Cd | N-Sg-Msc | |
| ii- | Raaitu | me'at | bint-un | (I saw one hundred girls) |
| | [sb(1)v] | Nm-Pl-Cd | N-Sg-Fm | |
| iii- | Raaitu | me'at-tayn | wlad-un | (I saw two hundred boys) |
| | [sb(1)v] | Nm-Pl-Cd | N-Sg-Msc | |
| iv- | Raaitu | me'at-tayn | bint-un | (I saw two hundred girls) |
| | [sb(1)v] | Nm-Pl - Cd | N-Sg-Fm | |
| v- | Raaitu | me'at | wa sitta-at | wlad-un. (I saw one hundred and six boys) |
| | [sb(1)v] | Nm-Pl-Cd | Cj Nm-Pl-Cd | N-Sg-Msc |
| vi- | Raaitu | me'at | wa sitta | bint-un. (I saw one hundred and twenty-three girls) |
| | [sb(1)v] | Nm-Pl -Cd | Cj Nm-Pl-Cd | N-Sg-Msc |

The cardinal (me'at) one hundred is a noun so that no reverse agreement is needed. The examples 7(i-ii) show that (me'at) is constant while modified noun is always singular. The examples 7(iii and iv) show that the cardinals (me'at-tayn) two-hundred is treated as a dual and follows the dual cases (nominative -an and accusative -ayn) and the modified noun is always singular. The examples 6(v and vi) show that the complex cardinal (me'at wa sitta) has the digit (me'at, the conjunction (wa) and the simple number sitta) one hundred the conjunction and the simple numeral six. The tens digit remains constant. The ones digit disagrees with the modified noun is always singular and follows the nominative or accusative as required. For the ordinals (me'a and alf) they stay the same regardless the gender because they are nouns. Two hundred and two thousand are treated as a dual (me'at-ayin/tan, Alfa-yin/an).

8-

- | | | | |
|-----|--------------|----------|----------------------|
| i- | Sittat aalaf | walad | (six thousand boys) |
| | Nm-pl -Cd | N-Sg-Msc | |
| ii- | Sit' aalaf | bint | (six thousand girls) |
| | Nm-pl -Cd | N-Sg-Msc | |

The examples 8(i-ii) show that when the cardinal (alf) one thousand is preceded by sitta (six) and this is true for all the digits from three to nine those digits are in reverse agreement with the noun they modify which is always singular. The plural of numeral thousand (aalaf) is to be used here.

The cardinals of English

Singh (2021: 93) states that the Cardinal, the ordinal and the multiplicative are numeral adjectives, they express definite quantity, and have no comparison. With regard to the behaviour and agreement of cardinals in English, Verma (2011:49) mentioned that in English, cardinals are definite and there have no agreement with the noun in number and gender. The cardinal 'one' modifies a singular noun, examples;

9-

- | | | | | | |
|-----|--------------|----------|---------|--------------|---------|
| i- | One | man | and | one | woman |
| | Nm-Sg-Cd | N-Sg-Msc | Cj | Nm-Sg-Cd | N-Sg-Fm |
| ii- | The one | man | and the | one | woman |
| | DfA Nm-Sg-Cd | N-Sg-Msc | Cj | DfA Nm-Sg-Cd | N-Sg-Fm |

The examples 9(i-ii) above from English show that the cardinal one modifies singular nouns either masculine or feminine. 'One' agrees with the singular noun it modifies in number but there is no gender, definiteness or case agreement.

It is worth mentioning that agreement in number is sometimes implicit, zero morpheme is added. This appears clearly in the following example:

10-

- | | | | |
|----|-----|-------|---------------------|
| i- | One | sheep | (sheep is singular) |
|----|-----|-------|---------------------|

	Nm-Sg-Cd	N-Sg-Fm
ii-	Six	dogs (dogs is plural)
	Nm-Sg-Cd	N-Sg-Fm
iii-	Six	sheep (sheep is plural)
	Nm-Sg-Cd	N-Pl-Fm

The examples 10(i-ii) above from English show that the cardinal ‘one’ agrees with the singular noun it modifies in number. The cardinal ‘six’ agrees with the plural noun it modifies in number. There is a morphological phenomenon in English where a plural number agrees with a singular noun as in 10(iii) implicit agreement in number takes place when a singular noun is the same as the plural (sheep- singular and sheep-plural). Morphemes like (sheep) are few and limited in number. In English there is no definiteness, gender or case agreement.

The cardinals from two and up are plurals so that they modify plural nouns;

11-

i-	Two	men	and	two	women		
	Nm-Pl -Cd	N-Pl-Msc	Cj	Nm-Pl-Cd	N-Pl-Fm		
ii-	Six	boys	and six	girls			
	Nm-Pl -Cd	N-Pl-Msc	Cj	Nm-Pl-Cd	N-Pl-Fm		
iii-	The	two	men	and	the	two	women
	DfA	Nm-Pl-Cd	N-Pl-Msc	Cj	DfA	Nm-Pl-Cd	N-Pl-Fm
iv-	The	six	boys	and	the	six	girls
	DfA	Nm-Pl -Cd	N-Pl-Msc	Cj	DfA	Nm-Pl-Cd	N-Pl-Fm

The examples 11(i-iv) above from English show that the plurals in English start by the cardinal two because English has no ‘dual’. The examples show that there is agreement with the noun it modifies in number but not the case, indefiniteness or gender.

Unlike Arabic English has natural gender, Ayoun (2022: 131) states that ‘from a syntactic point of view English does not have gender agreement’. Thus, the following examples 12(i to vi) show.

12-

i-	One	boy
	Nm-Sg-Cd	N-Sg-Msc
ii-	One	girl
	Nm-Sg-Cd	N-Sg-Fm
iii-	Two	boys
	Nm-Pl-Cd	N-Pl-Msc
iv-	Two	girls
	Nm-Pl-Cd	N-Pl-Fm
v-	Thirteen boys	
	Nm-Pl-Cd	N-Pl-Msc
vi-	Thirteen girls	
	Nm-Pl-Cd	N-Pl-Fm
v-	Hundred	boys
	Nm(100)-Pl-Cd	N-Pl-Msc
vi-	Hundred	girls
	Nm(100)-Pl-Cd	N-Pl-Fm

There is no gender agreement in English in general, so, all the cardinals agree with the noun it modifies only in number. In the examples 12(i-ii) the cardinal one agrees with the singular noun it modifies. All the other cardinals take plural nouns, as the examples 12(iii-vii) show, and there is no any other type of agreement between the cardinal and the noun it modifies. As for the structure of the English compounds, Verma (2011: 49) points out that Arabic and English have the same word order of the compound cardinal numerals from eleven to ninety nine; the ones digit comes first then the tenth, e.g. (thalathata-ashr, thirteen), (arbata-ashr, fourteen), (Seventy six, Ninety nine). With complex cardinals no ‘-s’ is to be added to ‘hundred’, ‘thousand’ and ‘million’ e.g. Six thousand seven hundred thirty (6730).

Arabic Ordinals

From a morphological point of view (Miller et al. 2000, Wiese 2003) cited in Hamann (2013: 522) states that in many languages including English, German, French and Chinese, ordinals are derived from the cardinals by adding affixes according to the language. Ordinal adjectives indicate order or place of the modified noun among a group of others. They are adjectives; they agree with the nouns they modify in gender, they agree with the noun in definiteness or indefiniteness according to the situation. In Arabic they occupy the position of

adjectives (post nominal). The regular form for the ordinal is the pattern (fa'il) is derived from the cardinal root except for (awal) first.

13-

- i- Al- walad al- awal (The first boy)
DfA N-Sg-Msc DfA Nm-Od-Sg-Msc
- ii- Al- bintu al- uula (The first girl)
DfA N-Sg-Msc DfA Nm-Od-Sg-Msc

The above examples 13(i-ii) show that the Arabic ordinal for "first" is (awal) is not related to (wahid), it comes from another root. The examples also show the ordinal agreement with the noun.

14-

- i- Al- walad al- thani. (The second boy)
DfA N-Sg-Msc DfA Nm-Od-Sg-Msc
- ii- Al- bintu al- thania. (The second girl)
DfA N-Sg-Msc DfA Nm-Od-Sg-Msc

The examples 14(i-ii) illustrate the uses of the Arabic ordinal for (th'ani or thaniya) second which is a defective adjective. Without the definite article it is (th'an-in) for masculine and (th'ania) for feminine where case is not shown for nominative and genitive but for the accusative there is a fatha. The ordinals (three to ten) are all active participle patterns. The ordinal (althamin/althamina) "eighth" is ought to be derived from (thamania) but it is not like the cardinal for some reason or another. The (ya) is omitted so that the ordinal is without the (ya).

15-

- i- Al- satr al- khamis (the fifth line)
DfA N-Sg-Msc DfA Nm-Od-Sg-Msc
- ii- Al- qasida al- khamisat (the fifth poem)
DfA N-Sg-Fm DfA Nm-Od-Sg-Fm
- iii- Al- markaz al- thalith (The third position)
DfA N-Sg-Msc DfA Nm-Od-Sg-Msc
- iv- Al- alfeeia al- thalithat (The third millennium)
DfA N-Sg-Fm DfA Nm-Od-Sg-Fm

The above examples 15(i-iv) show that the ordinals follow the noun they modify and agree with them in definiteness, case, and gender.

Ryding (2005: 359-362) points out that with the compound, tens ordinals, the first part of the compound has the ordinal form of the number and agrees with the following noun in gender. Both parts of the ordinal agree in case and definiteness with the singular modified noun.

16-

- i- Al- walad al- tasi' - ashar (The nineteenth boy)
DfA N-Sg-Msc/Fm DfA Nm-Od -Msc Nm-Od -Msc
- ii- Al- bint al- tasi'at- asharat (The nineteenth girl)
DfA N-Sg-Msc/Fm DfA Nm-Od-Fm Nm-Od-Fm

The examples above 16 (i-ii) show that in Arabic compound ordinal that has ones and tens digits, the first part of the compound (one to nine) has the ordinal form of the number and agrees with the following noun in gender. Both digits agree in in gender with the singular modified noun.

The ordinals (20 to 99 to 100 to 1000) behave the same way as the compounds above)

17-

- i- Al- katib/atal- ishr-uun/een (The twentieth writer)
DfA N-Sg-Msc/Fm DfA Nm-Od-Pl-Msc
- ii- Al- katib/atal- khams-uun/een (The fiftieth writer)
DfA N-Sg-Msc/Fm DfA Nm-Od-Pl-Msc
- iii- Al- katib/atal- wahid wa al- khams-uun/een (The fifty-first writer)
DfA N-Sg-Fm DfA Nm-Od-Sg-Pl Cj DfA Nm-Od-Pl-Msc
- iv- Al- katib/atal- thani wa al- khams-uun/een (The fifty-second writer)
DfA N-Sg-Fm DfA Nm-Od-Sg-Pl Cj DfA Nm-Od-Pl-Msc
- v- Al- katib/at al- thalith wa al- khams-uun/een (The fifty-third writer)
DfA N-Sg-Msc/Fm DfA Nm-Od-Sg-Msc Cj DfA Nm-Od-Pl-Msc
- vi- Al-katib/at al- me'at (The fifty-third writer)
DfA N-Sg-Msc/Fm DfA Nm-Od-Li-Fm
- vii- Al-katib/at al- me'at wa uthnan wa ishr-uun/een (the one-hundred fifty first writer)
DfA N-Sg-Msc/Fm DfA- Nm-Cd Cj Nm-Cd-Dl Cj Nm-Od-Pl
- viii- Al-katib/at al- alf
DfA N-Sg-Msc/Fm DfA Nm-Od-Sg-Msc

The examples 17(i to iii and vii to viii) show that the ordinals (ishreen) (20th and its counterparts like 30th, 40th) modify singular nouns and behave the same way like the cardinals but the definite article (-al) is attached to the ordinals and gender agreement is not polar. The examples (iii, iv, v and vii) are complex and conjoined by (wa) and. They represent the ordinals (21st to 999th) other than (20th, 30th and on). The complex ordinals are ordered at the ones digit (alhadi, alhani, althalith , ...altasi') while the rest of the number remains constant. These entire ordinals modify singular nouns regardless its gender.

Ordinal numbers constitute some difficulty in Arabic because they are gender-defined. Unlike English, Arabic uses the ordinals for telling the time; with the exception of the ordinal (first) i.e. they use Al-whahida instead of (al-ou'la). In telling the time, the definite feminine cardinal numbers are used;

18-

- | | | | | | |
|-----|-----|---------|-----|-------------|----------------------|
| i- | Al- | sa'atu | al- | sadisa | (it is six o'clock) |
| | DfA | N-Sg-Fm | DfA | Nm-Od-Sg-Fm | |
| ii- | Al- | sa'atu | al- | tasi'a | (it is nine o'clock) |
| | DfA | N-Sg-Fm | DfA | Nm-Od-Sg-Fm | |

The examples 18 (i-ii), show that Arabic uses the ordinals (al-sadisa and al-tasi'a) the sixth and the ninth to tell the time, although they are ordinals. These ordinals agree with the feminine noun they modify in definiteness gender and case.

ElSaadany (2008: 20) clarifies that ordinals are adjectives, so that, their behaviour is the same with regard to position and agreement.

English ordinals

As in Arabic, English ordinals are numerals which are used for positioning a noun in a sequence. In English, the suffix (-th) is added to the root except for (one) first, (two) second, (three) third.

19-

- | | | | | | |
|------|----------|---------|-----|---------------|------------|
| i- | Jack | scored | the | first | position |
| | N-Sg | v | | DfA | Nm-Od N |
| ii- | Muna | goes to | the | second | class |
| | N-Sg | v | Pr | DfA | Nm-Sg-Od N |
| iii- | Jack | met | the | fifth | president |
| | N-Sg | v | DfA | Nm-Od | N |
| iv- | This | is | the | tenth | lesson |
| | Pr-Sg | v | DfA | Nm-Od | N |
| v- | Tomorrow | is | her | twenty-second | birth-day |
| | Av | v | Pr | Nm-Sg-Od | N |
| vi- | That | was | his | ninetieth | goal |
| | Pr-Sg | v | Pr | Nm-Sg-Od | N |

Hamann (2013: 522) states that English ordinal numbers are first, second, third, fourth, etc. they are also written 1st, 2nd, 3rd and do not have a regular pattern. The ordinals 4th up to 20th are regular and are formed by adding the suffix (-th) to the name of the cardinal numeral.

20-

- | | | | |
|------|-----|------------|--------|
| i. | The | seventh | boy |
| | DfA | Nm-Sg-Od | N-Msc |
| ii. | The | tenth | Girl |
| | DfA | Nm-Sg-Od | N-Fm |
| iii. | The | Nineteenth | member |
| | DfA | Nm-Sg-Od | N-Ntl |

The examples 20(i-iii) show that the ordinals; seventh, tenth and nineteenth are formed by adding (-th) to the cardinals seven, ten and nine respectively. All the ordinals are formed the same way, except for first, second and third.

The suffix '-th' is added to the second or last component of the compound ordinal numeral. When the second compound is related to (one, two or three it appears as; first, second or third which are also related to forms such as 91, 92, and 93 and like are formed as;

21-

- | | | | |
|------|-----|-----------------------------------|------------|
| i- | The | twenty-first (21 st) | competitor |
| | DfA | Nm-Sg-Od | N-Ntl |
| ii- | The | twenty-second (22 nd) | competitor |
| | DfA | Nm-Sg-Od | N-Ntl |
| iii- | The | twenty-third (23 rd) | competitor |
| | DfA | Nm-Sg-Od | N-Ntl |

The examples 21(i-iii) are related to the formation of the compound ordinals which first part is (one, two or three). First and second are not related to (one and two, while the suffix (-rd) is added to form the ordinal (third). In the formation of the ordinals related to hundred, million or their multiplications the suffix -th is also attached to the second component as in (one million – the one-millionth and two hundred – the two-hundredth).

The general order of Arabic adjectives

A set of attributive adjective including cardinal or ordinal adjective or both types of numerals can modify same noun in both English and Arabic.

In both languages a sequence of adjective including numerals can modify the same noun. In Arabic language attributive adjectives are Simple or compound, they are pre-headed they follow and agree and with the head nouns. When more than one adjective qualifying the same noun, appearing in the sentence, there is no fixed syntactic order for Arabic adjectives but semantically they appear in the sentence according to their importance.

22-

Inna	khayr man astajart	alqawiu al'amin		
em-pr	Aj	Cj [v-sbj(you)]	Aj(1)	Aj(2)

The above verse (22) from Qur'an shows that adjectives in Arabic are ordered according to their importance. Interpretation of the holly Quran: surely the best of those that you can employ is the strong and faithful man. (Quran 28:26). This example shows that adjectives are ordered according to the situation in which they are said; the adjective strong is more important than faithful then the order of the adjectives relies on their importance. In Arabic, according to Amer (2013) from a syntactic point of view, adjectives do not have order in general. But they are ordered semantically. This means the most important one in the sentence comes first, followed by the less important one.

According to Kaul (2020: 104) adjectives are an open class with numerous semantic features and sub - groups such as 'colour, value, size, age, weight, etc.' They attribute qualities or properties and they are ordered with regard to the importance of these qualities or functions.

Order of numerals among other adjectives in Arabic

As mentioned before, Arabic does not have fixed order of adjectives in general but when numerals are used, Arabic order of numerals among the other adjectives is first position. In case more than one numeral adjective modify or qualify the same noun the ordinal comes first then the ordinal that come closer to the noun then the cardinal and finally the other types of adjectives if found. On the other hand, despite the rules, English meet many exceptions of using specific quantifiers. Douglas and Strumpf (2004:48) state that "When a cardinal number and an ordinal number modify the same noun, the ordinal number always precedes the cardinal number: The first two operations were the most difficult to watch".

In English, the order depends on the function of the adjective. The usual order starts by ordinal then the cardinal and the other adjectives appear in a specific sequence. Many grammatical references including Kaul (2020: 104) order the English adjectives as follows (quantity, value/opinion, size, temperature, age, shape, colour, origin, material). The concern here is that quantity has the priority which means numerals have first position. The following examples from Arabic illustrate the differences in the usages and meanings acceptability.

23-

i-	Al-	rusu'mat	al-	ashar	al-	jameela (The ten beautiful drawings)
	DfA	N-Fm-pl	DfA	Nm-Cd	DfA	Aj-Fm-Sg
ii-	Al-	rusu'mat	al-	jameela	al-ashar	(The beautiful ten drawings)
	DfA	N-Fm-Pl	DfA	Aj-Fm		Nm-Cd-Msc-Pl
iii-	Al-	rus'mat	al-	khamisa	al-	jammela (The fifth beautiful drawing)
	DfA	N-Fm-Sg	DfA-	Nm-Od	DfA	Aj
iv-	Al-	rus'mat	al-	jammela	al-	khamisa(The beautiful fifth drawing)
	DfA	N-Fm-Sg	DfA-	Aj_Sg	DfA-	DfA-Nm-Od
v-	Al-	safhat	al-	khamis	al-	uola (the first five pages)
	DfA	N-Fm-Pl	DfA	Nm-Cd	DfA	Nm-Od
vi-	Al-	safhat	al-	uola	al-	kams (the five first pages)
	DfA	N-Fm-Pl	DfA-	Nm-Od	DfA-	Nm-Od
vii-	Al-asharat		al-	awakir min Ramadan.		(The last ten nights of Ramadan)
	Nm-Cd-Fm-Pl		DfA	Nm-Od	Pr	N
viii-	Al-	awakir	al-	asharat	min Ramadan.	(the ten last nights of Ramadan)
	DfA	Nm-Od-Fm-pl	DfA		Nm-Cd-Fm-Pl	Pr
					N	

The examples 23(i to viii) from Arabic sentences show that, when the numeral adjectives appear before the other adjectives the sentence is logical and acceptable as in 24(i, iii, v and vii). When adjectives other than

numerals come first as in 23(ii, iv, vi and viii) sentences are illogical and unacceptable, but grammatically correct.

Order of numerals among other adjectives in English

On the order of English numerals, when there is a sequence of adjectives that embody cardinals and ordinals, Roy (2020:134) mentions that the usual place of numbers is before adjectives. The ordinals often come before the cardinals. Swan (1997:8) states: "Unfortunately, the rules for adjectives order are very complicated, and different grammars disagree about the details" but numerals usually take the first place before the other adjectives as in.

24-

- i- Two green bottles
Nm-Pl-Cd Aj N-Pl
- ii- The fourth big country
Nm-Od Aj N-Sg

The examples, 24 (i-ii) from English show that numeral adjectives appear before the other adjectives.

Swan (1997:9) adds most often the ordinals take place before the cardinals as in: 'The first two runners' which is more common than the phrase 'the two first runners'. Rzayev (2019:164) points out that in noun phrases that contain combinations of cardinals and ordinals, ordinals usually come before cardinals. 'However, they may be used freely before and after general ordinals: "His last two books were novels vs. His two last books were novels". With regard to the position of adjectives (including numerals), in English, they take a pre-noun position, they do not have special form, but certain suffixes characterize the adjectives (Pan et al., 2021; Hobi, 2011). In Arabic, they take a post noun position and they are derived from certain verbs and nouns. It is also found that the similarities of attributive adjectives in both Arabic and English are more than differences. Wiese (2003:276) states, numbers behave like all the other determiners, so that they come at the beginning of the NP and come in front of any other adjective preceding the noun. This is a cross-linguistic pattern where adjectives come closer to the noun than numerals and quantifiers. Hargis (2008:35) states that in noun phrases ordinals and cardinals may appear together before the nouns. When they are used together ordinals normally come before cardinals. The structure appears as follows: the definite article first, then the ordinal, then the cardinal and finally the noun.

25-

- i- The last two cars
DfA Nm-Od Nm-Cd N-Pl
- ii- Al- layali al- ashri al- awakhir (The last ten nights)
DfA N-Fm-Pl DfA Nm-CdDfA Nm-Od

The above example 25(i-ii) illustrate that, the English and Arabic ordinals occur before the cardinals so depending on the noun position in both languages the cardinal is closer to the noun.

Multiplicative adjectives

Multiplicative adjectives are attributive adjectives that always come before nouns and unlike the other adjectives they are not inflected. There are definite and indefinite multiplicative adjectives according to the modified noun. Quiles and López-Menchero (2012:205) explain that multiplicative adjectives are the ones that denote how many times the noun is as, single, double, thrice, twice, once, triple, two-fold, six-fold, nine-fold, etc. they represent repetition. Isoda and Olfos (2019: 160) on the other hand state; multiplicative numerals can be adjectives or adverbs. To differentiate the multiplicative numerals; (single, double, and triple) are adjectives and (once, twice, and thrice) are adverbs.

Multiplicative numeral Adjectives in Arabic

Owaida (2015:157) claims that (Mathna, thulath, ruba'a) are adverbs while Abu Al-Abbas (2014: 96) explains that the numeral patterns (Mathna, thulath, ruba'a up to ushar) are adjectives that stand instead of the cardinal numbers from (wahid to ashara) one to ten. No gender polarity takes place with multiplicative adjectives. Multiplicative adjectives are limited in number and use; they are active on occasions or can be replaced by a multiplicative adverb on other occasions in everyday language or even can be replaced by cardinals. In Arabic numeral adverbs are expressed as once,(marra), twice (mathna or marratein) three times(thulath or thath marrat) and they are all driven or added to cardinals.

26-

- i- Ja'a' al- rijal mathna (the men came double/ two, two)
v DfA N-Pl-Msc Aj-Nm-Mc
- ii- je'na al- nisa'u mathna (the women came double/ two, two)
v DfA N-Pl-Fm Aj-Nm-Mc
- iii- Ja'a al- rijal thulath (the men came thrice/ three, three)

	v	DfA	N-Pl-Msc	Aj-Nm-Mc	
iv-	Je'na	al-	nisa'u	thulath	(the women came thrice/ three, three)
	v	DfA	N-Pl-Fm	Aj-Nm-Mc	
v-	Ja'a'	al-	rijal ja'au	maratein	(the men came two times)
	v	DfA	N-Pl-Msc	Av-Nm-Mc	
vi-	Je'na	al-	nisa'u	maratein	(the women came two times)
	v	DfA	N-Pl-Fm	Av-Nm-Mc	
vii-	Ja'a'	al-	rijal	thalath	marrat (the men came three times)
	v	DfA	N-Pl-Msc	Av-Nm-Mc	N-Pl-Fm
viii-	Je'na	al-	nisa'u	thalath	marrat (the women came three times)
	v	DfA	N-Pl-Msc	Av-Nm-Mc	N-Pl-Fm

The above examples 26(i-iv) are cases for repetition of the cardinals, in 26(i, ii) the two groups of men and women came by two, and in 26(iii and iv) they came by three, that is, three, three. The repetition of the cardinal means they are adjectives. In 26(v-viii) the multiplicative words (marrat-ein and thalath marrat) two times and three times, are adverbs because they qualify the verb. The two groups 26(i-iv) and 26 (v-viii) of words are also distinguished as multiplicative adjectives and multiplicative adverbs.

One of the common multiplicative numerals in Arabic is (di'f , singular di'f –an/ayn, dual and (ad'af) plural). (di'f), means two or double, (di'f –an/ayn) means double or two and (ad'af) means multiplied.

27-

La-	takulu	al-	riba'	ada'afan	muda'afa-tan	(Eat not usury doubled and multiplied)
prh-pr	v	DfA	N-Nc-Msc	N-Pl-Msc	Aj-Nm-Mc	Affix(nunation)

The example (27) above the multiplicative adjectives (muda'afa-tan) modifies the plural noun (ada'afan) that comes before it.

Order of multiplicative numeral adjectives among the other numerals in Arabic

In the use of multiplicative adjectives among the other numerals it is found that multiplicative numerals can be accompanied by either cardinals or ordinals. When they come together, multiplicative adjectives usually come before the cardinals. For a structural reason, no example that includes cardinal, ordinal and multiplicative together is found.

28-

i-	Yusawy	sitta	ada'af	al-	khamasa	(It equals six times the five).
	[v-sbj(it)]	Nm-Pl-Cd	Aj-Mc	DfA-	N-Fm	
ii-	Yataqadaa	thalath	'at	ada'af	al-	murattab (He gets three times the salary).
	[v-sbj(he)]	Nm-Pl-Cd	Aj-Mc	DfA	N-Msc	
iii-	Al-	mablaqu	althani	di'f	Al-	mablaqu al-awal (the second amount is double the first)
	DfA	N-Msc	Nm-Od	Aj-Mc	DfA	N-Msc DfA Nm-Od

In the examples 28(i-ii) the cardinals (sitta and thalath) six and three come before the multiplicative numeral (ada'af) multiplied. Cardinals modify the multiplicative numerals and are in reverse agreement with the modified noun. In 28(iii) the ordinal (al-thani) the second, comes before the multiplicative (di'f) double.

Multiplicative numeral adjectives in English

Multiplicative adjectives in English also, indicate the number of times a quantity should exist, these are; double, triple, quadruple. There is no fixed pattern to form these adjectives but they can be formed as, a number-fold (six-fold) or (number times) like; two times, three times and so. Hanna and Greis (1972:84) mention that multiplicative adjectives in English are driven from cardinals except for the single and the double(<https://notesread.com/100-examples-of-numeral-Adjectives/>)

In English decuple or tenfold are usually of round numbers only, for example twenty-fold and hundred-fold. In multiplicative numerals the values are multiplied (two hundred, three thousand) they are formed from multiplying the hundred and the thousand two times and three times.

29-

i-	He	gave	me	as	twice	as	you	gave.
	Sbj	v	Obj	Cj	Aj-Mc	Cj	Sbj	v
ii-	We	have	a	double	room.			
	Sbj	v	inD	Aj-Mc	N			
iii-	They	pay	two-fold	(double)	fees	to	the	driver.
	Sbj	v	Aj-Mc	Cj	N-Pl	Pr	DfA	N
iv-	Find	the	sixty-fold	of	twenty-five.			
	v	DfA	Aj-Mc	Pr	Nm-Pl-Cd			

The sentences 29(i-iii) are common examples of multiplicative adjectives and they always indicate the number of times a noun exist (single, double, triple ...). Multiplicative numbers are adverbials when they express how

many times some event happens (once, twice, trice). Depending on the function of the multiplicative numeral, it can be classified as an adjective or an adverb. An adjective determines or qualifies a noun while an adverb changes, explains or simplifies verbs or other adverbs. (<https://educalingo.com/en/dic-en/fivefold>)

30-

- i- A five-fold increase in funding
inD Aj-Mc N Pr N
- ii- The rate rose five-fold
DfA N v Av-Mc

The above examples 30(i-ii) distinguish between the multiplicative numeral adjectives and adverbs. In 30(i) the multiplicative adjective (five-fold) modifies the noun (five times as great or as numerous) while in 30(ii) it modifies the verb (rose) by five times, so that it is an adverb.

The order of multiplicative numeral adjectives in English among the other numerals

In English cardinal, ordinal and multiplicative numerals, it is found that cardinal and ordinal can modify on another or modify the multiplicative adjectives but for some structural reasons or another, the three types of numerals do not come together one after the other. When ordinal and multiplicative adjectives influence one another in the same sentence, each one can come before the other according to the meaning e.g. 'He was three times the first' and 'He was the first three times' convey the same meaning but emphasis is different. When it comes to the order of the ordinal and multiplicative numerals the following examples illustrate;

31-

- i- The house has one single room
Dfa N v Nm-Sg-Cd Aj-Mc N-Sg-Fm
- ii- The house has two double room
Dfa N v Nm -DI-Cd Aj-Mc N-Sg-Fm
- iii- The room has three double bed
Dfa N v Nm-DI-Cd Aj-Mc N-Sg-Msc

The examples 31(i-iii) show that when the cardinal and the multiplicative adjectives modify the same noun. The cardinals appear before the multiplicative adjectives. In English, as in Arabic cardinals take place before multiplicative adjectives.

Arabic does not treat adjectives as a separate part of speech. Arabic adjectives including numbers are positioned after the noun and are marked for singular, dual, and plural, according to the noun they modify. Arabic Syntax does not have a specific order for adjectives. In the other hand, English, adjectives are positioned before noun, act independently and usually follow a specific order. English treats them as a separate word class which is characterized by certain suffixes (Khan et al., 2022). In Arabic adjectives are inflected and infixed for agreements in; gender, number and case. Case itself includes nominative, accusative, and genitive and definiteness. English adjective Arabic number expresses singular, dual and plural and have masculine/feminine forms while English number expresses only singular and plural forms. Some Arabic and English cardinals like; 'wahid' 'uthnan' and 'one', 'two' have different patterns for the ordinals (awal, thani, first, second) respectively. Some of the differences between the English and Arabic rely behind how many and what parts of speech are there in each language? besides; order, case assignment, and agreement. These are realised with remarkable complexity in the numeral system for the learners of both languages.

CONCLUSION

Most languages do not have independent class for adjective and do not have fixed order of words and it is a cross-linguistic pattern that adjectives come closer to the noun than numerals and quantifiers. Both Arabic and English have cardinals, ordinal and multiplicative numerals, they refer to them as adjectives. Arabic cardinal adjectives (1,11 and 2,12) are in complete agreement with the singular or dual NPs they modify while (3 to 10) modify plural nouns and are in reverse agreement in gender with their modified nouns. The ones digits (3-9) digit in (13-19) disagrees in gender with the noun they modify while the (tens) digit agrees with the singular noun it modifies in gender and the case remains accusative. Ten-fold numerals (from 20 to 90) as well as (100 to 1000) are nouns. Ordinal adjectives in Arabic are derived from their cardinal roots and follow pattern (fa'il). Except for (awal) first, it is not derived from the root 'whaid'. Arabic ordinals follow the noun they modify and agree with them in definiteness, case, and gender. In the ordinal compounds the first part of the compound (one to nine) has the ordinal form of the number, both the ones and the tens digits agree in gender with the singular modified noun. Ordinal numbers constitute some difficulty in Arabic because they are gender-defined. Unlike English, Arabic uses the ordinals for telling the time.

English cardinals have no gender, definiteness or case agreement. The cardinal 'one' modifies a singular noun and all the other cardinals modify plural nouns. English ordinals have different patterns for (first, second and third) but other ordinals are derived from their cardinals by adding the suffix (-th). If the ordinal is compound or complex, the suffix is added to the last component. When the second compound is related to one, two or three it

appears as; first, second or third. Arabic adjectives in general are ordered semantically, while English language follows a specific pattern but in both languages the ordinals come before the cardinals. Depending on the noun parameter of the language the cardinal is closer to the noun. In both languages multiplicative adjectives are attributive adjectives that denotes how many times the noun occurs and there is no fixed pattern for these multiplicative adjectives in both languages. Depending on its function in both Arabic and English multiplicative numerals can be classified adjectives or adverbs. Cardinals are placed before the multiplicative adjectives. Arabic multiplicative adjectives are driven from cardinals or appear as (di'f, di'fain and ad'af) double, multiple and multiplied and no gender polarity takes place with them. As far as the numeral adjectives are concerned, both Arabic and English share similarities and show differences. Arabic is more complicated than English and there are Structural and typological differences that show difficulties and lead to errors. The study recommends that the target groups of non-native users of both languages should be stimulated via different methods to use adjectives in general and numerals in specific, correctly. Special courses of comprehensive practice should be designed to ensure the correct and perfect morpho-syntactic and semantic sense.

Acknowledgements

This project was supported by the Deanship of Scientific Research at Prince Sattam Bin Abdulaziz University under the research project (PSAU-2022/02/19983)

REFERENCES

1. Abu Al-Abbas, M. (2014) *The Easy Syntax: A study of grammar, meanings, and syntax that combines authenticity and modernity*. Cairo: Dar Al-tala'i for Publishing and Distribution
2. Abu Shquier, M. & Sembok, T. (2007) "HANDLING AGREEMENT IN MACHINE TRANSLATION FROM ENGLISH TO ARABIC". 1st International Conference on Digital Communications and Computer Applications (DCCA2007) JUST. PP: 385 – 379.
3. Alhawary, T. M. (2011) *Modern Standard Arabic Grammar: A Learner's Guide*. UK: John Wiley and Sons: ISBN 978-1-4051-5502-1
4. Ali Dada, A (2007) Implementation of the Arabic numerals and their syntax in GF: Semitic '07: Proceedings of the 2007 Workshop on Computational Approaches to Semitic Languages: Common Issues and Resources. June 2007 Pages 9-16
5. Alish, M. and Clark, A. (2021) *Ahlan Wa Sahlan: Third Edition: Functional Modern Standard Arabic for Beginners*. UK: Yale University Press, ISBN: 9780300233711
6. Alqarni, M. (2021). No Gender Polarity in Arabic Numeral Phrases. *Linguistic Inquiry* 2021; 52 (3): 441-472. doi: https://doi.org/10.1162/ling_a_00385
7. Al-Sharkawi, M. (2017) *History and Development of the Arabic Language*. New York: Routledge, ISBN: 978-1-138-82150-7
8. Amer, W. M. (2013). An investigation into the differences between English and Arabic position and order of Adjectives: A contrastive study with pedagogical implications. *Red Sea University Journal*, <http://hdl.handle.net/20.500.12358/25563>
9. Ayoun, A (2022) *The Acquisition of Gender: Cross linguistic perspectives*. Amsterdam: John Benjamin, ISBN: 9789027258397
10. Aziz , Y . (1989) *A Contrastive Grammar of English and Arabic*. Mosul: The University of Higher Education . USA: Charles C Thomas Publisher. Illinois, ISBN: - 978-8-398-07779-2
11. Benyo. A., Supriyatno, T., Borah A. &, Kumar, T., & (2022). Is It Justified To Use Arabic In English Class? Efficacy Of English-Arabic Bilingual Teaching For Teaching English At Elementary Level. *Ijaz Arabi Journal of Arabic Learning*. Vol. 5 No. 1. 165-173. DOI: <https://doi.org/10.18860/ijazarabi.v5i1.15490>
12. Chelliah, L. S. and de Reuse, J. W. (2010) *Handbook of Descriptive Linguistic Fieldwork*. USA: Springer
13. Corbett, G. (1978) Universals in the syntax of cardinal numerals. *Lingua* 46:355-368.
14. Dahami ,S. (2012) Adjectives and their Difficulties in English and Arabic A Comparative Study. *Sana'a University Journal of Vol.9-issue No1. June- January 2012 Education & Psychological Sciences* (82 -117)
15. Douglas, A. and Strumpf, M. (2004) *The Grammar Bible*. 1st ed., New York: Holt
16. Dryer, S, M. (2018) On the order of demonstrative, numeral, adjective, and noun. *Linguistic Society of America: Volume 94, Number 4, December 2018 pp. 798-833. 0.1353/lan.2018.0054*

17. ElSaadany, K. (2008). Toward an LFG account of agreement mismatches of numerals within Arabic NPs. In D. Parkinson, ed., *Perspectives on Arabic Linguistics: Papers from the annual symposium on Arabic Linguistics*, pages 13–42. Amsterdam: John Benjamins.
18. Flotow, L and Kamal, H. (2020) *The Routledge Handbook of Translation, Feminism and Gender*. New York: Routledge, ISBN: 978-1-315-15893-8.
19. Ghahderijani, B.H., Namaziandost, E., Tavakoli, M., Kumar, T. & Magizov, R. (2021). The comparative effect of group dynamic assessment (GDA) and computerized dynamic assessment (CDA) on Iranian upper-intermediate EFL learners' speaking complexity, accuracy, and fluency (CAF). *Language Testing in Asia*, 11, 25. <https://doi.org/10.1186/s40468-021-00144-3>.
20. Goldenberg, G. (1998) "Attribution in Semitic Languages", in Goldenberg Gideon (ed.), *Studies in Semitic Languages, Selected Writings by Gideon Goldenberg*, Jerusalem: Magnes Press.
21. Hamann, C. (2013) *Language Acquisition and Development: Proceedings of GALA*. UK: Cambridge Scholars Publishing, ISBN: (13): 978-1-4438-7553-0
22. Hanna, S and Greis, N (1972) *Beginning Arabic: A Linguistic Approach: from Cultivated Cairene to Formal Arabic*. BRILL, Leiden
23. Hardegree, G. (2009) *Compositional Semantics*. USA: UMass Amherst 2009.
24. Hargis, H. C. (2008) *English Syntax: An Outline for Teachers of English Language Learners*
25. Hobi, E (2011) *A Contrastive Study Of Attributive Adjectives In English And Arabic*. Journal of Al-Ma'moon College. Published by AlMamon University College. ISSN: 1992-4453 .
26. <https://notesread.com/100-examples-of-numeral-Adjectives/>
27. <https://educalingo.com/en/dic-en/fivefold>
28. Hurford, J. (1987). *Language and Number. The Emergence of a Cognitive System*. London: Basil Blackwell
29. Al-Bataineh, H. and Branigan, P. (2020) *The syntax of (complex) numerals in Arabic*. Memorial University of Newfoundland February 14, 2020. DOI 10.31219/osf.io/6pesa
30. Isoda, M. and Olfos, R. (2019) *Teaching Multiplication with Lesson, Study: Japanese and Ibero-American Theories for International Mathematics Education*, Springer, ISBN 978-3-030-28561-6
31. Kachru, Y. and Nelson, L. C. (2006) *World Englishes in Asian Contexts: Hong Kong: Hong Kong University Press*. ISBN:13-978-962-209-756-8
32. Kaul, S. (2020) *Objective English For Competitive Examinations*. Agra: Apkar printing unit, ISBN 978-93-09937-25-1
33. Khan, R. J. I., Kumar, T., Supriyatno, T, & Nukapangu, V. (2021). The phenomenon of Arabic-English translation of foreign language classes during the pandemic. *Ijaz Arabi Journal of Arabic Learning*. Vol. 4 No. 3 (October). 570-582. DOI: 10.18860/ijazarabi.v4i3.13597
34. Khan, R.M.I., Kumar, T., Benyo, A., Jahara, S. F. & Haidar, M. M. F. (2022). The reliability analysis of speaking test in computer-assisted language learning (CALL) environment", *Education Research International*, vol. 2022, Article ID 8984330, 10 pages. <https://doi.org/10.1155/2022/8984330>
35. Maggie, T. (1989). *Understanding Syntax*. London: Edward Arnold, LTD.
36. Michalski, M. (2016) *Agreement in Modern Standard Arabic constructions with cardinal numerals over ten*. LINGUA POSNANIENSIS LVIII (1) DOI 10.1515/linpo-2016-0005.pp 69-88
37. Nikolaeva, I. and Spencer, A. (2019) *The Morphosyntax of Noun Modification*. Cambridge: Cambridge University Press, ISBN: 9781108415514
38. Nima, F. (1973) *Summary of Arabic Grammar (19th Edition)*, Cairo - Egypt: The Scientific Office for Composition and Translation, p. 91-92
39. Owaida, A. (2015) *The syntax of the verses of judgments in the Qur'an*. Cairo: Atlas Publishing House and Media Production
40. Owens, J. (1988) *The Foundation of Grammar: An Introduction to Medieval Arabic Grammatical Theory*. Amsterdam: John Benjamins Publishing Company
41. Pan, H., Xia, F., Kumar, T., Li, X., & Shamsy, A. (2022). Massive open online course versus flipped instruction: Impacts on foreign language speaking anxiety, foreign language learning motivation, and learning attitude. *Frontiers in Psychology*, 13:833616. doi: 10.3389/fpsyg.2022.833616.
42. Paulmony, R, Vasanthakumari, S, Singh, B., Almashaqbeh, H. A., Kumar, T., & Ramesh, P. (2022). The impact of bullying on academic performance of students in the case of parent communication. *International Journal of Early Childhood Special Education (INT-JECSE)*, 14(1): 2325-2334. DOI: 10.9756/INT-JECSE/V14I1.273

43. Pustet, R. (2006) Adjectives. Encyclopaedia Elsevier. Popular science writing (2014). Retrieved February 28, 2014, from <http://awelu.srv.lu.se/genres-and-text-types/writing-in-academic-genres/popular-science-writing>
44. Quiles, C. and López-Menchero, F. (2012:205) A Grammar of Modern Indo-European . Indo-European Association, 2012 - E U: ISBN-13:1461022138
45. Ranginwala, M. (2013) Essentials of Quranic Arabic: Volume 2. ILF: New York 978-1-257-71-562-6.
46. Roy, E. (2020) Ranjesh's Practical Global English Grammar, Composition & Usages- Volume - 1A. India: Blue Rose. ISBN: 978-93-5347-952-7
47. Ryding C. K. (2005) A Reference Grammar of Modern Standard Arabic. Cambridge University Press: UK. ISBN-13 978-0-521-77771-1
48. Rzyayev, H. (2019) A Comprehensive Reference Dictionary of Linguistics, A-D: Concepts, Notions, and Terms. Wipf and Stock Publishers. Eugene, Oregon. ISBN-13: 978-1532669842
49. Sadler, L. (2010) Arabic Numeral Noun Constructions: Some Preliminary Thoughts, UK: University of Essex
50. Singh, D. (2021). CTET/TETS English language & pedagogy papers-I & II. Siddhi Press: New Delhi: ISBN 978-93-90389-58-2
51. Swan, M. (2005) Practical English Usage, Oxford: Oxford University Press
52. Verma, S. G.N. (2011: 49) A Comprehensive Grammar of English. India: Chand Publishing
53. Wiese, H. (2003) Numbers, Language, and the Human Mind. Cambridge: Cambridge University Press. ISBN: 978-0-512-83182-6
54. Yaziji, K. (1885). Practical principles of Arabic grammar. Beirut: Dar Aljabal
55. Yunus, M. M., Suciati, Ritonga, M., & Kumar, T. (2022). Multimodal teaching practices for EFL teacher education: An action based research study. *Journal for Educators, Teachers and Trainers*, Vol. 13(1). 141-148.