

SYNTACTIC ANALYSIS OF ARABIC NOUN PHRASE'S BETWEEN ARABIC AND ENGLISH: X BAR THEORY

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Abstract: *Through the prism of X-Bar theory, this research explores the complex world of Arabic noun phrases, contrasting and comparing their syntactic patterns with those of the English language. A key component of linguistic study is the examination of noun phrases since it reveals the structural differences and similarities between Arabic and English, two linguistically dissimilar languages. The main goal of this research is to analyse how the distinctive structural characteristics of Arabic noun phrases differ from those of their English counterparts while taking into account the X-Bar theory framework. Using a comparative methodology, this research examines the distinctive characteristics of Arabic noun phrases interact with the X-Bar theory. It also explores the consequences of these syntactic differences. This study sheds light on the syntactic examination of Arabic noun phrases within the framework of X-Bar theory. It also highlights the distinctions and similarities between Arabic and English noun phrases. The fields of syntax, language typology, and linguistic variety will benefit greatly from the study's conclusions.*

Keywords: *Arabic noun phrases, noun phrase, syntactic analysis, X-Bar theory*

Abstrak: Melalui prisma teori X-Bar, penelitian ini mengeksplorasi dunia kompleks frasa nomina Bahasa Arab, mengkontraskan dan membandingkan pola sintaksisnya dengan pola sintaksis bahasa Inggris. Komponen kunci dari studi linguistik adalah pemeriksaan frasa kata benda karena hal ini mengungkapkan perbedaan struktural dan persamaan antara bahasa Arab dan Inggris, dua bahasa yang berbeda secara linguistik. Tujuan utama dari penelitian ini adalah untuk menganalisis bagaimana karakteristik struktural khas frasa kata benda bahasa Arab berbeda dari frasa kata benda bahasa Inggris dengan tetap mempertimbangkan kerangka teori X-Bar. Dengan menggunakan metodologi komparatif, penelitian ini mengkaji ciri-ciri khas frasa nomina Arab yang berinteraksi dengan teori X-Bar. Hal ini juga mengeksplorasi konsekuensi dari perbedaan sintaksis ini. Penelitian ini menyoroti pemeriksaan sintaksis frasa nomina bahasa Arab dalam kerangka teori X-Bar, juga perbedaan dan persamaan antara frasa kata benda bahasa Arab dan Inggris. Bidang sintaksis, tipologi bahasa, dan ragam linguistik akan mendapat manfaat besar dari kesimpulan penelitian ini.

Kata kunci: *Frasa nomina bahasa Arab, frasa nomina, analisis sintaksis, teori X-Bar*

Introduction

Our communication with one another and our perception of the world are greatly influenced by language and syntax. As a fundamental aspect of syntactic analysis, the study of noun phrases reveals the complexity and diversity seen in many languages. This study compares and contrasts the syntactic structures of Arabic noun phrases with those of the English language in

order to shed light on their intricate world. Two languages that reflect different linguistic traditions and structures, Arabic and English, give a special chance to explore the fundamental ideas of syntax. This study aims to clarify the structural distinctions and similarities between these languages by utilizing the X-Bar theory framework, with a focus on the distinctive characteristics of Arabic noun phrases.

Arabic and English, which come from the Semitic and Germanic language families, respectively, are representative of two distinct linguistic traditions. There are notable differences in these languages' syntax, morphology, and semantics. Particularly Arabic is praised for its complex morphological and syntactic elements, such as case marks, prepositions, and gender agreement, which provide unique difficulties when using the linguistic framework of X-Bar theory, which is predominately Anglo-Saxon. Due to the intricate and distinct features of Arabic noun phrases, a thorough syntactic analysis that considers the linguistic variety inherent in these languages is necessary. In order to overcome these obstacles, it is essential to comprehend the syntactic distinctions between Arabic and English noun phrases. Given that noun phrase structures are the fundamental building blocks of language usage, it is important for language learners to understand the differences and similarities among them in order to acquire language effectively.

The grammatical complexity of Arabic noun phrases and similarities with English have been the subject of several research. Chomsky (1981) emphasized in a seminal study the crucial significance Arabic case marks play in identifying syntactic functions inside noun phrases. Chomsky's analysis paved the way for more research into Arabic grammar and its unique characteristics. In 1994, Aoun, Benmamoun, and Sportiche provided a thorough analysis of the complex subject of gender agreement in Arabic. They underlined the significance of gender agreement in Arabic noun phrase structure and its ramifications for linguistic theory. Their research demonstrated how important it is to take these gender-based agreements into account while examining Arabic syntax. Expanding upon this antecedent research, Baker (2001) carried out a comparative examination of Arabic and English syntax, examining several structural facets, encompassing noun phrases. The differences between Arabic and English noun phrases' fundamental structural principles were highlighted by Baker's research. This study was a significant forerunner to the current investigation since it established the foundation for comprehending the innate syntactic differences between the two languages.

Saeed (2003) provided an extensive exploration of the Arabic language, emphasizing its distinct morphological and syntactic features, with a specific focus on noun phrases. This comprehensive analysis addressed various elements, including case markings, prepositions, and the intricate nature of Arabic noun phrases. Saeed's work underscored the challenges and opportunities presented by the Arabic language's unique structural characteristics. A lens through which to view the hierarchical organization of noun phrases in many languages is provided by Cinque's (2005) work on hierarchical structures in noun phrases, especially in Italian. The X-Bar theory framework may be utilized to study Arabic noun phrases by using the transferable concepts of hierarchical organization, even if they are not unique to Arabic.

A comprehensive cross-linguistic examination of several languages, including Arabic and English, was conducted by Hawkins (1983). His study on language universals and language-specific features has implications for our understanding of how various languages, like as Arabic and English, may display differences in noun phrase patterns. This study contributes to

considering the similarities and differences between these languages. Radford (1988) made a significant contribution to our knowledge of transformational grammar and its use in language analysis. His research provides insights into the mechanics behind structural modifications that occur inside a phrase, despite not being language-specific. Given the distinctive characteristics of Arabic and English noun phrases inside the X-Bar framework, this knowledge may be modified for study of those phrases.

Bolinger (1972) investigated how prepositions function in various languages. His studies on prepositional phrases are not limited to Arabic and English, but they may be very helpful in comprehending the differences in prepositional usage and their syntactic effects in these two languages. Gass and Selinker (2008) investigated second language learning and the difficulties encountered by students. The study's assessment of the pedagogical implications for language learners—particularly in acquiring the different noun phrase patterns in Arabic and English—benefits from their research. The 1994 paper Hawkins' Efficiency Principle has had a significant impact on syntactic research. According to his view, languages often aim to optimize linguistic economy. By utilizing this approach in the examination of Arabic and English noun phrases, one may get insight into the ways in which both languages attain syntactic efficiency and the associated compromises.

Understanding the structural and functional elements of noun phrases may be gained from Bresnan's work on Lexical-Functional Grammar (LFG) (2001). In order to examine the intricacies of noun phrases in Arabic and English, a thorough framework for evaluating the connections between syntax and semantics is provided by LFG. Prepositional phrases were studied by Zwicky and Sadock (1975), namely their ordering and structure. Their insights into prepositional phrases might help in comprehending the subtleties of prepositional usage in Arabic and English, even if they are not specifically focused on these languages. Schwartz (1993) investigated the cognitive mechanisms involved in learning a second language. Her studies on second language learning and processing might provide light on the difficulties that learners could run into while attempting to understand the differences between Arabic and English noun phrase forms. Belletti and Rizzi (1988) studied comparative syntax with an emphasis on linguistic structures. Their research is relevant to the analysis of the similarities and differences between Arabic and English syntactic structures within the context of X-Bar theory.

By adding the X-Bar theory framework to the analysis, the new study expands on the body of information from earlier research. It attempts to give a more thorough and nuanced understanding of the syntactic distinctions between Arabic and English. In addition, based on the knowledge gathered from these earlier studies, it seeks to advance the subjects of syntax, language typology, and linguistic variety while providing useful advice for language learners.

Research Method

This study employed qualitative research method (Creswell, 2013; Neuman, 2005; Kumar, 2011; 2014). The main purpose of this research is to study and describe how Arabic noun phrases are used within the perspective of X-bar theory. The data are collected through interview from a specific native Arabic speaker. This study used interview as the primary data collection method with exploratory studies. The participant is asked to write three noun phrases

written in standard Arabic language and their correspondence in English, and three noun phrases written in Standard English and their correspondence in Arabic to see and observe the role of syntax in Arabic language. The data will be taken for the descriptive study of Arabic noun phrases within the perspective of X-bar theory proposed by Chomsky (1970) of formal syntax on Arabic focusing on the noun phrases.

Findings and Discussion

The data were investigated with the support of the theoretical framework of X-bar theory. This theory was first developed by Noam Chomsky (1970). The Arabic noun phrases were presented, and described to understand their place, task, and significance in the phrase structure. The data were also described in order to understand how Arabic noun phrases are used within the framework of X-bar theory. In addition, the data in this research were also analyzed to see how the settings of the nouns relates to the meaning of the noun in a phrase.

Arabic Noun Phrase

A phrase is a grammatical component that is composed by a head and surrounded by any one element or more than one element. A phrase is a combination of words which has no subject. This definition indicates that a phrase is greater than a head. However, it depends on the head. From this explanation, it is clearly viewed that a phrase is completed by the clusters of words including lexical words and function words. However, the lexical word is what heads the phrase and from where the name of specific phrase is constructed. It is also said that a noun phrase, or nominal (phrase), is a phrase that has a noun or pronoun as its head. Noun phrase performs the same grammatical function as a noun. They are very common cross-linguistically, and may be the most regularly appearing phrase type.

Example 1: shows common Arabic phrase

الكتاب الرياضيات على المكتب
the table | on | of math | the book
al maktab | ala | al riyadhiyat | al kitab
'the math book on the table'

However, although Arabic noun phrases are syntactically quite similar with the English one, Arabic nouns which followed by adjective are also considered as noun phrase, even though they would be considered as adjective phrase in English.

Example 2: shows Arabic noun phrase

البيت الأكبر في المدينة
the city | in | the biggest | the house
madina | fii | al akbar | al bayt
'the biggest house in the city'

Because of this reason, the X-Bar analysis of the Arabic noun phrases such as in the Example 2 would be analyzed as noun phrase, not an adjective one.

Arabic Noun Phrase in X-Bar Theory

The X-Bar theory was first developed by Noam Chomsky (1970). Later on, it was developed by Jekendoff (1977), then that it was developed by Radford (1988). Here is the formula of X-bar theory of noun phrase:

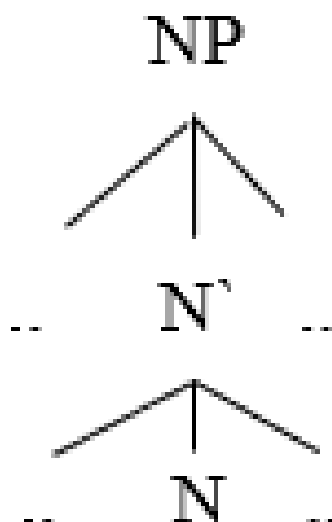


Figure 1. X-Bar formula of noun phrase

X-bar theory is based on the assumption that prominent phrases have a head that determines the name of that phrase. In the case of noun phrase, the N (noun) is considered as the head of the phrase. Such as VP, NP, PP, ADJP, and ADVP, are referred as the maximal projection in the phrase. As the head of the phrase, X-bar theory emphasizes on lexical category rather than functional categories. Obligatory part in any phrase is considered as its head. X-bar theory suggests that every phrase must be brought up into three level; maximal projection (XP), which is arbitrary, can be used as VP, NP, ADJP, ADVP, intermediate level is (X'), and (X) which can be a specifier or a complement. Here is the syntactic analysis of Arabic noun phrases in X-Bar theory of the Example 2:

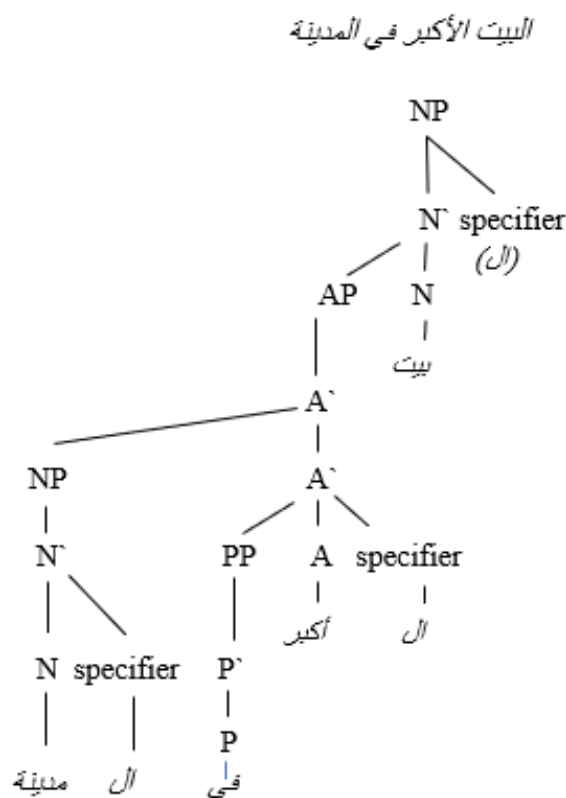


Figure 2. X-Bar theory application in Arabic noun phrase

Example 2 is following a noun phrase. In this Arabic noun phrase ‘al = ال = the’ is the specifier, ‘bayt = بيت = house’ is a noun, ‘al = ال = the’ is the specifier, ‘akbar = أكبر = biggest’ is an adjective, ‘fii = في = in’ is a preposition, ‘al = ال = the’ is the specifier, and ‘madina = مدينة = city’ is a noun. The phrase is analyzed within the framework of X-bar theory and explained with the use of tree diagram. The phrase is a noun phrase, where the head word is a noun. The head word of this phrase is ‘bayt = بيت = house’, which is the head of this phrase. According to X-bar theory, every phrase has a head, which is the obligatory element of that particular phrase. A phrase is always known by its head. As Huddleston (1988) states that a noun phrase is a major constituent made by a noun as its head. Noun is a head of a phrase that can stand alone or can be accompanied by one or more element as its dependent.

Every natural language of the world has their own head, some are in the right and some of them are in the left. This is according to universal grammar which asserts that all world languages have general universal principles and language specific rules, which vary from language-to-language (Chomsky, 1981; 86; 88).

In Arabic, the head always comes first in phrases, unlike English in which the head comes after adjective or another noun. Noun is a word that refers to a person, living and non-living things. Noun phrases are composed by a noun as the head, and surrounded by any one element or more than one element. In this phrase, akbar/biggest is an adjective which qualifies on the noun that is bayt/house, which also functions as the head of the phrase. Whereas fii/in is a

preposition and madina/city is a noun. Every noun in this phrase is always begun with al/the which plays as specifier.

English Noun Phrase in X-Bar Theory

Here is the syntactic analysis of English noun phrases in X-Bar theory of the Example 1:

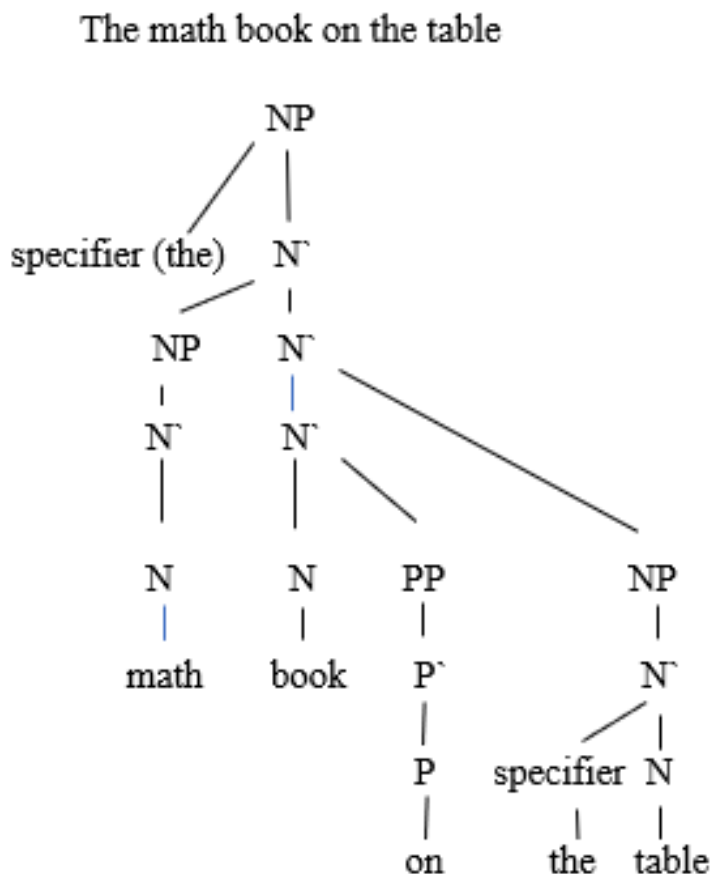


Figure 3. X-Bar theory application in English noun phrase

Example 1 is following a noun phrase. In this English noun phrase ‘the’ is the specifier, ‘math’ is a noun, ‘book’ is the noun which functions as the head, ‘on’ is a preposition, ‘the’ is another specifier, and ‘table’ is noun. The phrase is also analyzed within the framework of X-bar theory and explained with the use of tree diagram. The head word of this noun phrase is a noun, which is ‘book’. Unlike Arabic, the head in English noun phrases always comes after adjective or another noun. In this phrase, ‘math’ is a noun which precedes the head that is ‘book’. Whereas ‘on’ is a preposition and ‘table’ is a noun.

This study draws results and findings for the comparison between Arabic and English noun phrases, which are explained with the help of tree diagram. The explained phrases are used according to Chomsky’s theory of X-bar. It is a theory of phrase structure which sets up a possible phrase, mainly in natural languages of the world. An Arabic noun phrases was used within the framework of X-bar theory using tree diagram. It is observed that the Arabic noun phrases can be investigated using the X-bar theory. The analysis declares that Arabic phrases

cannot be uttered like English since the head in Arabic phrases always come first, unlike English which the head comes after one or more element as its dependent.

Conclusion

In the aim to comprehend linguistic theory, X-bar, and noun phrases, an attempt is made to analyze Arabic noun phrases syntactically with the use of tree diagram. In doing so, this study compares the analysis of Arabic and English noun phrases and examines the differences. In the end, the objective of the study was achieved, the investigation result was confirmed that there is certain feature that found in Arabic noun phrase structures which distinguish it from the English one. Arabic noun phrases can be considered for having syntactic function by using the X-bar theory.

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