

AN X-BAR THEORETIC ACCOUNT OF JENJO NOUN PHRASES

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Abstract

This study analyses the Jenjo noun phrase in X-bar convention. X-bar has been the focal point of linguistic theory and has changed the way linguists view syntactic model today. X-bar deals with head categories and recognizes the variability of these categories across languages despite the notions of the 'Principles and Parameters'. In this respect, Jenjo noun phrase may well be explained within X-bar framework. Therefore, this paper gives the X-bar theoretic account of Jenjo noun phrases. Jenjo is an Adamawa-Ubangi language group spoken in parts of Taraba State, Adamawa State and Gombe State North East Nigeria. The aim of this study is to analyze the Jenjo noun phrase using X-bar theory. Jenjo New Testament Bible and the researcher's introspection form the basis for the data. The study determined Jenjo as a head-first language, most elements within the Jenjo NP are post-head. Jenjo complements branch at N¹ and are sister to their head noun. Adjuncts are sister to N¹ and daughter to N¹. Specifiers expand N¹ to N¹¹ they occur on the left and right of the head noun phrase. we find that a single noun can function as a noun phrase and it is obligatory. Intermediate categories exist in Jenjo NP. There are nominal constituents that are larger than noun but smaller than full nominal phrase. For instance, *vYaka de a Jos* 'the city of Jos' constitutes a full noun phrase while *vYakaP a Jos* 'city of Jos' is an intermediate category that is smaller than the full NP and larger than a word. Similarly, complements in Jenjo branch at X¹ in the tree diagram and are vital to the head i.e. closer to the head than adjunct. Genitive NP and complement PP function as constituents in Jenjo NP.

Keywords: Noun Phrase, X-bar, Jenjo, Complements, Adjuncts.

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Introduction

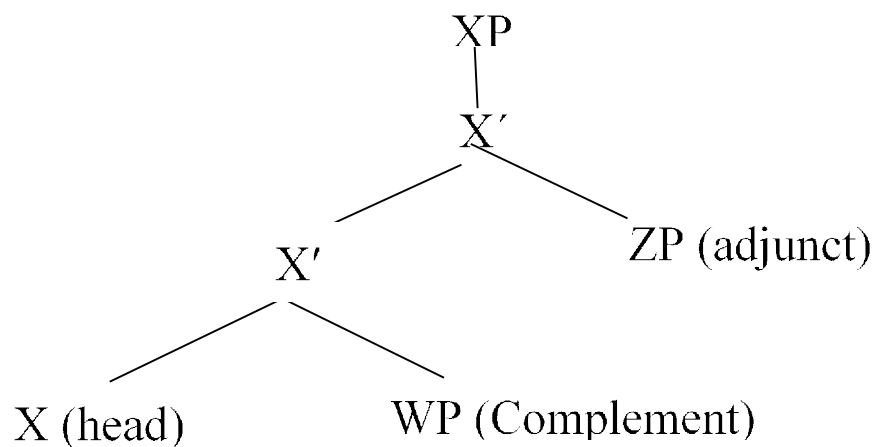
This paper gives a theoretic account of Jenjo noun phrase structure in an X-bar convention. The name 'Jenjo' is variously used to refer to the language and the ethnic group of the Jenjo people. *Dza* is the actual name but they are commonly known as Jenjo. Other names are Jen and Janjo. Jenjo is spoken in Taraba, Adamawa and Gombe States, North-east, Nigeria. In Taraba State, the speakers of Jenjo are found in Karim-Lamido, Lau, Jalingo, Ardo-Kola, Bali, and Ibi Local Government areas. The Jenjo people are also found in Numan and Lamurde Local Government area of Adamawa while in Gombe State, they are found in Balanga and Akko Local Government areas. In Language Ethnologue written by Paul, Simons, and Fennig (2015), Jenjo is classified as a Niger-Congo, Atlantic-Congo, Volta-Congo, North, Adamawa-Ubangi, Adamawa, Waja-Jen, and Jen.

Jenjo, being one of the minority languages in Nigeria has not been extensively studied as is the case with Hausa, Igbo and Yoruba languages. Hausa is widely spoken in North East Nigeria. It is taking over other languages in the region. Inter-marriage with other tribes, and immigration to urban areas cause the language to be threatened (endangered)

Generally, Jenjo is spoken at homes and partly in marketplaces, Jenjo is spoken to Jenjo sellers and Hausa is spoken to Hausa sellers in Jen (Jenjo village with the highest number of Jenjo people). There are no written materials in Jenjo at schools or churches except the Jenjo New Testament Bible that is 75% completed and in circulation. Children are taught in English at school and pastors preach with Hausa in churches.

In Principles and Parameter, the head parameter in any language is supposed to be head-first and head-last. X-bar deals with the head category, there are no constant cross-category elements specific to head complement order. X-bar captures this cross-category. X-bar is used to account for Jenjo noun phrases because it clarifies and simplifies phrase structure grammar. The choice of the theory is due to the fact that UG principles apply to all languages. Though noun phrase may have been over-studied, Jenjo noun phrase has a distinctive feature that is worth studying. The theory of X-bar was first proposed by Chomsky (1970) which is one of the modules of Government and Binding. The theory deals with a relationship between

the head of a phrase and other dependents within the phrase. It is a theory of syntactic category that phrases such as NP, VP, AP, and PP contain intermediate constituents that can be projected maximally. X-bar deals with head category and it simplifies and clarifies the Phrase Structure Grammar. It was further developed by Jakendoff (1977) and more refined by Radford (1988). The theory tries to identify language universal syntactic properties as well as language-specific features. It provides an opportunity for discovering the variation between languages. This theory accounts for the category that is larger than word and smaller than a full phrase i.e the maximal projection, intermediate projection and minimal projection. The choice of this theory is due to the principles of UG that apply to all languages.



Source: (Carnie, 2000:116)

Previous Studies

There is a growing number of studies on noun phrases by African linguists, especially in the Bantu language group. Studies such as Amare (1999), Rugemalira (2007), Lusekelo (2009) and Wabwire (2010) are among them. Jenjo a member of the Adamawa-Ubangi language group, has not been broadly studied. The noun phrase is a phrase that is headed by a noun. For example, a structure such as "*The king of Utopia*" is a noun phrase comprising

the head noun "*king*", the complement "*of Utopia*" and its specifier "*the*" (Radford, 2004). Therefore, the noun phrase is a phrase consisting of a noun and other dependents and the noun serving as the head of the phrase. Across linguistics, NP is either the head noun alone and/or the head noun with other dependents (modifiers) preceding or following it.

Rugemalira (2007) discusses the syntax of noun phrase in several Bantu languages such as Swahili, Nyambo, Sukuma, Ha, Nyakyusa and Mashami. He examines the Syntax of the noun and its dependent elements. He presents the structure of a noun phrase in Bantu as one having Pre-determiner, Noun, Determiner and Modifier. He establishes that the pre-determiners of these languages are either possessives or demonstrative and the modifiers are numeral ordinal or associative, quantifier, adjective and relative clause. The distributive and demonstrative occupy the pre-determiner slot and cannot co-occur. Second, the NP of these languages has limit because of the syntactic and semantic restrictions on the co-occurrence of the elements of the NP. The NPs cannot expand indefinitely because of the cumulative effects of the restrictions. Rugemalira (2007) states that Swahili has the following NP structure: {Dem, Noun, Poss, Num, Ord, Adj, Quant, Asso.}. The elements common in all these Bantu languages are the determiners appearing before and after the head noun either as possessive or demonstrative except Sukuma whose possessive, demonstrative and relative clause vary position freely but after the head noun.

Similarly, White (2006) conducted a study of X-bar and Standard Arabic. He sheds more light on the advantages of X-bar theory instead of phrase structure rules and reveals the consistency of X-bar theory towards all phrasal categories. White's (2006) view Standard Arabic as DP not NP. He states that the DPs in Standard Arabic exhibit a little variation. Determiners in Arabic fail to detach from their relevant NP complement. Standard Arabic chooses not to spell out the content of the DPs if the NPs are attached to the determiners. He adds that X-bar theory is flexible enough to incorporate all cross-linguistic variation. White's (2006) study is relevant to the present work because it gives insight on the application of the theory on a language that is different from English which the theory was first applied. Offiong (2011) examines the internal Syntax of NPs in Efik, a Lower-Cross language

of Niger-Congo family spoken in Southern Cross River State, Nigeria. His study focuses on the various types of modifying elements and their positions in relation to the heads of noun phrase. He investigates the grammatical affinity that holds between syntactic constituents like complement, adjunct and determiner with the head of the NP and proposes an analysis of the relevant grammatical functions of NPs in Efik using X-bar theory. His findings show that Efik has three word order typologies. These are the prenominal modifier, post-nominal modifiers and neutral order. For prenominal elements, the constituents of the NP that precede it are (Quantifier) (Ordinal Number) (Adjective) noun. Post-nominal are N (Poss) (Cardinal numeral) (Dem/ Det). The neutral order involves a noun, not modified by elements before or after it. The prenominal modifier elements that precede the noun are quantifier, ordinal, numeral and adjective. The elements that post modify are possessive, cardinal numeral, determiner and demonstrative. He concludes that Efik has an inflexible word order in relation to the head noun and its modifying elements. His work is similar to this study on analysis of NPs but it also differs in terms of language group. It is similar in the sense that Jenjo has pre-nominal and post-nominal elements

Aboh (1998) studied the Syntax of Gungbe noun phrases, where the determiner obligatorily follows the nominal. The noun is interpreted as specific in the sense that it necessarily refers to an entity which is previously established in discourse or context such as:

(1) Távo Ìó

Table Det

'The (specific) table'.

The Gungbe noun must also precede adjectives that modify it, exhibits a number marker (or plurality specification) which may co-occur with the specificity marker in a fixed order specificity marker-number marker. It also shows that the Gungbe DP allows for the co-occurrence of noun, adjective, demonstrative, determiner and number marker. The Gungbe determiner and number marker co-occur with elements that are commonly assumed to

be inserted in the determiner position. He states that the determiner, number marker, demonstratives etc projects its own X-bar schema. He concludes that the Gungbe determiner phrase has a head-initial underlying structure. The DP includes different functional projections, NumP, DemP, NralP etc which project between D^- and NP. He follows Abney's DP-hypothesis to describe Gungbe noun phrases. This study chooses to use the NP- hypothesis because Sanusi (2014) proposed a parameter for SVO languages with pre-modification like English adopt DP- analysis and those with post-modification like Yoruba to adopt NP-analysis to ensure head-initial value for the two categories of languages. Therefore, the DP-analysis should not be over-generalized for the syntactic analysis of every human language. This paper gives a theoretic account of Jenjo noun phrases in general not just the head but also other dependents that may occur in the noun phrase.

Methodology

The study adopted descriptive research design in collecting, describing and analyzing the data. This enabled the researchers to use secondary data and incorporate the researchers' intuition. There was a random selection of noun phrases from each of 5 chapters of the Jenjo New Testament Bible considering the structures. With the objectives of the study in mind, the noun phrases were elicited from the five books and the researcher's introspection as a Jenjo native speaker. The five books are: Luke, Galatians, 11 Thessalonians, Titus and 11 Peter.

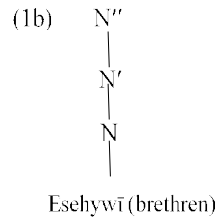
Data Analysis

We analysed the Jenjo NPs on X-bar tree. The tree diagrams were assigned based on schematic forms of X-bar from the simple to the complex NP. A symbol with this sign (") represents a full phrase and (') represents a phrase. H means head and N means noun. For each NP there is a grammatical and X-bar terminology given.

Head

(1) Esehywī

Brethren

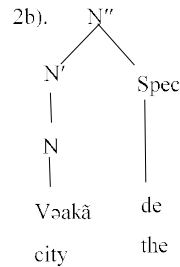


The head noun is an obligatory element in an NP and it can be projected maximally as shown in (1b) above. That is to say the determiners, complements and adjuncts are not obligatory in Jenjo NP. Above is the theoretic account of head alone of simple NP.

Specifiers

Det+N

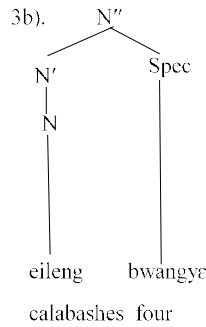
- 2a). Vəakā de
 Vəakā de
 City the
 'The city'.
 (H+Spec)



Articles are specifiers in Jenjo and are post-nominals. It is the sister to N' and daughter to N''.

N+Num

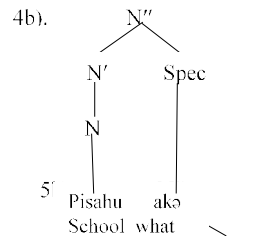
- 3a). Eiləng bwagye
 E-iləng bwagye
 Pl-Calabash Four
 'Four calabashes'.
 (H+Spec)



Numerals and nouns formed parts of the simple noun phrases in Jenjo. Numerals are post-nominal elements in Jenjo. The following examples are the X-bar account of the complex NPs structure in Jenjo.

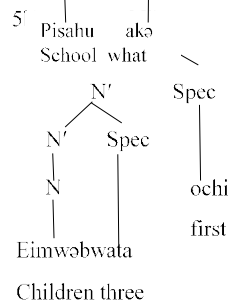
N+Det

- 4a). Pisahu akə
 School What
 'What school'.
 (H+Spec)



N+Card+Ord

- 5a). Eimwə bwata ochi
 E-imwə bwata Ochi
 Pl-child three First
 'the first three children'.
 (H+Spec+Spec)

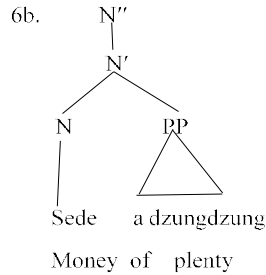


We have specifier co-occurring in (5b) above which corresponds to Wabwire (2010) that Olukhayo NPs can have than one specifier.

Complements

N+PP (H+Complement)

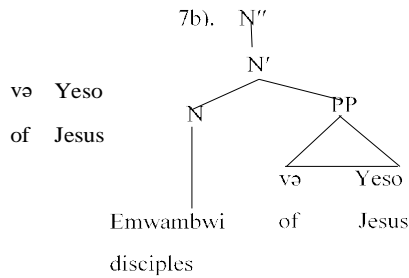
- 6) a. Sede a dzungdzung
 sede a dzungdzung
 money of Plenty
 ‘A lot of money’.



In (6b) the N *sede* expands the PP *a dzungdzung* to N'. Thus, PP functions as complement of the N. It tells us the quantity of the money. It is the complement of the head noun because it completes the meaning.

N+Genitive NP

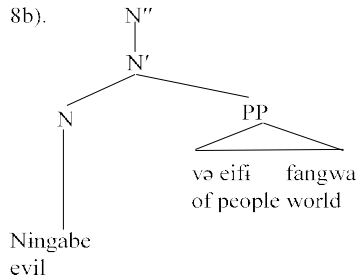
- 7a). Emwambwi vø Yeso
 Emwambwi
 Disciples
 ‘disciples of Jesus’
 (H+Complement)



It is observed that the genitive NP *emwambwi ve Yeso* ‘disciples of Jesus’ could also mean ‘Jesus’s disciples’.

N+PP

- 8a) Ningabe vø eifi fangwa
 Evil Of Pl-people world
 ‘Evil of the people of the world’.
 (H+Complement)

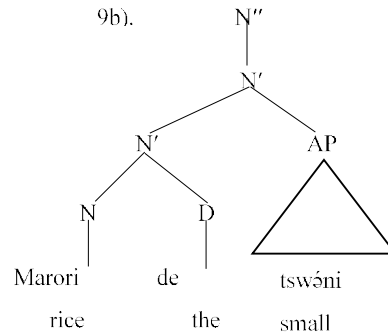


The N *ningabe* expands PP *və eifi fangwa* to N' *ningabe və eifi fangwa*. i.e. the PP is sister to N and daughter of N'. This shows the prepositional phrase is complement of the noun in the phrase.

4.3 Adjunct

N+Det+Adj

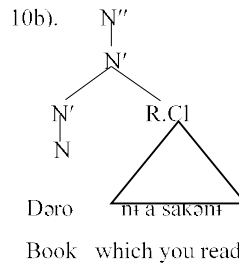
- 9a). Marori de tswóni
 Marori de tswóni
 Rice the Small
 'The small rice'.
 (H+Adjunct)



In (9b) above, the N *marori* is the head, the determiner *de* post-modifies the head while the AP *tswóni* is the adjunct. It is the adjunct because it does not complete the meaning of the phrase rather, it is an additional information that the phrase can do without. Because adjuncts are sister and daughter to a bar level, another intermediate category was created fit into that position. This agrees with Radford (1988) view that NP has an intermediate category.

N+Rel. Cl

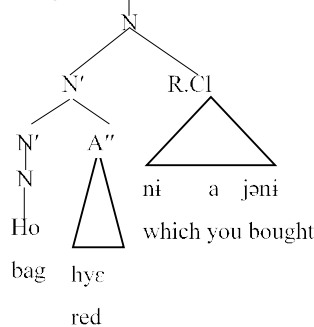
- 10a). Dəroni a sakəni
 'The book which you read'.
 (H+Adjunct)



The above tree in (10b) illustrates the relative clause in X-bar. The N *dəroni* expands to N' then to another N' because the N' which contains the relative clause is not required by the head noun *dəroni* 'book'. Hence, an adjunct, adjuncts are sisters and daughter to N'' level (N').

N+Adj+Rel.cl

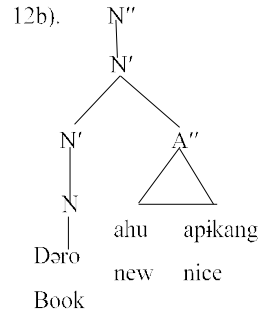
- 11a). Ho hyeni a jəni
 'The red bag which you bought'.
 (H+Adjunct)



The relative clause as a modifier is an adjunct as seen in (10) and (11) according to X-bar schema.

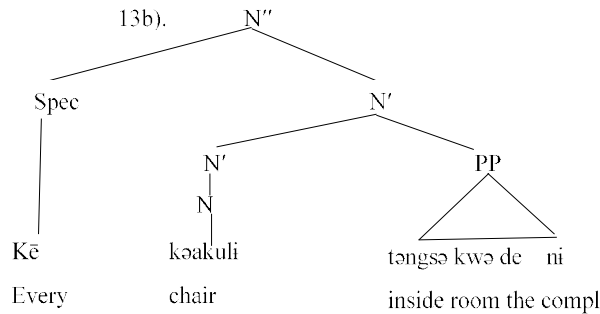
N+Adj+Adj

- 12a). Dəro ahu apikang
 Dəro ahu apikang
 Book new nice
 ‘A new nice book’.
 (H+Adjunct)



N+Det+PP

- 13a). Kē kəakuli təngsə kwə de ni
 Kē kəakuli təngsə kwə de ni
 Every chair In room the Compl
 ‘Every chair in the room’.
 (Spec+H+Adjunct)



The tree in (13b) has the specifier on the left, the head and the adjunct on the right. The specifier precedes the head noun and the adjunct follows the head noun. This structure is not a common occurrence in Jenjo noun phrases, it only occurs if the noun phrase contains a distributive/quantifier as this. It reveals adjunct rule that expands N' into sequence [N' PP] as stated in Radford (1988:182).

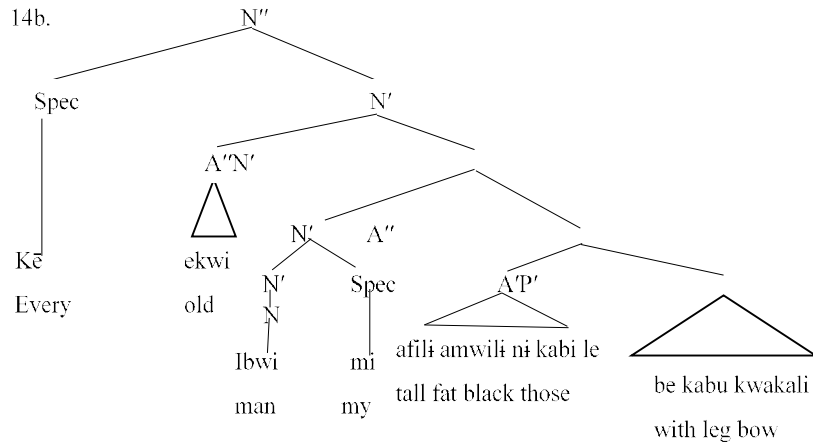
Det+N+Adj+PP

- 14a Ké ekwi ibwi mi afili amwili ni kabi le be le kabu kwali

Ké	e-kwi	ibwi	mi	afili	amwili	ni	kabi	le	be	kabu	kwakwali
Each	Pl-old	man	my	tall	Fat	Det	black	those	with	leg	bow

‘each of those my five tall fat black men with bow legs’.

(Spec+H+Adjunct+Adjunct)



The above complex NP in (14) has multiple adjuncts. These adjuncts can swap their order and the meaning will still be grammatical. The N'' contains specifier, head and adjunct. The first A'' that is sister and daughter to N' is an adjective that pre-modifies the head noun which is attributive. The third N' that is dominated by N' and sister to A'' contains the head noun and it can be full NP because it has the specifier *mi* 'my'. This corresponds with Wabwire (2010) whose study in Olukhayo shows that possessives, distributives and demonstratives occasionally occur in Olukhayo. These are the specifiers that are left-handed in the Olukhayo NP tree diagram which is similar to Jenjo. Also, the current study corresponds to Carnie (2000) who shows that NP can have multiple adjuncts. The illustration that follows is that of conjoined NP in Jenjo.

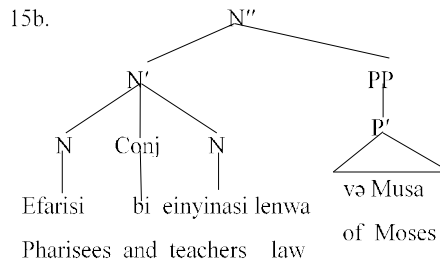
15a Efarisi bi einyinasi lenwa vø Musa

E-farisi bi e-inyinasi lenwa vø Musa

Pl-pharisee and Pl-teacher law of Moses

‘Pharisees and teachers of law of Moses’.

(N+PP)



The conjunction *bi* 'and' conjoined the two heads in the NP in (15) above. This shows that there is a relationship between the specifier, complement and adjunct with the head noun in Jenjo NP. This corresponds to the study by Offiong (2011) that grammatical affinity holds between syntactic constituents like determiner complement and adjunct with the head of NPs in Efik using X-bar theory.

Findings

This study discovered that a single noun can function as a noun phrase and it is obligatory. Intermediate categories exist in Jenjo NP just as indicated by (Carnie 2000 and Radford 1988). There are nominal constituents that are larger than noun but smaller than full nominal phrase. For instance, *vāka de a Jos* 'the city of Jos' constitutes a full noun phrase while *vākā a Jos* 'city of Jos' is an intermediate category that is smaller than the full NP and larger than a word. Similarly, complements in Jenjo branch at X' in the tree diagram and are vital to the head i.e. closer to the head than adjunct. Genitive NP and complement PP function as constituents in Jenjo NP. Consider '*kwə və bi*' (room our) 'our room'. This is so because they can occur with pronoun.

It is evident that there is an immediate level between the word level and the phrase level. It is possible to reduce the NP to *vākā a Jos* that is 'city of Jos' without the determiner *de* 'the'. This shows that N'' can be reduced to N' since it can occur alone. The above trees show the evidence of N-Bar in Jenjo.

Similarly, the findings agree with Carnie's (2000) rules that the specifiers, complements and adjuncts can appear on left or right of a head noun depending on the language:

Specifier rule: $XP \rightarrow YP (X')$ or $XP \rightarrow X' (YP)$

Adjunct rule: $X' \rightarrow X' (ZP)$ or $X' \rightarrow (ZP) X'$

Complement rule: $X' \rightarrow X (WP)$ or $X' \rightarrow (WP) X$

The study also joins Carnie (2000) and Jacobsen (1993), to assert that X-bar is a cross-linguistic theory because the options within the rules cater for differences between languages.

Conclusion

A single noun can function as a noun phrase and it is obligatory in Jenjo. Most Jenjo noun phrases have their head appearing first as in the analysis above. There are nominal constituents that are larger than noun but smaller than full nominal phrase which is the minimal, intermediate and maximal projection respectively. For instance *vāka de a Jos* 'the city of Jos' constitutes a full noun phrase (maximal projection), *vākā a Jos* 'city of Jos' is the noun phrase that is smaller than the full NP and larger than a word (intermediate projection) and lastly *Jos* 'Jos' is the minimal projection. The elements in the minimal projections are nouns, pronouns and nominals, the elements in the intermediate projections are nouns, pronouns, possessives, determiners, numeral, and demonstratives while the elements in the maximal projections are nouns, pronouns, nominals, prepositional phrases and relative clauses. Similarly, complements in Jenjo branch at X' in the tree diagram and are vital to the head i.e. closer to the head than adjunct. Genitive NP and complement PP function as complements in Jenjo NP.

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