

Syntactic Object Representation of Amharic Sentences by Function

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Abstract

The objective of this study was to examine the syntactic structure of declarative, interrogative, imperative and exclamatory sentences of Amharic. A descriptive research design and purposive sampling procedure were used to examine the projected study objective. Consequently, qualitative data were gathered from thirteen native speakers of Amharic (six females, seven males) who teach the intended subject at high school and college. Relevant data were also collected as of secondary sources. All the way through purposive sampling, 25 sentences were chosen for expressive analysis. Labeling Algorithm {XP, YP} model was used to interpret the actual data. Result indicated that syntactic object representations found within declarative, interrogative, imperative and exclamatory sentence has one verbal head. It appeared that, Syntactic Object representations established in each sentence structures include: Noun Phrase, Tense Phrase, Adjective Phrase, Verb Phrase, Determiner Phrase, Adverb Phrase, and Preposition phrase. It is recommended that a further research on how to implement Labeling Algorithm {XP, H} and {X, Y} to examine Amharic Phrase structures.

Keywords: Labeling Algorithm, sentence, syntactic object, {XP, YP}.

1. INTRODUCTION

Amharic is a Semitic language, related to Hebrew, Arabic, and Syrian. Next to Arabic, it is the second most spoken Semitic language. As the working language of the Ethiopian Federal Government and some regional governments in the country, most documents in the regions are produced in Amharic. As the national language, Amharic is spoken in every province, including the Amhara regional state (Meyer, 2006; Teferra, 2013).

It is one of the rare languages in Africa with its own writing system, a semi-syllabic system called Fidel. Amharic is a field of study at the bachelor, master and doctorate levels and in the school curriculum (Hudson, 2009). It is taught as a subject in most elementary and secondary levels of education. In Amhara Regional State, in Addis Ababa, and in most major towns, it is the medium of instruction for primary level education. Because of its past and present role, Amharic has served as a medium of study of Ethiopian culture and society (Gasser, 2011).

1.1 Research problem

Amharic is one of the most widely studied languages in Ethiopia. Getahun (1990) and Baye (1987) studied syntactic structures of Amharic sentences. However, these studies were not investigated the implementation of {XP, YP} to portray Syntactic Object representations found in Amharic function based sentences. This implies that Labeling Algorithm {XP, YP} is an innovative understanding in the history of Amharic syntax. As

a result, the motivation of this study is design to fill the gap through analyzing Syntactic Object representations found in declarative, interrogative, imperative and exclamatory sentences of Amharic.

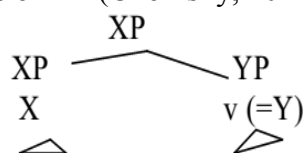
1.2 Objective of the Study

The objective of this study was to look at the syntactic structure of interrogative, declarative, exclamatory and imperative sentences of Amharic.

2. REVIEW OF LITERATURE

The operation Merge combine two SOs, X and Y, to form a set {X, Y} from them. This creates a new SO, which is different from its members. Take, for instance, Merge of DP *the bread/ dabowun* with V *bälla /eat*. The resultant SO from this Merge is equivalent to neither V nor DP, but it is a new object commonly represented as VP (Chomsky, 2013, 1014). Syntactic Objects must contain information about what kind of Syntactic Objects they are. The researcher approves the assumption it follows that, any newly created SO by Merge must also contains label. In this regard, Chomsky (2013, 2014, 2015) asserts that the label of SO is determined at the phase level. He goes on to argue that the label of SO is determined by the operation Labeling Algorithm (LA).

According to Chomsky's (2013) assumption $SO = \{XP, YP\}$, neither a head then minimal search is ambiguous, finding both the head X of XP and the head Y of YP. In order to solve this uncertainty, he proposed that LA defines labeling through modifying SO (by raising XP) so that there is only one visible head. If, say, XP rises, then the result will be the structure with two copies of XP (Chomsky, 2014; Narita, 2015) as in:

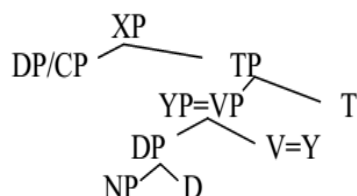


Subsequently, {XP, YP} distinguishes YP, but not XP, which is the subordinate end of an alternating constituent, a sequence consisting of a succession of copies headed by structurally mainly significant element. Chomsky (2013), and Rizzi (2016) asserted that grouping was allocated, and the option is predetermined to be $Y=v$, the verbal head of the sentence, obviously the preferred result.

The researcher supposes, following Chomsky (2013, 2015), Rizzi (2016) and Shlonsky and Rizzi (2015), the first supposition is that syntactic trees must be uniformly labeled at the interfaces. Consistent labeling can be a result of interpretive principles, which may need labels to be correctly interpreting structure. The second postulation that the researcher will make use of Chomsky (2013, 2013a, 2013b, 2014a, 2014b; Rizzi, 2015b) is that, the labeler of a category created by Merge is {XP, YP} case, defined by LA that modifies SO by raising XP. Therefore, the verb (V), which is found at the end of every sentence structure, is the only one visible head for the entire SO (Adger, 2016; Chomsky, 2013).

When auxiliary verbs might appear at the end of sentence structure, they could only help the main verb (that is the head). They can reside in T position within the tree structure. Throughout the analysis, CP (Complementizers

Phrase), DP (Determiner Phrase), TP (Tense Phrase), VP (Verb Phrase), AP (Adjective Phrase), ADVP (Adverb Phrase), PP (Preposition Phrase) are used for expository convenience (Adger, 2016; Chomsky, 2014; Leu, 2014) as in:



In the exceeding reproduction, merge joins DP and TP to outline a new SO {XP, YP}, which is dissimilar as of its constituent. A recently formed Syntactic Object XP has no relation among DP and TP. The main important constituent is V. For this reason, only YP is visible to the Labeling Algorithm and the structure is labeled as V, that is verbal, the preferred ending. In this regard, Chomsky (2013) emphasized that, the significant information about SO will be provided by this single designated element which is a head. The verbal head should provide the label found by LA, when the algorithm can apply. Moreover, in terms of internal merge of a WH phrase, Amharic does not allow complementizers (C) like that, if, whatever, etc. Thus, the position of CP occupies the label of Determiner Phrase (Bošković, 2016; Rizzi, 2015a).

In Amharic, sentential constituents such as sentence-final particles, complementizers, aspect, focus, topic, tense, determiners and agreement morphemes are not in fact the head of intended phrase structure. On the other hand, it discards SO movements as a syntactic process, given that they not at all have semantic effects (Cinque, 2005; Hartman, 2011; Lechner, 2006; Roberts, 2010). Likewise, an assumption that is implicit in the analyses, which the researcher has presented here, was that tree structure of all sentences was derived from left to right structural procedure.

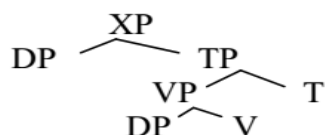
3. METHODS

The research design used in this study was descriptive and that involved gathering data which describe Syntactic Objects found within declarative, interrogative, imperative and exclamatory sentences of Amharic. Accordingly, data were collected from thirteen native speakers of Amharic (six females, seven males). Informants were teaching the intended subject at high school (9) and college (4). Four informants (2 females and 2 males) were involved in group discussion to crosscheck the collected data. Relevant data were also collected as of secondary sources. All the way through purposive sampling, 25 sentences were chosen for descriptive analysis.

Labeling Algorithm {XP, YP} model was used to interpret the actual data. In this regard, Merge applies to two objects α and β , and forms a new object $\gamma = \{\alpha, \beta\}$. Chomsky (2013) hypothesizes that it must accompany an algorithm to determine the label of the newly formed object. For that reason, he considered $\gamma = \{\text{AP}, \beta\text{P}\}$ supposition. This model was problematic because the label of γ cannot be determined straightforwardly. Given this, the researcher used Chomsky's (2013) concrete proposal to accommodate instances of ($\gamma = \{\text{AP}, \beta\text{P}\}$) that arise in actual derivation.

In his {XP, YP} model, Chomsky proposed that by raising XP, then the categories were assigned and the choice was stipulated to Verbal head of sentence structure. Therefore, there would be only one visible verbal head. Since Amharic is verb final

language, current research adopted the succeeding model for data interpretation (Takita, 2018).



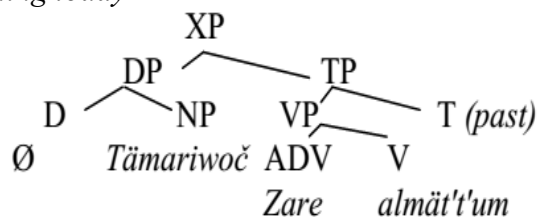
4. RESULTS

According to the function (purpose) of utterance, sentences are subdivided into declarative (statements), interrogative (questions), imperative (commands) and exclamatory (Bayer & Obenauer, 2011; Marantz, 2013). Syntactic Objects found in these sentence types were described and analyzed in the subsequent sections.

4.1 The declarative sentence

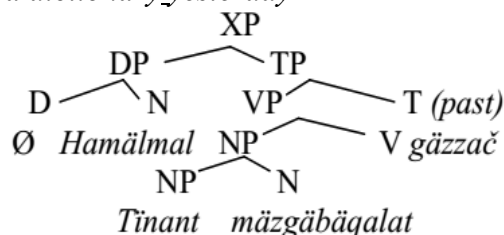
The declarative sentence states a fact in the affirmative or negative form. The direct word order of declarative sentence in Amharic is subject, object and verb (SOV).

- (1) *Tāmariwoč zare almät't'um*
Students today not coming
 'Students are not coming today'



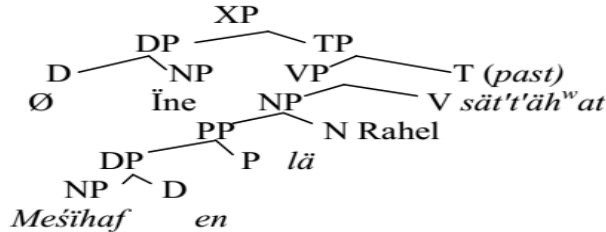
(1) Tells us (amongst other things) is that the overall expression *tāmariwoč zare almät't'um* is a declarative sentence; its head is the verb *almät't'um*, and the complement of *almät't'um* is the Adverb Phrase *zare*. The subject of the entire sentence is DP phrase *tāmariwoč*. Moreover, the VP *tāmariwoč zare almät't'um* is a projection of the head Verb.

- (2) *Hamälmal tīnant mägäbäqalat gäzzač*
Hamälmal yesterday dictionary bought
 'Hamälmal bought a dictionary yesterday'



What (2) notifies us is that, the object *mägäbäqalat* is a secondary part of the sentence, which modifies the verb *gäzzač*. It completes its meaning through indicating the phenomenon affected by the action of the predicate. Therefore, *mägäbäqalat* denotes a person or a thing affected by the action of a transitive verb. This kind of object is non-prepositional and follows the predicate immediately. The Verb *gäzzač* takes only one object expressed by a noun without a preposition; it is always a direct one. The subject of sentence structure is the Noun *Hamälmal*. The head of the overall sentence is the Verb *gäzzač*. The Syntactic Object *tīnant mägäbäqalat* is the complement of the head *gäzzač*.

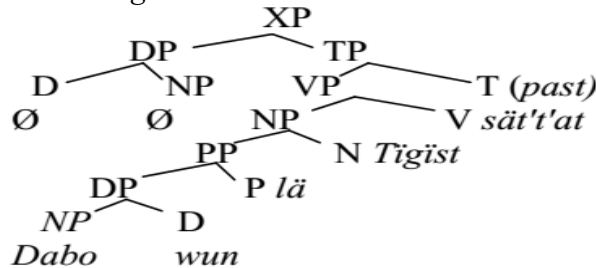
- (3) *İne mešihafen läRahel sät't'äh^wat*
I my book Rahel gave
'I gave my book to Rahel'



The analysis in (3) accounts that, *läRahel* is indirect object that denoting the addressee of the action. This object is placed between the predicate verb *sät't'äh^wat* and direct object *mešihafen*. The subject *ine* is the principal part of the sentence, expressed by a word which is grammatically independent of the other parts of the sentence and with which the second principal part, the predicate, agrees in number and person. The head of the overall sentence structure is the verb *sät't'äh^wat*.

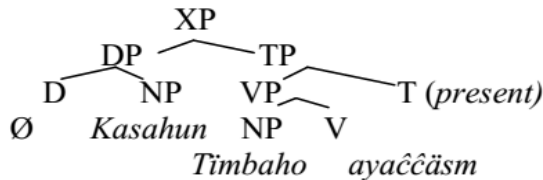
When the direct object precedes the indirect object, the latter is used with the preposition *lä/ to* and sometimes *lä/for* as in:

- (4) *Dabowun lä Tigist sät't'at*
The bread to Tigist gave
'He gave the bread to Tigist'



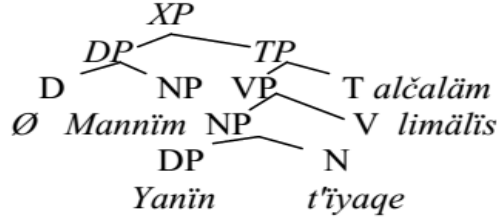
The resulting sentence structure (4) *dabowun lä Tigist sät't'at* is headed by the verb *sät't'at*. The Noun Phrase *lä Tigist* is the complement of *sät't'at*. The subject of the sentence is empty, but it is implied he. *Dabowun* is the direct object and *lä Tigist* is indirect object conjoined in the tree.

- (5) *Kasahun timbaho ayaččäsm*
Kasahun tobacco not smoke
'Kasahun does not smoke tobacco'



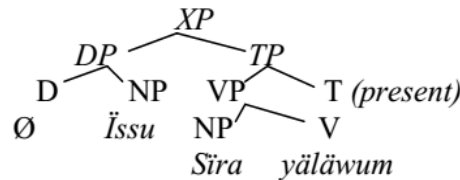
Initially, this (5) sentence appears to have two main components that each function as units, specially the subject Determiner Phrase *Kasahun* and the Verb Phrase *timbaho ayaččäsm*. The overall expression *Kasahun timbaho ayaččäsm* is a projection of the head Verb *ayaččäsm* and so has the status of a sentence XP: the head of XP *Kasahun timbaho ayaččäsm* is the Verb *ayaččäsm* and the complement of the Verb is the NP *timbaho*.

- (6) *Mannim yanin t'iyage limälis alčäläm*
Nobody that question answer could
'Nobody could answer that question'



The preceding (6) sentence structure consists of merely one independent clause, which is *Mannim yanin t'iyage limälis alčäläm* with a finite verb. The subject of the sentence *mannim* is the person that does not perform the action denoted by *alčäläm*. Moreover, *limälis* is the head of the overall sentence structure and *alčäläm* is the auxiliary verb that helps the main verb *limälis*.

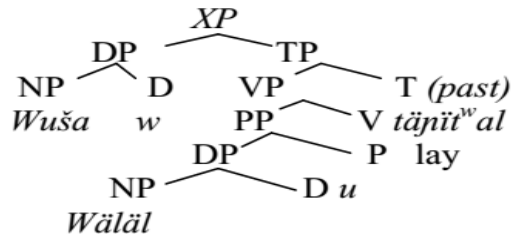
- (7) *İssu sira yäläwum*
He job less
'He is jobless'



Under the analysis in (7), the noun *issu* is the subject of the sentence. The head of the overall sentence structure is the Verb *yäläwum*. The complement of the Verb is the Noun *sira*.

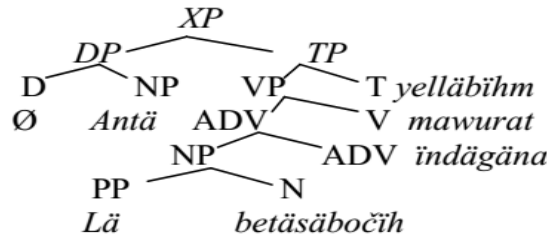
Statements typically have a falling tone; they are marked by a pause in speaking and by a full stop in writing. Depending on their structure and lexical content, declarative sentences may be communicatively poly functional. Thus, besides their main function as information-carriers, statements may be used with the force of questions, commands and exclamations.

- (8) *Wušaw wälälulay täjnit^wal*
The dog on the couch was sleeping
'The dog was sleeping on the couch'



According to (8) the subject of the sentence is *wušaw*. By the same token, the overall structure *wušaw wälälulay täjnit^wal* is the projection of the head Verb *täjnit^wal*. The complement of the Verb is the Prepositional Phrase *wälälulay*.

- (9) *Antä läbetäsäbočih indägäna mawurat yelläbihm*
You your parents again talk must not
'You must not talk again to your parents'

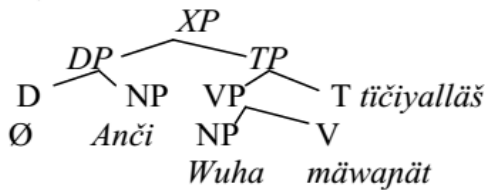


What (9) tells us is that the pronoun *antä* is the subject of the sentence. The head of the overall sentence structure is the Verb *mawurat*. The complement of the Verb is the Adverb Phrase *läbetäsäbočih indägäna*. *Yelläbihm* is an auxiliary verb used to add functional or grammatical content to the information expressed by *mawurat*.

4.2 The interrogative sentence

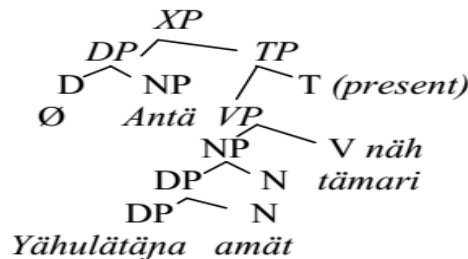
The interrogative sentence is characterized by the indirect word order and the use of function words. Their communicative functions consist in asking for information as in:

- (10) *Anči wuha mäwaṇät tičiyalläš?*
You water swim can
 ‘Can you swim water?’



In (10) the Pronoun *anči* is the subject of the sentence. The head of the overall sentence structure is the Verb *mäwaṇät*. Its complement is the Noun *wuha*. *Tičiyalläš* is an auxiliary verb used that adds grammatical content to the information expressed by *mäwaṇät* which is considered to the main verb.

- (11) *Antä yähulätäṇa amät tämari näh?*
You second year student are
 ‘Are you second year student?’

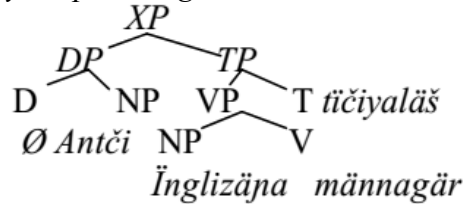


In accordance with (11) the subject of the intended sentence structure is the Noun *antä*. The predicate contains the Verb *näh*, which identifies what the subject is being. Initially, this sentence appears to have two main components that each function as units, specially the Noun Phrase *antä* and the Verb Phrase *yähulätäṇa amät tämari näh*. If we further consider the DP, we can see that it contains a Noun *antä*, Determiner *yähulätäṇa*, a Noun *amät*, and another Noun *tämari*. The head of the overall clause *antä yähulätäṇa amät tämari näh* is the projection of the head verb *näh*.

The speaker is interested to know whether some event or phenomenon asked

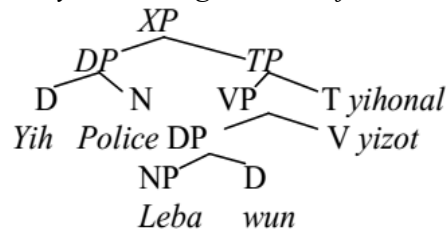
about exists or does not exist; accordingly, the answer may be positive or negative, thus containing or implying "yes" or "no". A general question opens with a verb operator, that is, an auxiliary, modal, or link verb followed by the subject. Such questions are characterized by the raising tone as in (12 and 13):

- (12) *Antči inglizäna männagär tčiyaläs?*
You English speak can
 ‘Can you speak English?’



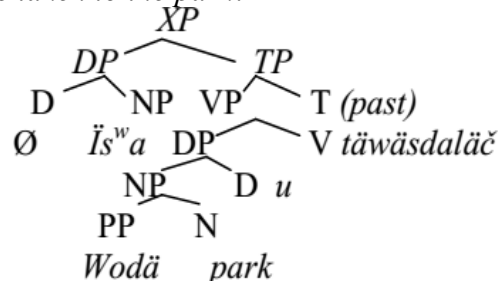
The bar notation used in (12) posits that the Determiner Phrase *anči* is the subject of the sentence; the Noun Phrase *inglizäna* is as well the immediate compliment of the head Verb *männagär*. *Tčiyaläs* is used in conjunction with main verb *männagär* to express shade of time and mood.

- (13) *Yih police lebawun yizot yihonal?*
This police thief caught may have
 ‘This police may have caught the thief?’



What the tree diagram in (13) tells us that the existing structure contains direct object. The subject is not the single word, but rather a Determiner Phrase/ DP *yih police*, which has itself been formed by merging the Determiner *yih* with the Noun *police*. *Lebawun* is the direct object and it referees that; *police* may have caught the thief. By the same token, the head of the overall sentence structure is the verb *yizot*.

- (14) *İs^wa wodä parku täwäsdaläč?*
She to the park was taken
 ‘Was she taken to the park?’

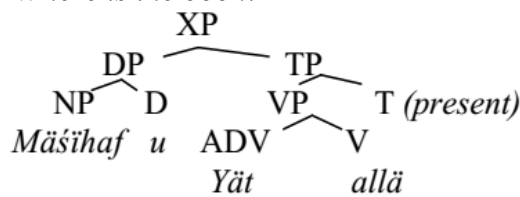


What the notation in (14) tells us is that the overall XP *İs^wa wodä parku täwäsdaläč* is a sentence structure (XP), and that its two immediate constituents are the DP *İs^wa* and the Tense Phrase *wodä parku täwäsdaläč*. The verb *täwäsdaläč* is the head of the overall phrase (and so is the key word, which determines the grammatical and semantic properties of the XP *İs^wa wodä parku täwäsdaläč*). Therefore, the XP *İs^wa wodä*

parku täwäsdaläč is a projection of the verb *täwäsdaläč*, in the sense that this verb is projected into a larger structure by merging it with another constituent of an appropriate kind.

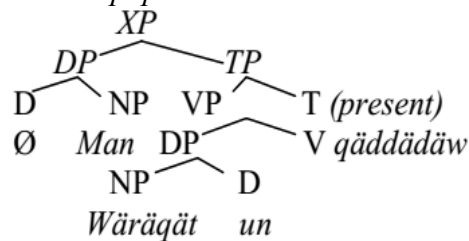
Special questions in Amharic can asserted with a question word, the function of which is to get more detailed and exact information about some event or phenomenon known to the speaker and listener. The question words include what, which, who, whom, whose, where, why and how. With the help of these means, the speaker can specify the information about the time, place, reason, manner, doer and other characteristics of the action, for instance as in (15), (16) and (17):

- (15) *Mäsīhafu yät allä?*
 The book where is
 'Where is the book?'



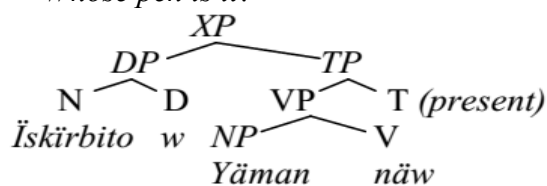
The question word in (15) is *yät*. With the help of this word, the speaker can specify the information about the place, reason, manner, doer and other characteristics of the action. The head of the resulting XP projection *mäsīhafu yät allä* is the Verb *allä*, and the Adverb Phrase *yät* is the complement of *allä*; conversely, *mäsīhafu yät allä* is a projection of *allä*. *Mäsīhafu* is the subject of the entire sentence structure.

- (16) *Man wäräqätun qäddädäw?*
 Who the paper tear
 'Who tear the paper?'



What (16) tells us is that the overall XP *man wäräqätun qäddädäw* is a sentence structure (XP), and the subject of the entire sentence structure is Determiner Phrase *man*. The verb *qäddädäw* is the head of the overall phrase, which determines the grammatical and semantic properties of XP *man wäräqätun qäddädäw*. As a result, the XP *man wäräqätun qäddädäw* is a projection of the verb *qäddädäw*, in the sense that the head verb is projected into a larger structure by merging it with another Determiner Phrase complement *wäräqätun*.

- (17) *İskirbitow yäman näw?*
 The pen whose is
 'Whose pen is it?'

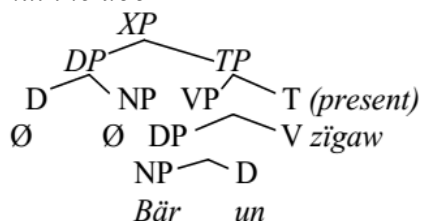


In (17) the head of the resulting XP projection *iskirbitow yäman näw* is the verb particle *näw*, and the pronoun act as Noun *yäman* is the complement of the head *näw*. On the other hand, *iskirbitow yäman näw* is a projection of the head verb.

4.3 The imperative sentence

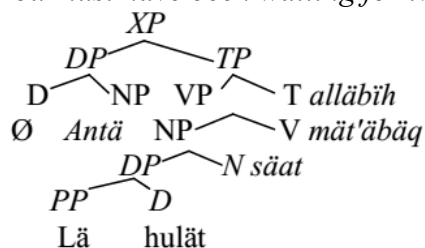
An imperative sentence is a type of sentence that gives instructions or counsel, and expresses a command, an order, a direction, or a request. It is also known as a jussive or a directive. Depending upon its delivery, an imperative sentence may end with an exclamation mark or a period. It is usually simple and short, but could be long and complex, depending upon its context (Shlonsky, 2014b). Imperative sentences may express a prohibition, request, invitation, warning, persuasion, etc, depending on the situation as in (18, 19 and 20):

- (18) *Bärun zīgaw*
The door shut
 ‘Shut the door’



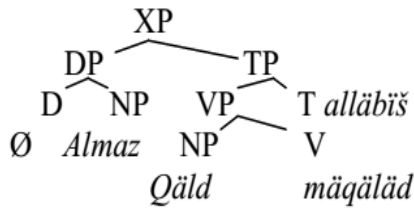
What (18) tells us is that the subject position of the sentence is indicated in the verb. Thus, it would be second person, singular, either feminine or masculine in gender. The head of the overall sentence structure is *zīgaw* and it has Determiner Phrase complement *bärun*.

- (19) *Antä lähulät säat mät'äbäq alläbīh*
You for two hours weight must
 ‘You must have been waiting for two hours’



In (19) the subject of the sentence is the Noun *antä*. The head of the overall sentence structure is the verb *mät'äbäq* and it has the Noun Phrase complement *lähulät säat*. The preposition *lä* merged with the Determiner *hulät* to form Determiner Phrase. *Alläbīh* is auxiliary verb that helps the main verb *mät'äbäq*.

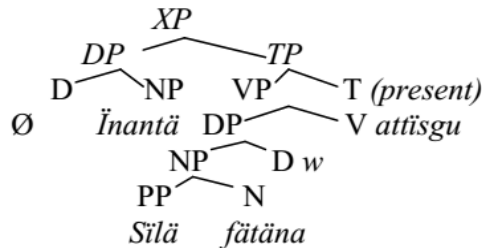
- (20) *Almaz qäld mäqäläd alläbīš*
Almaz jock joking must
 ‘Almaz must be joking’



What the tree in (20) tells us is that, the subject of the sentence is *Almaz*. The Predicate *mäqäläd* is the second principal part of the sentence, which expresses an action that state phenomenon denoted by the subject. It is also the head of the entire sentence structure. An auxiliary verb *alläbiš* indicate that she is compelled to joking because it is necessary to or advisable to perform joke.

Imperative sentences are generally characterized by the falling tone, although the rising tone may be used to make an inducement less abrupt. In writing, they are marked by a full stop or exclamation mark. A negative imperative sentence usually expresses prohibition, warning or persuasion as in (21):

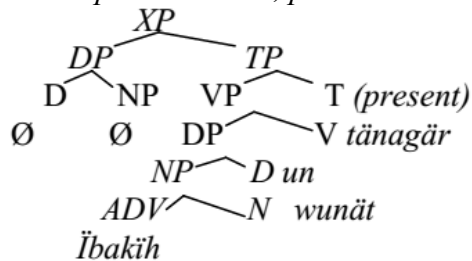
- (21) *Īnantä silä fätānaw attisgu*
 You about exam do not worry
 ‘You do not worry about exam’



The resulting structure in (21) tells us that the overall sentence *īnantä silä fätānaw attisgu* is XP, and that its constituents are the subject *īnantä* and the tense Phrase *sälä fätānaw attisgu*. The head of the entire sentence structure is the Verb *attisgu*.

Inducements can be softened and made into requests with the help of the word *please*, the rising tone or a tail question as in:

- (22) *Ībakih wunätun tēnagär*
 Please speak the truth
 ‘Speak the truth, please’



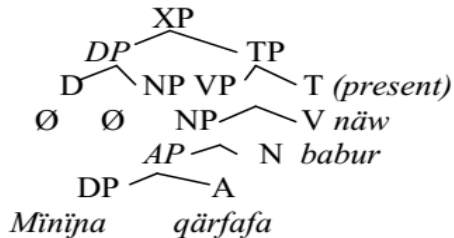
This (22) sentence structure has an implied subject. Currently, the position of DP is empty. The head of the overall sentence is the head *tēnagär* and its complement is the Determiner Phrase *ībakih wunätun*.

4.4. The exclamatory sentence

The exclamatory sentence articulates thoughts and emotions and often begins with the pronoun *what* or the adverb *how*. It always has direct word order. The

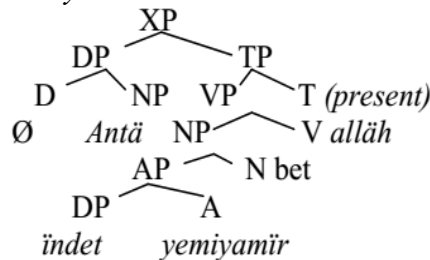
sentence has a falling tone in speaking and an exclamation mark in writing as in:

- (23) *Minijna qärfafa babur näw!*
 What slow train it is
 'What a slow train it is!'



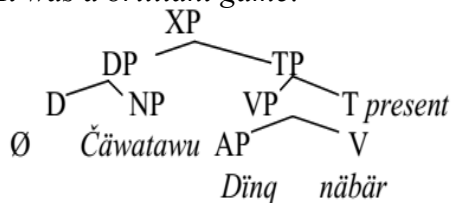
What the tree in (23) most relevant to the researcher's discussion in this section is the claim that the complement clause *minijna qärfafa babur näw* is an exclamatory XP headed by *näw*, and its subject is empty (Ø). The determiner *minijna qärfafa babur* is the complement of *näw*.

- (24) *Antä indet yemiyamir bet alläh*
 You what a beautiful house you have
 'What a beautiful house you have'



What (24) tells us is that the overall phrase *antä indet yemiyamir bet alläh* is a sentence structure (XP). The verb *alläh* is the head of the overall sentence structure. Consequently, it is the key word, which determines the grammatical and semantic properties of the phrase *antä indet yemiyamir bet alläh*. On the contrary, the VP *antä indet yemiyamir bet alläh* is a projection of the verb *alläh*, in the sense that the verb *alläh* is projected into a larger structure by merging it with another constituent (*indet, yemiyamir* and *bet*) of an appropriate kind.

- (25) *Čäwatawu dinq näbär*
 The game a brilliant was
 'It was a brilliant game!'



What (25) tells us is that the overall sentence *čäwatawu dinq näbär* is XP. *Čäwatawu* is the subject of the sentence and the head of the overall sentence structure is the Verb *näbär*. An adjective phrase *dinq* is the complement of the head Verb *näbär*.

5. DISCUSSION

Similar to Chomsky's (2013, 2015) supposition, the result from Amharic syntax demonstrate with the intention of Syntactic Object {XP, YP}. In this notation minimal search is ambiguous, judgment both the head X of XP and the head Y of YP. To resolve this vagueness, LA defines labeling all the way through modifying SO (by raising XP) so that there is merely one noticeable head. After that the Labeling Algorithm appears YP, which is the subordinate part of an irregular element, a sequence consists of a sequence of copies headed by structurally most significant constituent.

By the same token, comparable to Shlonsky and Luigi (2015) research finding the main idea in Amharic was that syntactic objects have to be consistently labeled at the interfaces. Dissimilar to Chomsky's (2013, 2014, 2015) and Adger , (2016) studies sentential constituent such as complementizers, sentence-final particles, aspect, tense, focus and topic, and agreement morphemes, and determiners in Amharic are not the head. Unlike to Urk Coppe (2015) phrasal movements in Amharic made the syntactic structure ungrammatical (Borer, 2013).

6. CONCLUSION

Syntactic {XP, YP} structures are problematic for minimal Labeling Algorithms, which relay on structural asymmetry to identify the label. Mechanism have been proposed to resolve the label in symmetric {XP, YP} configuration. By raising XP, LA takes, the head of the proposal object that does not move out (YP) as a label. Therefore, by modifying Syntactic object so that there is only one visible verbal head. The upward head sees one occurrence of the verbal head and then labels are the syntactic objects.

Result designated that sentences were dissimilar in terms of their forms, forming Syntactic Object representations they contain. Alternatively, all sentence structures share Syntactic Object representations that include; Tense Phrases, Noun Phrases, Verb Phrases, Prepositional phrases, Adverb Phrases, Determiner Phrase and Adjective Phrases (Cinque, & Rizzi, 2010; Rizzi & Cinque, 2016).

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