The Clausal Syntax of Ethio-Semitic

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in memory of

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Contents

PART ONE:
INTRODUCTION

Chapter One: Introduction

In this thesis, I will deal with the branch of Semitic languages, which is spoken in Ethiopia (and the present Eritrea), called the Ethio-Semitic languages. Among the Semitic languages these are the least studied ones, within the generative tradition as well as within other linguistic traditions. My approach is comparative. I will investigate a number of grammatical categories and structures which are characteristic of the Ethio-Semitic languages but which show considerable cross-linguistic variation as regards their precise realization within this group of languages.

In section 1.1, I present some background information about the languages under study here and collection of data. In section 1.2, the general objective of the thesis; in section 1.3, the scope, and in section 1.4, the organization of the work are presented.

1.1 Background of the Thesis

Ethiopia is a multiethnic state, having more than 80 languages. These languages are known for being the least studied. Most of them even lack sufficient recording and description.

The assumed more than 80 languages spoken in this country fall into two major language phyla — Afroasiatic and Nilo-Saharan. From Afroasiatic, Cushitic, Omotic and Semitic are spoken in Ethiopia. The Semitic language family is also one of the least studied groups. For example, Shlonsky (1997), in his book on the comparative Semitic syntax, excludes the Ethio-Semitic languages from discussion. This is mainly, he states, due to the absence of generative research on these languages.

Though the Ethio-Semitic languages make up a large number of the Semitic languages they are not only the least studied languages in the generative tradition but also most of them lack satisfactory descriptions and recording. Even the existing limited number of studies on these languages are not easily available on the market nor in the libraries world-wide, as most of them are unpublished materials, such as Master's theses, manuscripts etc.

This project collects data from two sources. One is from primary sources, i.e. from the area where the languages under investigation are spoken, and the other is from secondary sources, i.e. from books, manuscripts, research papers, articles, published or unpublished theses etc. The project has used some secondary sources because time limits make it impossible to collect all the data needed from the area where the languages are spoken, despite the fact that primary data are preferred to secondary data in the generative linguistic research tradition.

1.2 Objective of the Thesis

The major aim of the thesis is to give a comparative analysis of the clausal structure of Ethio-Semitic languages within the Principles and Parameters approach to languages, with special reference to the Minimalist Program (cf. Chomsky 1993, 1995 etc.) and other recent developments, such as the Antisymmetry of Syntax (cf. Kayne 1994). However, I have kept the theoretical discussions to a minimum. I have used such theoretical models not as an object of investigation in their own right but rather as a base framework.

1.3 Delimitation of the thesis

This thesis deals mostly with issues related to what is known as the IP-domain; i.e. to grammatical categories such as tense, aspect, negation, and agreement. However, it also contains some discussion on argument structure and on what is known as the CP-domain. Neither is this research an attempt to describe all the existing Ethiopian Semitic languages.

1.4 Organization of the Thesis

This work has five parts and eleven chapters. Part One is introduction and contains two chapters — chapter 1 and chapter 2. Chapter 1 introduces the general nature, aim and scope of the thesis. Chapter 2 introduces the Minimalist Program and in general, some of the basic theoretical assumptions adopted in this work.

Part two has also two chapters—chapter 3 and chapter 4, and deals with agreement in a broader sense of the term. The first chapter of the two deals with subject agreement and Case checking and the latter with the so-called object agreement.

The morphology of subject agreement in Semitic in general is almost similar and a lot of works are found on the subject. See, for example, for Ethio-Semitic Hetzron (1997), Leslau (1992, 1995, 1997), Yimam (1987 E.C., 1998), Halefom (1994), Rose (1996, 1997), Petros (1996, 1997), Engdashet (1998) among many others. Hence, the descriptive facts are kept to the minimum. My major aim in this chapter is in investigating whether subject agreements have a role in Case checking, i.e. do agreement elements check Case, if not what role they play in Case checking?

Object agreement may better be called non-subject agreement, because their occurrence is not restricted to the identification of an object but also to instrumental PPs and other adverbials. Furthermore, such agreement elements can be associated with an argument, which is under focus and realized along with applicative heads to identify the applied argument in question. They have also very peculiar characteristics and it is because of this that they are dealt in a separate chapter.

Part three has chapters 5, 6 and 7 and deals with aspect, tense and mood. Chapter 5 deals with the morphosyntactic property of aspect. Chapter 6 is about tense formation. These two chapters provide a morphosyntactic analysis and a basic descriptive overview of, aspect and tense in Ethio-Semitic languages. They are intended, one, to fill the gap which is created by lack of general and comprehensive description of aspect and tense in the literature and, two, to provide a morphosyntactic explanation to such grammatical categories.

Chapter 7 provides theoretical explanations and analyses for various aspectual and tense constructions that are introduced in chapters six and seven. In particular, it tries to derive the semantic of tense and aspect from the syntax. In that chapter, following work by Klein (1995) I suggest that both tense and aspect are temporal relations. Following Stowell (1995, 1996) and Zagona (1995), I suggest that the semantic of tense can be captured from the syntactic configuration by considering tense as heading a syntactic projection TP that takes two temporal phrases as its internal and external arguments. In the same manner, following work by Demirdache and Uribe-Etxebarria (2000), I suggest that aspect also can be seen as heading its own projection AspP and takes dyadic temporal predicates. In such a view, the syntactic projections of Asp° and T° relate temporal arguments, i.e. they establish a temporal ordering between two time-denoting arguments, similar to *after* and *within* (cf.

Demirdache and Uribe-Etxebarria 2000). Such an analysis enables capturing the wide range of aspect and tense constructions and the interaction of these in Ethio-Semitic languages, which would otherwise remains mysterious.

Part four deals with polarity elements, particularly what is called affirmative main clause markers (chapter 8) and sentential negative markers (chapter 9). In chapter 9, I discuss the incompatibility of post-verbal negative markers with (some type of) tense markers, complementizers, (affirmative) main clause markers, and imperatives. In this chapter I argue that the post-verbal and the pre-verbal negative markers in Ethio-Semitic languages project heading two different syntactic projections of their own; namely PolP and NegP respectively.

Part five has two chapters— chapters 10 and 11.

Ethio-Semitic languages, except Ge'ez, differ from the other Semitic languages mainly by having OV word order. Recently, the OV vs. VO parametric variation has been eliminated from certain versions of generative theory in favor of the assumption of uniform linear order (LCA) (Kayne 1994). What is interesting in these languages is that in what is known SOV we find OSV as an unmarked word order in certain type of clauses. Chapter 10 examines such word order considering various types of clauses. In this chapter, attempt has been made to derive the VSO, OSV and SOV structures of these languages within the uniform Specifier-Head-Complement Hypothesis of Kayne (1994).

Chapter 11 summarizes the major points and concludes the thesis.

The last part of this thesis is appendixes and references.

In the appendix section, I have included four appendixes —One about transcription, one about abbreviation, and one about classification and one about basic descriptive facts of the root/ verb types in the languages under consideration here. I have included this overview because in Semitic the types of verbs have many different properties in terms of their morphology, phonology and, to some extent, in their syntactic structures.

Chapter Two:
Theoretical Issues on Clause Structure

In this chapter I discuss the basic theoretical assumption on which this work is based. In section 2.1 and 2.2, I introduce some of the basic principles and assumptions in the Minimalist Program. More ideas in this research program are found throughout this thesis. In 2.3, I discuss two competing hypotheses regarding to the architecture of a clause.

2.1 The Minimalist Program: General Overview

> Minimalism is anchored in the suspicion that at certain times and for certain purposes less can be more (Epstein and Hornstein 1999: ix).

2.1.1 Introduction

In generative grammar, it has been hypothesized that "languages are based on simple principles that interact to form intricate structures, and that language faculty is non-redundant, in that particular phenomena are not 'over determined' by principles of language" (Chomsky 1995b: 168). The Minimalist Program in particular is seeking to explain linguistic expressions in minimal and optimal way. Minimalism is anchored in some basic ideas and principles, such as principles of economy. It is a research program strongly built on the notion of features and takes the only syntactic operations to be merge and move.

The Minimalist Program assumes two levels of representation unlike the traditional four-level GB model of representation. Such two levels of representations are PF, for an abstract sound and LF, for an abstract representation of meaning. "The linguistic expressions are the optimal realizations of the interface conditions, where 'optimality' is determined by the economy conditions of UG" (Chomsky 1995b: 171).

Chomsky explains the interface condition of PF and LF as follows: A derivation D *converges* in both interface levels if it yields a legitimate linguistic expression and *crashes* if it does not. Meaning "D *converges at PF* if π is legitimate and *crashes*

at PF if it is not; D *converges at LF* if λ is legitimate and *crashes at LF* if it is not" (Chomsky 1995: 171).

Chomsky summarizes the guiding ideas of the Minimalist Program as follows:

(1) a. A linguistic expression (SD) is a pair (π, λ) generated by an optimal
       derivation satisfying interface conditions.
    b. The interface levels are the only levels of linguistic representation.
    c. All conditions express properties of the interface levels, reflecting
       interpretation requirements.
    d. UG provides a unique computational system, with derivations driven by
       morphological properties to which syntactic variation of languages is
       restricted (Chomsky 1995b: 212).

2.1.2 The Economy Principle

The principle of economy is assumed to be applied in both representation and derivations. The economy principle with regard to representation is considered as Full Interpretation (FI) which demands representations to contain no superfluous symbols. It is the convergence condition and, thus, understood in terms of language independent rules (Chomsky 1995b: 200).

One of the principle of economy of derivation formulated in earlier minimalist work is "procrastinate". According to this principle covert movement is cheaper than overt movement. The other is Last Resort, "a step in a derivation is legitimate only if it is necessary for convergence — had the step not been taken, the derivation would not have converged" (Chomsky 1995b: 200).

According to Chomsky "the self serving property of Last Resort cannot be overridden even to ensure convergence" (Ibid.). In addition to Procrastinate, Greed/ Last Resort and FI the principle of economy has been interpreted in the Minimalist Program "in terms of length of links and length of derivation" (Ibid.: 212).

2.1.3 The Status of X-bar theory in the Minimalist Program

X-bar theory does not have any theoretical status in the Minimalist Program. Phrases are built from bottom-up fashion by the operation Merge and Move. These are the only two operations allowed by UG.

As we have mentioned earlier, there are only two interface levels LF and PF. It is assumed that a lexical item (LI) and its nonphonological properties LF(LI) are accessible at the LF interface. Where LF(LI) is the semantic properties and the formal properties that are interpreted at LF. According to this assumption, LI and LF(LI) are assumed to be available for the computational system C_{HL}. Furthermore, it is assumed that the computational system can access the formal features FF(LI) and maximal projections which are relevant to LF interpretation since noun phrases and verb phrases are interpreted differently (cf. Chomsky 1995: 242). Based on this assumption, Chomsky argues that "bare out put condition make the concepts 'minimal and maximal projection' available to C_{HL}. But C_{HL} should be able to access no other projection" (ibid.).

However, minimal and maximal projections, according to Chomsky (1995b: 242), are not identified by any special marking. These have been taken, in the Minimalist Program, relational properties of categories. "There are no such entities as XP (X^{max}) or X° (X^{min}, terminal element) in the structures formed by C_{HL}" (Chomsky 1995a: 396).[1] For expository purposes, following Chomsky and many others, I will use these notations along with X-bar for any segment in the terminology of Kayne (1994).

According to this hypothesis the syntactic objects are:

(2) a. Lexical items
    b. K={Y, {α, β}}, where α, β are objects and Y is the label of K (Chomsky
        1995b: 242).

As already discussed, LIs are complex of features which are listed in the lexicon. As Chomsky explains in a syntactic structure K as in (2-b) "the label of K^2 is

determined derivationally (fixed once and for all as K is formed), rather than being derived representationally at some other stage of the derivation[3] (say, LF)" (Chomsky 1995b: 245). Then the question arises on the status of Y. Since Y is the label of K, where K is a set of $\{\alpha, \beta\}$, the only possibility is to consider Y as the projection of one of the two; since the other options, the intersection of α and β and the union of α and β are excluded for conceptual and empirical reasons (cf. Chomsky 1995a and 1995b for discussion). Thus, "phrase structure representation is 'bare, excluding anything beyond lexical features and objects constructed from them" (Chomsky 1995: 245).

(3)

$$\begin{array}{ccc} & \alpha_1 & \\ \alpha_2 & & \beta \end{array}$$
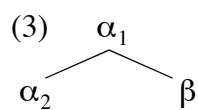
The departure of bare "phrase structure" theory can be summarized as follows:

(4) a. categories are elementary constructions from properties of lexical items,
    satisfying the inclusiveness condition;
  b. there are no bar levels;
  c. there are no distinction between lexical items and 'heads' projected from
    them. Hence, an item can be both an X° and an XP (Chomsky 1995: 249).

2.1.3.1 Merge

According to Chomsky merge takes place in a binary fashion and applies at the root only (cf. Chomsky 1995b: 248) where the root of a certain projection XP is understood also as terms of it. It is understood that if XP $=\{X,\{P,Q\}\}$ where, X, P and Q are the root element, they are said to be terms of XP (cf. Chomsky 1995b: 247). More specifically for any structure K;

(5) a. K is a term of K
  b. If L is a term of K, then the members of the members of L are terms of K[4]
    (Chomsky 1995a: 399, Chomsky 1995b: 246)

Let us assume that there are two syntactic objects α and β. "Suppose that the derivation has reached stage $\sum$, with objects α and β. Then Merge may eliminate

α and β from ∑ in favor of the new object K={Y, {α, β}}, with label Y"
(Chomsky 1995b: 248). Y is either a type α or β. Suppose Y is a type α and α is a
zero-level lexical item. Assume along with Marantz (1997), Borer (2000) that
lexical items are category-less, hence α is R but not Y, since nominal and verbal
projections behave differently at LF and in phonological component as well. Thus,
though Y is either α or β, it is the label and distinct from α and β in some
respects. Hence Y cannot be α itself but rather its label. In Chomsky (1995) Y is
understood as the head of α, i.e. H(K) as well. This is with the general assumption
that "the head determines the label, though not always through strict identity"
(Chomsky 1995: 245-246). Such an assumption needs explanation.

In Chomsky (1995) and earlier minimalist works, since lexical items are
understood as category marked the interpretation of Y as H(K) is a straightforward
matter. However, if α is R, as advocated in recent minimalist works (see, for
example Chomsky 1998, 2000, 2001 among many others); it is not the case that Y
is H(K) but rather determines H(K) and, hence H(K) is not also similar to α; i.e. in
terms of category, but Y; since the category of H(K) is determined at the merge of
α and β (cf. Chomsky 2001), i.e. Y — the label. From theoretical point this is
consistent with Borer's (2000) proposal of argument structure for the category-
less Encyclopedia Items such as event nominals and verbs.

2.1.3.2 Adjunction and Substitution

According to Kayne (1994), multiple adjunction are excluded by LCA. Let us see
how LCA excludes multiple adjunction assuming that there are two adjuncts in a
certain projection; namely $adjunct_1$, and $adjunct_2$. According to this notion, the set
of terminals that $adjunct_1$, and $adjunct_2$ dominate, cannot be ordered in a sense
<a,b> and <b,a> are both possible orders where *a* is a terminal node of $adjunct_1$
and *b* is a terminal node of $adjunct_2$. For example, let us say DP_1 and DP_2 are
double adjuncts, which adjoin to the nonterminal node NP creating two specifiers
namely NP_1 and NP_2 as in the following:

(6) NP_1

```
(6)  NP₁
      /\
   DP₁   NP₂
    |     /\
   D'₁  DP₂   N'
    |    |    /\
   D°₁  D'₂  N°   DP₃
         |
        D°₂
```
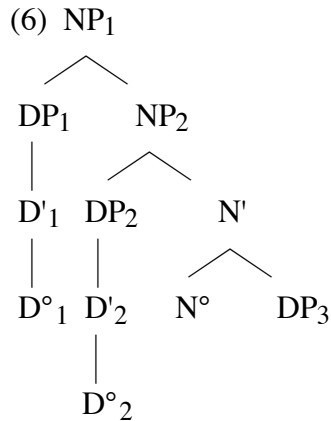
In (6), DP_1 asymmetrically c-commands D'_2 and DP_2 asymmetrically c-commands D'_1 given the definition of asymmetric c-command "X asymmetrically c-commands Y iff X c-commands Y and Y does not c-command X" (Kayne 1994: 4), thus, the set of nonterminals (A) contains $<DP_1,D'_2>$ and $<DP_2,D'_1>$, so that $<D°_1,D°_2>$ and $<D°_2,D°_1>$ are both in the set of terminals ($d(A)$), which is not antisymmetric. For Kayne (1994) specifiers are also adjuncts. Otherwise there will be no linear ordering obtained between the terminal node of the specifier and the head. Consider the following:

(7) E

```
(7)  E
     /\
    D    F
    |    /\
    A   B    C
    |   |    |
    a   b    N
             |
             n
```
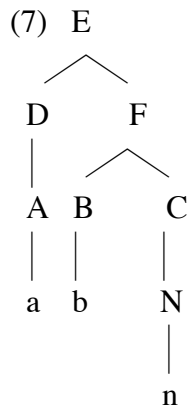
In (7) D asymmetrically c-commands B and as the same time F asymmetrically c-commands A: Thus, d(A) contains <a,b> and <b,a>. However, for Kayne (1994) there exists a distinction between a segment and a category; and a segment cannot enter into a c-commanding relation: "X c-commands Y iff X and Y are categories and X excludes Y and every category that dominates X dominates Y"(1994:16).

Thus, F cannot asymmetrically c-command A since it is a segment. The only c-command relation obtained between these projections is D to B, i.e. D c-commands B. Thus the terminal node *a* and the terminal node *b* can only form a pair of the form <a,b> not <b, a> ; in other words, d(A) contains <a,b> not <b,a>. Thus, specifiers are considered to be adjuncts.[5]

However, for Chomsky (1994/1995a, 1995b) there exists a distinction between specifiers and adjuncts, and multiple adjunction is a possible operation. In the Minimalist Program both operations substitution and adjunction exist and differs in minimal way: "Adjunction differs from substitution ... only in that it forms a two-segment category rather than a new category" (Chomsky 1995b: 248). Consider the following from Chomsky:

(8) Substitution

L={H(K), {α, K}}, where H(K) is the label and a head of the LI[lexical Item] K.

(9) Adjunction

L={<H(K), H(K)>, {α, K }, where α adjoins to K and the target K projects.

Chomsky further reminds that "<H(K), H(K)>, the label L, is not a term of the structure formed. It is not identical to the head of K" (Chomsky 1995: 248).

According to Minimalism, no stipulated principle is acceptable. Hence, the theoretical principle stipulated in LCA to exclude double adjunction is subject to be examined. From the empirical side since multiple features are a common phenomenon nothing will prevent multiple adjunction if a syntactic head position has a multiple features which can license unchecked syntactic object XPs.

2.1.4 Checking Theory and/ or Feature Valuation

In the Minimalist Program since every movement is assumed to be morphologically driven and the lexical items inserted in the derivation fully inflected, the movement of the lexical items (= at the level of head) is not to support the inflectional elements as in pervious GB analysis rather for feature checking (cf. Chomsky 1993, 1995). The same is true for XP movement. In the

earliest Minimalist Program it is assumed that A-movement is triggered by Structural Case checking. Suppose, for example, in a transitive construction a complement of the verb has to move from its base position to a certain specifier place, e.g. Spec Agr_O, to receive its accusative Case from the verb which is moved from its base position to the head of Agr_O. This is stated in Chomsky as follows; "if a checking relation is established by merger of α in the checking domain of β, then the relevant features in the new checking domain are those of the head of α, which are immediately determined by its label" (Chomsky: 1995b: 268). However, in recent minimalist syntax, it is assumed that checking may take place without any movement by the operation Agree.

According to Chomsky's recent minimalist articles (1999, 2001) feature checking of uninterpretable features need not necessary involve movement. "Uninterpretable features to be unvalued, receiving their value only under Agree" (Chomsky 1999: 3). Note that, in recent minimalist syntax (cf. Chomsky 1999, 2001) the feature checking is also understood as feature valuation. Uninterpretable features enter the derivation unvalued and get their value under the relation Agree that matches the unvalued feature of α with the interpretable feature of β. Suppose we have a functional element (=a probe) α which has an uninterpretable feature. α is assumed to search for a matching interpretable feature of a goal β. If the search succeeds in finding a matching element to the uninterpretable feature of α, in principle, the relation Agree is established. Agree, then, values and subsequently deletes the uninterpretable feature of α and in some cases the uninterpretable feature of β as well (Assume that Case and ϕ-features checking).[6]

2.2 Movement Theories

I will not discuss in detail any movement theories here. I simply introduce what movement looks like in LCA and in the Minimalist Program in a very general term. The relevant details can be found scattered everywhere in this work.

2.2.1 Movement in LCA

Unlike previous GB works Kayne (1994) assumes that every movement is invariably leftward and every adjunction is at the left side of its host. For this assumption Kayne (1994) provides conceptual and empirical motivation based on what he calls the Linear Correspondence Axiom LCA. The reader is referred to this work for the details of the theory.

2.2.2 Movement in the Minimalist Program

The core of the minimalist movement theory is that "movement can apply only if it is triggered by the requirement that some formal feature be checked" (Abraham 1996: 48). Chomsky also explains this issue as follows: "move is driven by morphological considerations: the requirement that some feature F must be checked. The minimal operation, then, should raise just the feature F: we should restrict α in the operation Move α to lexical features" (Chomsky 1995b: 262). Hence "Move relates to checking of formal features" (Ibid.: 265).

Chomsky (1995: 266) further points out that "F is unchecked and enters into a checking relation" and, "thus, the variable F in Move F ranges over unchecked features, and the result of the operation is that it enters into a checking relation, either checking a feature of the target or being checked itself" (Ibid.). In Minimalism, it is understood that uninterpretable features are the deriving force of movement; i.e. causing displacement. And from these structural Case of the goal, ϕ-features on the probe are among the uninterpretable features: "Case-agreement systems involve a richer array of uninterpretable features, ... structural Case for nouns, ϕ-features for categories that agree with nouns; assume these to include T for subject-agreement and v for object-agreement" (Chomsky 2001b: 11).

As briefly discussed in Chomsky, uninterpretable features must be eliminated either in overt syntax or in covert syntax:

> Uninterpretable features are eliminated when they satisfy certain structural conditions: an uninterpretable feature of α must be in an appropriate relation to interpretable features of some β. Furthermore, β must be *complete*, with a full set of features. Nouns are complete,

since ϕ-features are always present (and interpretable); hence nouns
check the ϕ-features of agreeing categories (Chomsky 2001b: 11).

Note that, features with visible phonological form may be realized in both the probe and the goal though they may be interpretable in one of the two. For example ϕ-features are uninterpretable with the probe, either *v* or T, but interpretable with the goal DP but can appear either phonologically visible with both (in the case of a probe as agreement feature) (cf. 10); or can appear only with a goal (cf. 11) or can appear with a probe although the interpretation is on the goal (cf. 12).

(10) säw-occ mät'-u   (Amharic)

    man-pl come$_{perf}$-3pl$_s$

    'men came'

(11) a. men came

    b. a man came

(12) a. säß ma'a-Ø-m   (Ennemor)

    man come$_{perf}$-3ms$_s$-T$_{past}$

    'a man came'

  b. säß mo'o-om-m

    man come$_{perf}$-3mpl$_s$-T$_{past}$

    'men came'

On the other hand, in the Minimalist Program the distinction between strong vs. weak features are relevant, since any movement is assumed to be triggered by some kind of feature checking or valuation. A feature, which is assumed to be weak, does not trigger overt movement, given of Procrastinate, whereas a strong feature triggers overt movement before spell-out. However, what makes a feature strong and what makes it weak is a controversial issue.[7] For Chomsky (cf. 1995b) an overt or abstract feature can be strong while others (among them Solà 1996) disagree. Solà does not accept the existence of abstract strong features. Instead, he suggests that "the key to the relevant syntactic variation can be found in overt morphological distinction" (Abraham et al 1996: 60). Solà in particular argues that overt movement is triggered by overt inflectional morphology found in the

lexical item. He also assumes like Kayne (1998) that there is no covert movement at all. According to Gelderen (1996) features are always strong when once appeared in the derivation. However, the appearance of features in a given derivation is a parametric matter.

According to Solà (1996: 228) strong features are features "that are present in an inflected word". See also Groat and O'Neil (1996), Gelderen (1996) for the same kind of conclusion. Actually for Solà the distinction between weak and strong features have no theoretical status.

2.3 Clause Structure

2.3.1 Some Points on Layers of a Clause

Clauses may have three layers; a VP layer where thematic role assignment takes place, an IP layer where functional categories are projected for the checking of v-features, such as tense, agreement; and NP-features, such as Case; and the complementizer layer where operator like properties are projected. I discuss each layer below.

2.3.1.1 The Thematic Layer

This layer sometimes is referred to as the VP-Shell. It typically consists of the verb and its arguments. For interesting discussion and theoretical developments on this layer, see Larson (1988), Hale and Keyser (1993, 1998), Travis (1994, 2000), Borer (2000) among many others. In this work my major focus is the IP-layer which is a topic of the following section.

2.3.1.2 The IP Layer[8]

After, examining mainly the distribution of negation and adverbs in English and French, Pollock (1989) argues that IP has to be split into two functional categories namely AgrP and TP, where the first stands for subject agreement and the later for tense. Like Pollock, Ouhalla (1988) also claims that "all the elements that are believed to belong under the I node are head categories in their own right with projections that are constrained by the general X-bar schemata" (P.5).

The splitting of IP into further functional projections is not restricted only to AgrP and TP but as many as potential functional categories, like aspect, mood etc. For example, Chomsky (1991, 1993) splits the node Agr into Agr_S (subject agreement) and Agr_O (object agreement) where the first being the head of the clause and the latter projected immediately dominating the thematic layer VP. Ouhalla (1988, 1991) and Shlonsky (1997), among others, argue for the existence of AspP in this layer. A more articulated structure is found in Cinque (1997). According to Cinque there are even many mood, aspect, tense categories in this layer (cf. section 2.1.2 in this chapter).

2.3.1.3 The CP Layer

This layer is also known as the operator layer, and, "typically headed by a free functional morpheme, and hosting topics and various operator like elements such as interrogative and relative pronouns, focalized elements, etc." (Rizzi 1997: 281).

Following the spirit of the split-Infl hypothesis, the operator layer splits into further functional projections. For example, Puskas (1995), Tsimpli (1995) and many others assume that there exists a distinct focus projection in the CP area. Shlonsky (1994) argues for the existence of separate Agr projection in this layer. Rizzi (1997), in particular, splits this layer into finite phrase (FinP), force phrase (ForcP), two topic phrases (TopPs), in addition to a focus projection (FocP). Lambrecht (1995) also extensively discusses the possibility of the existence of more than one topic constituents and the co-occurrence of topic with focus in a single clause.

According to Rizzi the sequence of the functional projections in the CP-layer is uniform: ForceP is the head of the clause and selects TopP, TopP selects FocP, FocP selects another TopP and this second TopP selects FinP. That means FinP is immediately projected dominating all the functional categories at the IP level. In short this dominance order can be summarized in (13) below:

(13) [ForceP [TopP [FocP [TopP [FinP [IP]]]]]]

Hence, although C stands for complementizer it is not the case that the CP-domain contains only the projection of complementizer. It seems that the decomposition of CP into further functional categories is appropriate. As we will see in detail in this work in the following chapters, in Ethio-Semitic languages, we find more than one operator in a clause that need to head their own projection. Consider (14) from Ge'ez, for example:

(14) wä-akko-nu ahaw-kä   (Ge'ez)
    and-neg-intro brother-your
    '(and) isn't he your brother?'

In (14), we have at least the interrogative marker *nu* and the complementizer *wä* that need to head their own projections in the complementizer domain.

2.3.2 On the (Non-)Uniformity of Clause Structure[9]

In the Minimalist Program there is no such level as deep structure and surface structure and there is no also phrase structure in the sense of X-bar theory, which the lexicon maps on to. There are only PF and LF representations and there is only spell out. Phrases are built by the operation merge and move in a bottom-up fashion. The derivation can converge at any point when it has full interpretation in both interface levels; i.e. if it has legitimate object at PF and LF. Note that PF and LF operate independently. There is no fixed point for the spell out. It can take place at any point.

In the Minimalist Program, we keep talking about the (non-)uniformity of clause structure or any categorial projection like noun phrase because, say, if there are functional categories A, B and C to decide the merge between AB or BC or AC is prior. Note that, when we talk about the (non-)universality of clause structure we are talking about the hierarchy of functional categories, not the merger between a certain head and its complement or specifier. In particular, we are interested in answering the following questions:

(15) a. Does the c-commanding relation vary across languages?
    b. Does the c-commanding relation vary even intra-language on different
       sentences?

c. How do we know whether the c-commanding relation is uniform or not?

Cambell's (1991) and Ouhalla's (1988, 1991, 1994) among others assumptions can be deduced in the following manner: Clausal structure is different in different languages consistent with Baker's (1985, 1988) Mirror Principle. For example, according to Ouhalla, the difference between VSO and SVO languages is due to the difference of the ordering of tense and Agr morphemes in these two language groups. According to Ouhalla tense morpheme is found outside Agr morpheme in VSO languages, whereas in SVO languages Agr morpheme is found outside tense morpheme, in linear order. Meaning, in VSO Agr morphemes are closer to the verb than tense whereas in SVO tense morphemes are closer to the verb than Agr to the verb. Based on this linear order of morphemes, Ouhalla suggests that tense is higher in VSO while Agr_S is higher in SVO languages. He proposes for VSO Semitic languages the following clause structure:

(16) [(Neg) [TP [AgrP [AspP [VP]]]]] (Ouhalla 1988)

For Ohualla, the difference observed between these languages (SVO vs. VSO) are reduced to the movement of the verb and the subject to those functional categories. Since AgrP is a licenser of nominative Case in Ouhalla's analysis, in VSO languages the verb raises to AgrP and the subject raises to Spec of it. After this movement takes place, the verb also will move to T° such that the order VSO results. According to Ouhalla, since AgrP is higher than TP in SVO languages, the verb has to move to the higher node Agr°, and the subject to Spec of Agr°: This will give the order SVO.

In general terms, according to Ouhalla, the order of functional categories will determine whether the language in question is SVO or VSO, assuming that SVO and VSO languages display different order of morphemes. Thráinsson (1996) and many others also claim that, if the order of morphemes varies, consistent with Baker's (1985) Mirror Principle the dominance relation of functional categories will vary across languages. [10]

The weakest version of this idea, I think, is found in Cambell (1991) and Thráinsson (1996). According to Cambell functional categories can vary even

within a language. His examples come from German. According to Cambell Agr$_s$P c-commands TP in the past tense whereby in the present tense the opposite is true, i.e. TP c-commands Agr$_s$P. Thráinsson's proposal is similar in spirit to Cambell and Ouhalla although he does not assume variation in the order of functional morphemes within a language.

> The Limited Diversity Hypothesis (LDH)
> Clausal architecture is determined by UG in the sense that UG defines the set of functional categories, $\{F_1, F_2, ..., F_n\}$, that languages "select" from. Cross-linguistic and intra-linguistic variations are limited to the following:
> a. It is not the case that all FCs [functional categories] are instantiated in all languages.
> b. The FCs selected by a given language may not be present in all clause types of that languages.
> c. The sequence (c-command relations) of those functional categories (dominance relations between the functional projections) that are directly related to morphological distinctions may vary from language to language, consistent with the Mirror Principle (Thráinsson 1996: 257).

From the above quotation there raise one important and interrelated question (to those questions which I raised above), i.e. the question of the inventory of functional categories (in relation with their hierarchical structure). According to Thráinsson (1996) though functional categories are defined by UG, it is not the case that all functional categories are found in every language or in every sentence.

> The Functional Projection Alibi
> Let F be a functional head and Φ the set of ϕ-features (and/ or other features) which F contains. Now assume that the different values for the ϕ-features in Φ are systematically represented in overt morphology in language L in clauses of type A but never in clauses of type B. Assume further that there is evidence for overt syntactic movement to F and/or to Spec-FP in language L in clauses of type A but not such evidence can be found in clauses of type B. Then we may hypothesize that F is absent in clauses of type B in language L although it is present in clauses of type A (Thráinsson 1996: 260).

But to decide on this issue is not an easy task as Thráinsson himself points out: "Since linguists assume in many cases that certain morphological features are 'present' although they are not represented in overt morphology ..., they are

reluctant to take lack of overt morphological distinctions as valid evidence for hypothesizing the absence of a functional projection" (Ibid.: 260-261).

Among such linguists Cinque is one. According to Cinque (1997/ 1999) the presence or the absence of overt morphology is not decisive for the projection of functional categories. For Cinque UG supplies a series of functional categories in a uniform c-commanding fashion. These functional categories exist in any human language although the overt realization is open for parametric variation.

That means that, according to Cinque, the hierarchical relation of functional categories is uniform across languages. For Cinque, unlike the above authors, no variation on the c-commanding relations of functional projections is allowed by UG. Cinque draws his argument from the order of free functional morphemes, bound functional morphemes (affixes) and from the order of adverbial phrases in a clause. According to Cinque "adverbs are the overt manifestation of (the specifier of) different functional projections, which in certain languages may also manifest themselves via overt material in the corresponding head position" (1997: v). That means adverbial phrases "enter into a transparent Spec/head relation with the different functional projections" (Ibid.). Note that, with this assumption whether a functional category realized overtly or not does not matter for the existence of its projection. According to Cinque, "...if each adverb class indeed corresponds to a different functional head, then, we have evidence that the entire array of functional heads (and projections) is available even where there is no overt morphology corresponding to the heads, as the respective specifiers are available" (1997: 178). He suggests the following hierarchical order for the functional categories with their respective adverbs as their specifier.

> The Universal Hierarchy of Clausal Functional Projections
> *frankly* Mood$_{speech\ act}$ [*fortunately* Mood$_{evaluative}$ [*allegedly* Mood$_{evidential}$ [*probably* Mod$_{epistemic}$ [*once* T(Past) [*then* T(Future) [*perhaps* Mood$_{irrealis}$ [*necessarily* Mod$_{necessity}$ [*possibly* Mod$_{possibility}$ [*willingly* Mod$_{volitional}$ [*inevitably* Mod$_{obligation}$ [*cleverly* Mod$_{ability/permission}$ [*usually* Asp$_{habitual}$ [*again* Asp$_{repetitive(I)}$ [*often* Asp$_{frequentative(I)}$ [*quickly* Asp$_{celerative(I)}$ [*already* T(Anterior) [*no longer* Asp$_{terminative}$ [*still* Asp$_{continuative}$ [*always* Asp$_{perfect(?)}$ [*just* Asp$_{retrospective}$ [*soon* Asp$_{proximative}$ [*briefly* Asp$_{durative}$ [*characteristically(?)* Asp$_{generic/progressive}$

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[*almost* Asp~prospective~ [*completely* Asp~SgCompletive(I)~ [*tutto* Asp~PlCompletive~ [*well* Voice [*fast/early* Asp~celarative(II)~ [*completely* Asp~SgCompletive(II)~ [*again* Asp~repetitive(II)~ [*often* Asp~frequentative(II)~ (Cinque 1997: 178).

In many instances, since agreement and negative markers do not follow the universal hierarchy, Cinque excludes these functional projections from the inventory of the universal hierarchy. Cinque's proposal is, as he claimed, in line with Baker's Mirror Principle. However, he excludes negation and agreement in order to conform to the Mirror Principle. If this is true Ouhalla's (1988, 1991, 1994) observation of the order of morphemes should not be considered as evidence for the existence of different functional hierarchical projections, because, Ouhalla formulates his proposal with respect to the relation between agreement and other functional categories. According to Cinque, agreement morphemes in a certain language can be found close to the verb, but in another language, far from the verb. The same is true for negative morphemes. Furthermore, in a simple sentence, it is possible to find the same agreement morpheme more than once. Because of this, Cinque excludes agreement and negation from the universal hierarchy of functional projections. For every functional projection it is possible to have an agreement projection (Cinque 1997/ 1999). This idea is also shared by Shlonsky (1997). For Cinque and for Shlonsky, the realization of agreement and negation morphemes in different positions in different languages does not mean that there is no universal hierarchy of functional categories.

If I understood Cinque's (1997/ 1999) assumption well, the ordering of adverbial phrases is not restricted only to AdvPs but also to other phrases which have adverbial function. As is well known, in Semitic languages the category of adverb is almost non-existent as adverbial functions are expressed by PPs. In this language family, words, which are considered as adverbs in other languages can be counted on one's fingers. As Cinque's cross-linguistic examples show, PPs that have adverbial function can enter into this hierarchical relation with the assumed universal hierarchical functional projection. See, for example his example from Hebrew (1997: 52- 55).

As Cinque himself points out we expect; "the matching between temporal adverbs and T(Past) and T(Future) would appear to be straightforward, especially in view

of the recurrent observation that languages lacking overt tense distinctions often resort to temporal adverbs to locate the event in time" (1997: 149). Amazingly, Cinque himself points out that, "no simple matching seems, however, possible" (Ibid.). He provides an explanation for this on the same page, as follows:

> If 'bare' adverbial DPs are headless PPs rather than adverbs, ... the fact that they cannot appear in Spec, T(Past) or T(Future) may be no problem, as PPs are generally barred from the IP functional "space" (Ibid. fn. 30).

I do not know how this idea is compatible to his suggestion that the universal hierarchy of "adverbs" is not only restricted to AdvPs but also to phrases which have adverbial functions. It is unclear to me why Cinque suggests such a contradictory idea.

In addition, even though Cinque (1997/ 1999) only excludes negation and agreement markers from the hierarchy other functional categories are found as "mobile" affixes as well. According to Cinque (1998) the existence of mobile affixes in natural languages may not be enough evidence to say there is no universal hierarchical projection. For Cinque, it is premature to reject the universal functional hierarchical projection principle in the face of such pieces of evidence. For example, the appearance of, say, a single mood morpheme in different position in different languages or in different sentences within a language may be possible because that morpheme may have two separate modal functions. That means that, that morpheme probably is two separate homophonic functional categories. Its appearance in different places indicates that there are two independent functional projections.

But the question is, if, there is strict universal hierarchical relation of functional categories; which kind of functional categories are these, since there is no strict one-to-one match between functional categories found in human languages. In addition there are fusion and fission of features. For example, what is considered as two moods in one language probably realized in another language with a single mood category or with one single marker.

According to Giorgi and Pianesi:

The hypothesis of a universal clausal architecture requires a similar assumption of universality on the content of the array. Such a system, though possible in principle, seems to be at least redundant and not in the sprit of the minimalist proposal. Given these considerations, it follows that the idea that clausal architecture is a priori given - that is, universal, can and must be questioned. As an alternative, it might be claimed that the clausal architecture is a derived construal, varying from language to language and from one sentence to another (1997: 13).

As also noted by Gelderen (1996) the one-to-one matching between features and functional categories cannot be maintained. This is because; first there exist multiple functional categories in natural languages. Consider, for example the following:

(17) koj kakovo na kogo dade vcera?   (Bulgarian)
      'Who, what, to whom gave yesterday'

(18) koj li kakvo na kogo dade?   (Bulgarian)
      'who li what, to whom gave'.

(19) koj kakvo li na kogo dade?   (Bulgarian)
      'who, what li, to whom gave.' (Gelderen 1996: 113).

li is a focus element. If we assume that *li* is in C, then "sentence [(17)] and [(18)] indicate that the construction cannot involve just one C with multiple specifier positions but that multiple Cs with multiple specifiers exist" (ibid.).

According to Gelderen "the second problem with the one-to-one relationships between features and functional categories is that there would be a vast number of Functional categories; e.g. Person Phrase, Mood Phrase, Number Phrase, and Gender Phrase.... It has been shown that features are not in 'their' position in all languages" (ibid.). For instance, in most Afroasiatic and Bantu languages, in a simple sentence it is possible to have the same agreement in more than one place; i.e. in the main verb and in the auxiliary. The following Amharic sentence may illustrate this point where the agreement in the main verb divided into person and gender whereas the one which is found in the auxiliary as undivided atom.

(20) (anci) yonas-in ti-fällig-i-w-all-ä_   (Amharic)

(you (f)) J.- Acc $2_{s}i$-want perf-f$_i$-3ms$_{O}$-Aux$_{pres}$-2fs$_{S}$

'you want Jonas'

Gelderen (1996) argues that, "rather than having separate functional categories, ... features must be emphasized" (P. 115). According to Gelderen, even specifying names of functional categories is redundant because of two reasons: One is, features are needed independently, and the other is, as noted above, there is no one-to-one relationship between a functional category and a feature (1996: 121). Specifying functional categories in many instances also problematic in the languages under investigation here, as we will see later.

Minimalism is a research program seeking an explanation of human languages in a minimal and optimal way. Hence, assuming for every phrase that there exists a universal inventory and hierarchy of functional categories is redundant and against the spirit of such research program. Giorgi and Pianesi (1997: 13) also point out this fact as follows:

> The Minimalist theory,... is based on the notion of feature, the operations Merge and Move which build Σ plus economy principles. The conclusion which Chomsky (1994) draws, on the basis of Kayne's discussion, is that the empirical content of X-bar can be derived by means of independently needed principles and therefore can be dispensed with in the theory of grammar. If such a conclusion is correct, there is nothing in this system which might lead us to conclude that the clausal architecture *per se* is universal.

In recent minimalist work (cf. Chomsky 2000, 2001), it is assumed that a clause can be understood as having three phases; which are roughly equivalent to the three layers discussed above. From those three phases *v*P and CP are strong whereas the T-phase is week. If a derivation D is complete at stage Σ of any strong phase, it can be sent to spell out. Meaning, if a derivation D is complete at a stage Σ where Σ is equal to the first phase *v*P there is no need to continue the derivation into the next phase TP, and, hence a clause may have only a projection of the thematic layer; i.e. *v*P-phase.

If such an assumption is true, it is hard to believe in a theory which entertains the existence of a universal inventory and hierarchy of functional categories. Thus, I will not take such a position; i.e. a position which theorize a universal inventory

of functional categories with a fixed hierarchical order and try to fix every derivation with such pre-determined structure. In this work I assume along with the minimalist line that what is important in a derivation is features not functional categories. However, I will not rule out the possibility of uniform hierarchical structure among the existing functional categories in various clauses in the languages under discussion here. Although this issue is not my major object of inquiry, I will also try to point out whether the hierarchy of the existing functional categories in Ethio-Semitic corresponds to the proposed universal hierarchy discussed earlier.

2.3.3 Theoretical Issues on Word Order Variation

It has been claimed that hierarchical structure is not subject to parametric variation, but linear order is. Kayne questions this idea, "if two phrases differ in linear order, they must also differ in hierarchical order" (1994: 3). He further argues that the hierarchical structure determines linear order by virtue of asymmetric c-command, "asymmetric c-command invariably maps into linear precedence" (Ibid.).

Based on his Linear Correspondence Axiom, LCA, Kayne proposes a uniform Specifier-Head-Complement (S-H-C) order for all languages. According to this assumption all other orders, like SOV, VSO etc. are derived by movement.

Kayne (1994) proposes not only the universality of linear order but also the uniformity of adjunction and movement. According to him there is no right adjunction, "adjunction must always be to the left, never to the right" (Kayne 1994: XIII), and there is no rightward movement either, "any movement of a phrase upward to a c-commanding position must be leftward" (Ibid.: 47). In such a theory specifiers count as a subcase of adjunction and multiple adjunction is excluded.

In Minimalism, Kayne's LCA was taken with some modification. Unlike LCA, in minimalism there is a difference between specifiers and adjuncts and multiple adjunction is a possible operation.[11] "We take LCA to be a principle of the phonological component that applies to the output of Morphology, optionally ignoring or deleting traces" (Chomsky 1995a: 420).

According to the theory of Bare Phrase Structure since ordering does not have LF interpretation it is taken to be a PF property applying at a Morphological level.

> There is no clear evidence that order plays a role at LF or the computation from N [numeration] to LF...It must be, then, that ordering is part of the phonological component... It seems natural to suppose that ordering applies to the output of Morphology, assigning a linear (temporal, left-to-right) order to the elements it forms, all of them X°s though not necessarily lexical elements (Chomsky 1995a: 413).

Hence, Chomsky argues that like Kayne (1994) S-H-C is the basic word order, in fact, being a property of the phonological component, as already mentioned. Following Chomsky, I assume the same in this work.

On the other hand, Fukui & Takano (1998) and Haider (2000 and earlier works) propose S-C-H as the basic linear order taking the other orders to be derived. This assumption is clearly in contrast with Kayne's S-H-C order. However, both works argue that like hierarchical structure linear order is uniformly the same in the underlying structure of any human language.

It is to be noted that an alternative view of the universality of word order is that linear order is language specific rather than being universal. According to such hypothesis, the language faculty does not determine a uniform linear order for all languages. This classical assumption is not without support currently (see for example Donati & Tomaseli 1997).

In this work, for the reason already discussed in Kayne (1994) and Chomsky (1995a) I will take S-H-C as the basic word order and analyze the other word orders as derived by movement.

2.4 Summary

In this chapter, I have introduced the major theoretical issues which this work is founded. I have discussed some competing ideas with regard to functional hierarchy and presented the general outline of the Minimalist Program. I have discussed various issues such as checking theory, the economy principle etc.

within this program. However, all the above presentations can be considered as introductory. In the rest of the chapters we will see the details of the research program in relation to the data at hand.

Notes on chapter two

[1] "A category that does not project any further is a maximal projection XP, and one that is not a projection at all is a minimal projection X^{min}; any other is X', invisible at the interface and for computation" (Chomsky 1995: 243-244).

[2] According to Chomsky (1995), "labels are uniquely determined for categories formed by the operation Move α" (P.244).

[3] "...the general thesis that the computational process are strictly derivational, guided by output conditions only in that the properties available for computational purposes are those interpreted at the interface" (Chomsky 1995: 244).

[4] "For the case of substitution, terms correspond to nodes of the informal representations, where each node is understood to stand for the subtree of which it is the root" (Chomsky 1995: 246).

[5] According to Kayne a segment cannot be moved also: "A segment cannot be c-commanded, and if antecedent government strictly has c-command as a necessary component, then a segment cannot be antecedent governed and thus cannot be moved. In other words, a phrase that has something adjoined to it cannot be moved out by itself" (1994: 17). In the Minimalist Program, it is also assumed that a segment cannot be accessed for any other operation; only X^{max} (XP) and X^{min} (X°).

[6] See the following chapter for further discussion.

[7] Because there is no clear cut on such matter, some linguists cite such point as a weakness of the Minimalist Program.

[8] Note that, IP is a term which is assumed to represent functional categories below CP and above the thematic layer. It is an abbreviation for Inflectional Phrase where I is assumed to contain tense, agreement etc. But this term is simply a conventional term which does not have any significant meaningful content. This is for, at least, two basic reasons: First, the term inflection does not stand only for verbal inflection, and hence, nothing will prevent this term to stand for any inflectional item such as determiner, Case, etc. projections. That is, IP can be DP, KP, or anything else if such elements are realized as inflections and if they have to head their own projection. Furthermore, there are cases in natural languages where focus and interrogative markers realized as inflections, which are generally assumed to be projected at the operator layer. Second, if a language does not have any verbal inflection, it will misguide not to have such projection at all. Needless to say, the content which is assumed to be the head of IP can be found in some languages as free while in others as bound; for example, consider the future and past tenses in English where past is realized as suffixed to the verb whereas future is expressed by independent word.

[9] I will keep talking about clause structure, because I am dealing with this matter though the topic is almost the same in other phrases too; for example, in the extended projection of noun phrase.

[10] As Rahhali and Souâli (1997) point out, in the Minimalist Program ordering of the morphemes is irrelevant for the c-commanding relation of the functional categories since they are assumed to be abstract at their respective projections thus, any hierarchical order can allow feature checking. However, Thráinsson (1996), as already mentioned, tries to relate the Mirror Principle into this lexicalist notion:

> Lexicalist Mirror Principle
> The verb fully inflects in the lexicon however the FCs [functional categories] c-commanding relation is determined by the ordering of the morphemes, i.e. if T is closer to the base verb then it has to project next to the verb immediately dominating it.

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[11] I am not going to discuss how the Bare Phrase Structure differs from LCA. The reader is refereed for details Chomsky (1995a: 413- 420).

PART TWO:
AGREEMENT

Chapter Three:
Subject Agreement and Case Checking

3.1 Introduction

It is almost a standard assumption in the recent Minimalist literature that the checking of Case is strongly associated with the φ-features of functional categories T and *v*. According to Chomsky (1998, 1999, 2001), uninterpretable Case features of DPs are checked and, hence deleted by the uninterpretable φ-features of *v* and T. φ-features of T and *v* are themselves uninterpretable and, hence enter in the derivation unvalued. They are valued and subsequently deleted by the operation Agree that matches the φ-features of the probe α to the corresponding interpretable features of the goal β. The operation works as follows: The φ-features of an agreeing probe, say T, seek a goal element that has interpretable φ-features and an unchecked structural Case feature. When the search succeeds in finding a matching element XP, say to an element T, the Agree relation is established. Agree, then deletes the uninterpretable φ-features of the probe (in this case T) and the uninterpretable structural Case feature of the goal XP (cf. Chomsky 2001: 11).

With the assumed relation of Case and agreement, however, there are two major controversial points, which are not settled in the literature. One is, complete versus incomplete φ-features and their ability to license Case, and the other is whether an element α, whose Case is valued and eliminated, can enter in another Agree relation and be a candidate for A-movement.

In this connection, there are also some other points, which are not settled in the literature. For some linguists, see for example Carstens (2001), although, structural Case is related with agreement there are (non-agreement) functional categories which have such matching uninterpretable Case features *u*Case. For others, such as Svenonius (2002), Pesetsky and Torrego (to appear), however, the Case feature of a probe α is interpretable on the probes although uninterpretable on DPs. In this chapter, I will examine the subject agreement system of the languages under consideration here in relation to Case checking in general. Furthermore, I will show what checks structural Case and how it is checked in these languages.

3.2 Case and Agreement

In section 3.2.1, I will discuss the morphological facts of agreement and examine whether there exists any relation between Case and agreement in the languages under investigation here. In section 3.2.2, I examine in detail the complete versus incomplete φ-features issue. In section 3.2.3, I summarize the points discussed in section 3.2.

3.2.1 Examining the Relation of Case and Agreement

3.2.1.1 Some Agreement Facts in ES

Leaving aside object agreement, it is a fact that the realization of subject agreements is not uniform in natural languages. We find languages/ clauses that do not have agreement elements at all (cf. 3), have a single occurrence of agreement (cf. 1) and a multiple occurrence of agreement (cf. 2).[1] In a language L it may be the case that a multiple occurrence of agreement in some construction and a single occurrence of agreement in another construction can be found. L may also have no agreement in some type of constructions. In Ethio-Semitic, as we can see from the following examples we find all the above types almost in every language.

(1) a. saba zare mät't'a-*cc*   (Amharic)

     S.   today   come$_{perf}$- 3fs$_s$

     'Saba came today'

   b. käbbädä *yi*-c'än   (Ezha)

     K.   1s$_s$-come$_{impf}$

     'Kebbede comes'

(2) a. saba zare   *ti*-mät'-all-*äcc*   (Amharic)

     S.   today 3fs$_s$-come$_{impf}$-Aux$_{pres}$-3fs$_s$

     'Saba comes/ will come today'

   b. ya'akob 'it kil hig-hu   'amaan *li*-thaage   'i-'al-*a*   (Tigre)

     J.   in all speech-his truth   3ms$_s$-speak$_{impf}$ neg-Aux$_{past}$-3ms$_s$

   'Jacob was not in the habit of always speaking the truth' (Raz 1983: 72)

(3) saba mähed ...   (Amharic)

  S. to.go(minus Agr & nominal in category)

The variation of the agreement elements depends on the type of clauses in Ethio-Semitic. Nominal clauses, so to say infinitival phrases, do not have agreement at all (cf. 3), simple past has only a single occurrence (cf. 1-a) whereas non-past may have multiple agreement or a single occurrence depending on the language in question. For example, Amharic, Argobba, Zay and few other languages may have multiple agreement, whereas Mäsqan, Soddo, Ge'ez and a number of other languages do not (in simple non-past tenses).[2] The presence of the second agreement element depends on whether tense is expressed by auxiliaries or not (cf. chapter 6). If an auxiliary expresses it, it is most likely the case that the auxiliary will have an agreement element like the main verb, and hence we will have double agreement (but not always).

The realization of agreement as a prefix, suffix or as a combination of prefix and suffix is determined by the functional category that makes the unspecified root a verb. For example, if the verb is formed by adding the perfective or gerund to the root we have a suffix agreement element; if it is imperfective, imperative or jussive we have a prefix or a prefix suffix combination. Since this is true in all Ethio-Semitic, I will show here considering one language from the group.

Table I: List of subject agreement elements in Amharic

Person, Number and Gender	Perfective	Imperfective	Imperative	Jussive	Gerund
3ms	-ä	yɨ-		yɨ-	-o
3fs	-äcc	tɨ-		tɨ-	-a
2ms	-h/-k	tɨ-	(tɨ-)...-ø		-h
2fs	-_	tɨ-...-i	(tɨ-)...-i		-_
1s	-hu/-ku	'ɨ-		lɨ-	-e
1pl	-n	'ɨnn-		'ɨnn-	-n
2pl	-accɨhu	tɨ-...-u	(tɨ-)...-u		-accɨhu
3pl	-u	yɨ-...-u		yɨ-...-u	-w

As we can see from table I, in the perfective and gerund the agreement elements are suffixes whereas in the case of jussive and imperative they are prefixes as well as prefix-suffix combinations in some persons. The case in imperative is a little bit different than the others. Consider the following:

(4) a. sɨbär-i-w   (Amharic)

     break$_{impr}$-fs$_s$-3ms$_o$

     'break it!'

  b. at-tɨ-sbär-i-w   (Amharic)

     neg-2p$_s$-break$_{impr}$-fs$_s$-3ms$_o$

     'Don't break it!'

In the negative imperative we have a full set of ϕ-features and realized as prefix-suffix combinations whereas in the affirmative we have incomplete ϕ-features, it lacks the prefix Agr-element that is considered as person marker. See, for example, Yimam (1998), Halefom (1994), and Petros (1997) among many others.

3.2.1.2 The relation of agreement and Case

In this section, I examine whether the agreement elements discussed above are related to Case. I will particularly focus on the relation of subject agreement to nominative Case.

In Ethio-Semitic subject agreement is obligatory in verbal clauses and seems related to nominative Case. This is for two basic reasons. First, in this language group subjects in finite clauses are always nominative and must be in agreement with the verb. We never find a verb agreeing with a non-nominative XP (while there is another XP which is nominative). Consider the following:

(4) *säw-occ-u   yonas-ɨn fälläg-ä   (Amharic)

    man-pl-the.Nom   J.-Acc   want$_{perf}$-3ms$_s$

    'The people wanted Jonas'

(5) *'ɨtom säb'at   nɨ-yonas däli'-u   (Tigrinya)

    those men.Nom   Acc- J.   want$_{gerund}$-3ms$_s$

    'those men wanted Jonas'

The ungrammaticality of (4) and (5) is because the arguments *yonas-in* and *ni-yonas* which are not nominative are identified by the agreement morphemes as subjects while there are other arguments; i.e. *säw-occ-u* in (4) and *nitom säb'at* in (5) which are nominative in their respective clauses.[3]

Second, in Ethio-Semitic there is an agreement between a null expletive, which is nominative (cf. Giorgi and Pianesi 1997), and the verb as is shown by the following examples.

(6) a. i. saba yonas-n yämmɨ-t-fällɨg   yɨ-mäsl-all   (Amharic)

     S.   J.-Acc Comp-3fs$_s$-want$_{impf}$ 3ms$_s$-seem$_{impf}$-Aux$_{pres}$

    'It seems that Saba wants Jonas'

   ii. pro$_i$ [saba yonas-n yämmɨ-t-fällɨg] yɨ$_i$-mäsl-all

b. i. saba yonas-n yämmɨ-t-fällɨg   yɨ-mäsl-äññ-all

  S.   J.-Acc   Comp-$3fs_S$-$want_{impf}$ $3ms_S$-$seem_{impf}$-$1s_O$-Aux_{pres}

  'It seems to me that Saba wants Jonas'

ii. pro_i [saba yonas-n yämmɨ-t-fällɨg] $yɨ_i$-mäsl-äññ-all

(7) a. i. saba n-yonas tɨ-dälyo yɨ-mäsl   (Tigrinya)

  S.   to-J. $3fs_S$-$want_{impf}$ $3ms_S$-$seem_{impf}$

  'It seems that Saba wants Jonas'

ii. pro_i [saba n-yonas tɨ-dälyo] $yɨ_i$-mäsl

b. i. saba n-yonas tɨ-dälyo yɨ-mäsl-äni

  S.   to-J. $3fs_S$-$want_{impf}$ $3ms_S$-$seem_{impf}$-$1s_O$

  'It seems to me that Saba wants Jonas'

ii. pro_i [saba n-yonas tɨ-dälyo] $yɨ_i$-mäsl-äni

Saba, a feminine noun in the above examples is a subject of the embedded clauses. It cannot be a subject of the matrix clauses because the subject agreement of the matrix clauses requires a masculine subject which is an expletive pro.

However, this does not mean that agreement is what checks Case or that nominative Case is determined by the presence of agreement. It is a well-known fact that in languages/ constructions, which have no agreement marker there exists nominative Case. For example, with regard to Case there is no visible difference between the English simple past, i.e. -Agr, and simple present, +Agr. The same is true in infinitival clauses in Ethio-Semitic as we saw above. We can also look at Oromo, a Cushitic language spoken in Ethiopia and Kenya, which has a morphological nominative Case. In the negation of the perfective, Oromo does not distinguish morphologically different persons, but in the affirmative it does. Table II will illustrate this point.

Table II: The conjugation of the perfective verb in Oromo (cf. Kellermann 2001: 26)

Agr	Negation	Affirmative
1s	hin-déem-n-e	deem-e
2s	hin-déem-n-e	deem-t-e
3sm	hin-déem-n-e	deem-e
3sf	hin-déem-n-e	deem-t-e
1pl	hin-déem-n-e	deem-n-e
2pl	hin-déem-n-e	deem-t-ani
3pl	hin-déem-n-e	deem-ani

Oromo overtly marks nominative Case and such marking is found in the presence and absence of agreement as the examples in (8) show.

(8) a. asya-n   dire dawa deem-t-e   (Oromo)

  A.(f)-nom Dire Dawa go-3fs$_S$-perf

  'Asya went to Dire Dawa'

 b. asya-n   dire dawa hin-déem-n-e

  A.(f.)-nom Dire Dawa neg-go-neg-perf

  'Asya did not go to Dire-Dawa'

(8-a) has agreement element whereas (8-b) does not. However, in both clauses the subject *Asya* is marked for nominative Case as the morphological gloss also show. Hence, the question is to what extent nominative Case is related to (subject) agreement. In particular, in the rest of this chapter, I will try to answer what exactly the role of φ-features in Case checking is.

3.2.2 Case and φ-(in)completeness

In the preceding section I have examined the relation of subject agreement and nominative Case. In this section I will examine the complete versus incomplete phi-features issue. According to Chomsky (1998, 1999, 2001), although agreement features are assumed to check Case not all agreement does this job. For Chomsky, if an element α is φ-incomplete α does not check and delete structural Case. For example, participles: "Participles are not complete (lacking person), and do not check Case. T may be complete or *defective*; if the latter, it does not check Case" (cf.

Chomsky 2001: 11, Chomsky 1999: 4).[4] Lavine and Freidin (to appear) also suggest that in Russian a
nd Ukrainian when T is defective; i.e. φ-incomplete it cannot check (nominative) Case.

Although my major concern in this chapter is subject agreement, I will discuss object agreement to see whether the complete versus incomplete φ-features matters in Case checking.

3.2.2.1 Object Agreement

In Ethio-Semitic languages, it seems that there is a correlation between the realization of object agreement and accusative Case. Consider the following:

(9) a. yonas anbäsa-w-n gäddäl-ä-w   (Amharic)
     J.   lion-the-Acc kill$_{perf}$-3ms$_S$-3ms$_O$
    'Jonas killed the lion'
   b. *yonas anbäsa gäddäl-ä-w
   c. *yonas anbäsa-w gäddäl-ä-w

The ungrammaticality of (9-b) is due to the presence of an object agreement marker; and the ungrammaticality of (9-c) is due to the absence of an overt accusative marker. It seems that the data in (9) supports Chomsky's suggestion. However, if we examine closely the facts in these languages this is not the case. For example, it is possible to mark the object with accusative Case without the corresponding agreement element. Consider (10):

(10) yonas anbäsa-w-n gäddäl-ä   (Amharic)
    J.   lion-the-Acc kill$_{perf}$-3ms$_S$
    'Jonas killed the lion'

Moreover, in possessive constructions the object agreement must present without the corresponding accusative Case. In fact, if the accusative marker presents then, the structure becomes ungrammatical as illustrated in (11-b). [5]

(11) a. saba gänzäb all-ä-at →(all-Ø-at)   (Amharic)

      S.(f.) money(m.) there.is-3ms$_S$-3fs$_O$

      'Saba has money' (lit. 'there is money and the money is Saba's')

    b. *saba-n gänzäb all-ä-at →(all-Ø-at)

      S.-Acc   money there.is-3ms$_S$-3fs$_O$

      'Saba has money' (lit. 'there is money and the money is Saba's')

That the object is not marked for accusative in (11) type of constructions is, however, unexpected specially given that there are full set of agreement elements.[6] This may imply that agreement cannot check Case. If so, there has to be another functional category that has matching Case feature so that agreement can only be considered as "checking" Case when co-occurring with that category.[7] I will elaborate this point later in section 3, but now I will turn to examine the complete versus incomplete ϕ-features issue considering subject agreement and nominative Case.

3.2.2.2 Subject Agreement

In the above section, we have seen that in Ethio-Semitic the correlation between accusative Case and object agreement is weak. We find accusative Case with incomplete ϕ-features (cf. 10) and complete ϕ-features without corresponding accusative Case (cf. 11). In general, in this language group, it seems that accusative Case checking does not correlate with ϕ-completeness. This also seems the case with regard to subject agreement and nominative Case. We have at least three empirical arguments for this.

First, in imperative construction in Semitic in general, there is a difference in ϕ-features in affirmative and negative clauses (cf. §3.2.1.1). Affirmative imperatives lack person features whereas negative imperatives have them. However, there is no grammaticality difference or Case alteration of the respective external arguments. Consider the following:

(12) a. (anci$_{nom}$) hij-i   (Amharic)

      (you f.s.) go$_{impr}$-f.s.

    b. (anci$_{nom}$) a-t-hij-i

(you f.s.) neg-2-go$_{impr}$-f.s.

(12-a) is φ-incomplete — it lacks person; (12-b), however, is φ-complete but in both cases, the subject *anci* is marked for nominative Case. The subject cannot be marked for accusative or dative. Such non-nominative marking of SU is illict in both complete and incomplete φ-set cases as the ungrammaticality of (13) and (14) show.

(13) a. *(anci-n)   hij-i
        (you f.s.-Acc) go$_{impr}$-f.
    b. *(anci-n)   a-t-hij-i
        (you f.s.-Acc) neg-2-go$_{impr}$-f.

(14) a. *(l-anci)   hij-i
        (Dat-you f.s.) go$_{impr}$-f.
    b. *(l-anci)   a-t-hij-i
        (dative-you f.s.) neg-2-go$_{impr}$-f.

Second, in infinitival clauses we do not have φ-features at all (recall the discussion above). In Chomsky's terminology I (of IP) in such clauses is a defective category that cannot license/ check the nominative Case of SU. However, in Ethio-Semitic the arguments bear the same structural Case as other non-infinitival clauses have. Consider the following:

(15) pro$_i$ [yohannes mäs'haf-u-n   mäfälläg-u-]n   awqallähu$_i$ (Amharic)
        J.nom   book-def-Acc   to.want-def-Acc   know.1s$_S$
  'I know that John wants the book'

Third, recall that, in Ethio-Semitic, in a single clause, we may have multiple agreement in a single clause. That is, both the tense marking auxiliary and the matrix verb may inflect for agreement and both agreement elements can be specified for all φ-features; i.e. gender, person and number. Consider (16), for example, where agreement features are not different in terms of completeness.

(16) saba zare tɨ-mät'-all-äcc   (Amharic)

    S.   today 3fs$_s$-come$_{impf}$-Aux$_{pres}$-3fs$_s$

   'Saba comes/ will come today'

If agreement elements check Case, having a multiple agreement element in a single clause as in (16) is unexpected since once the *u*Case feature of an argument α is checked, in principle, α will not enter in further agree relation and frozen in place (cf. Chomsky 1998, 1999, 2001).

As we have also seen in section 3.2.2.1, in Ethio-Semitic Case checking does not correlate with ɸ-completeness. This observation is not novel, in fact. Carstens (2001) has reached to the same conclusion based on Bantu and Romance languages.

According to Carstens, although the Case checking is strongly related with ɸ-features, it has nothing to do with (in)completeness, but rather there are some categories which are inherently Case assigners: "certain categories are Case 'assigners', such that Agree deletes the goals Case only if the probe has an intrinsic structural Case value" (Carstens 2001: 147).

For her analysis, Carstens presents the following two points: First, in some constructions we may not find a complete ɸ-set in any of the probes, though one of the probes is capable of deleting the structural Case. This is the case, for example, in (i), footnote 8. Second, it may be the case that in some languages we have complete set of ɸ-features (cf. iii, footnote 8) in all the probes though structural Case is checked by only one of the probes of ɸ-features.[8] Carstens, hence, suggests that the Agree relation has to operate as in (17).[9]

(17) In the Agree relation:
    a. A probe α has uninterpretable ɸ-features.
    b. A goal β has matching ɸ-features.
    c. Uninterpretable ɸ-features are valued and delete.
    d. If α has an intrinsic structural Case value, it values any unvalued Case
       feature of β; the two Case features then delete.[10]

3.2.3 Summary

In the above sections, I have argued that although structural Case has some relation with agreement, it has nothing to do with complete versus in-complete φ-features. Furthermore, I argued that the relation of Case and agreement is transparent. If there is agreement in T (or Asp) such agreement is related with nominative subject. However, if there is no agreement it does not mean that there cannot be nominative Case. For example, in Oromo, negation has effect on agreement but not on Case (cf. table II). I strongly assume that, structural Case checking is related with some type of functional categories and (subject) agreement, if shows up, can be considered as a reflection of nominative Subject.

3.3 The role of (non-agreement) functional categories in Case checking

As I pointed out in the above sections, it has been claimed in many literature that other than agreement elements there are some functional categories that play a role in checking structural Case. These functional categories are taken to be T and *v* in most of the literature. T is associated with nominative Case and *v* with accusative Case. This association, however, is sometimes controversial. There are also cases where particularly nominative Cases is found in the absence of the functional category T. In the following section, I will examine the nature of, particularly nominative Case checking non-agreement functional categories in Ethio-Semitic.

In section 3.3.1, I examine temporal functional categories such as tense and aspect. In section 3.3.2, I examine non-temporal functional categories in relation to nominative Case checking. In the latter section, in particular, I will examine which functional category will check nominative Case in the absence of temporal projections. I will summarize the points discussed in 3.3, in section 3.3.4.

3.3.1 On the relation of temporal projection and nominative Case

3.3.1.1 Introduction

One of the major roles of T in syntax is understood to be checking of structural nominative Case. Because of this even in clauses, which do not have grammatical tense, we assumed we have the projection T. This assumption has a root in Chomsky's works; see for example, Chomsky (1998).

In Chomsky (1998) the core functional categories are C, T and the projection of the light verb *v*, head of transitive constructions. However, these functional categories, especially T and C are not assumed to stand only for what we know tense and complementizers. C is assumed to represent functional categories at the operator domain, such as focus, force etc. and T at the IP level, such as tense, aspect etc. (cf. Chomsky 1998: 15). The usage of TP in Chomsky, hence, exactly corresponds to the usage of IP. In this work, however, I use T as standing only for what we know as tense in grammar. Hence, I will not use the term imperative T, infinitival T etc. unless there is a grammatical evidence for that (cf. chapter 5 and 6).[11]

I assume along the line of Demirdache and Uribe-Etxebarria's (2000) proposal that in a certain clause α, there can be two temporal projections in what is known as an IP-layer. I will take the lower temporal projection to be AspP and the higher TP. I will argue here that the lower temporal projection; i.e. AspP is the one which checks nominative; i.e. the *u*Case of SU (in Ethio-Semitic). I argue also that the higher temporal projection can also check nominative if only, (a) the structurally lower temporal projection is missing and (b) there are two structural nominative Cases.

3.3.1.2 AspP and Nominative Case

For the suggestion that the lower temporal projection can value the uninterpretable structural Case (i.e. nominative) we have the following types of evidences where both temporal projections license nominative Case to different XPs.

(18) a.　　[saba　ɨyyämät't'-äcc]　　　n-äw　　　　　　　　　　(Amharic)

　　　　pro$_i$ [S.f.nom　prog.come-3fs$_S$]　T$_{pres}$-3ms$_{Si}$

　　　　'Saba is coming', 'It is the case that Saba is coming'

　　b.　　　[asya kätäb-ti]　　　　när-a　　　　　　　　　　　　(Harari)

　　　　pro$_i$ [A.f　write$_{perf}$-3fs$_S$] Aux$_{past}$-3ms$_{Si}$

　　　　'Asya had written', 'It is the case that Asya had written'

(19) a.　　[yonas-na　　sara　ɨyyämät't'-u]　　n-äw　　　　　　　(Amharic)

　　　　pro$_i$ [J.nom-and　S.nom prog.come-3pl$_S$]　T$_{pres}$-3ms$_{Si}$

　　　　'Jonas and Sara are coming', 'It is the case that Jonas and Sara are coming'

　　b.　　　[kätäb-u]　　　　när-a　　　　　　　　　　　　　　(Harari)

　　　　pro$_i$ [write$_{perf}$-3pl$_S$] Aux$_{past}$-3ms$_{Si}$

　　　　'They had written', 'It is the case that they had written'

I will take the ɸ-features found along with the matrix verb as ɸ-features of Asp, for a number of good reasons. First, Asp is the one that marks the category verb in Semitic as we will see later in this work. Second, it is Asp that determines the shape of the agreement elements. In both (18) and (19) Asp's and T's ɸ-features are different. However, the identification of Asp's ɸ-features, for example in (18-a) and (19-a) is to the nominative arguments *Saba* and to *Jonas and Sara* respectively. The identification of T's ɸ-features is to an expletive pro which is also nominative in principle.

On the other hand, one may consider the agreement element found along with the auxiliary in the above examples as a default feature. However, this also does not contradict the assumption that Asp checks the Case feature of SU in ES. Consider also the following clauses:

(20) a. yɨ-mät-all　　　　　　　　　　　　　　　　　　　　　(Amharic)

　　　3ms$_S$-come$_{impf}$-Aux$_{pres}$

　　　'he will come'

b. yɨ-säbr-äl   (Zay)

$3ms_S$-break$_{impf}$-Aux$_{pres}$

'he breaks/ will break' (Leslau 1999: 83)

If we assume that the auxiliaries *all* and *äl* in (20) occupy T, we will have the following base structure:

(21)   TP
        /‾‾‾\
              T'
            /‾‾‾\
        all/ äl   AspP
                  /‾‾‾\
                      Asp'
                     /‾‾‾\
                         VP
                        /‾‾‾\
                            V'
                           /‾‾‾\
                      yɨmät-/ yɨsäbr-
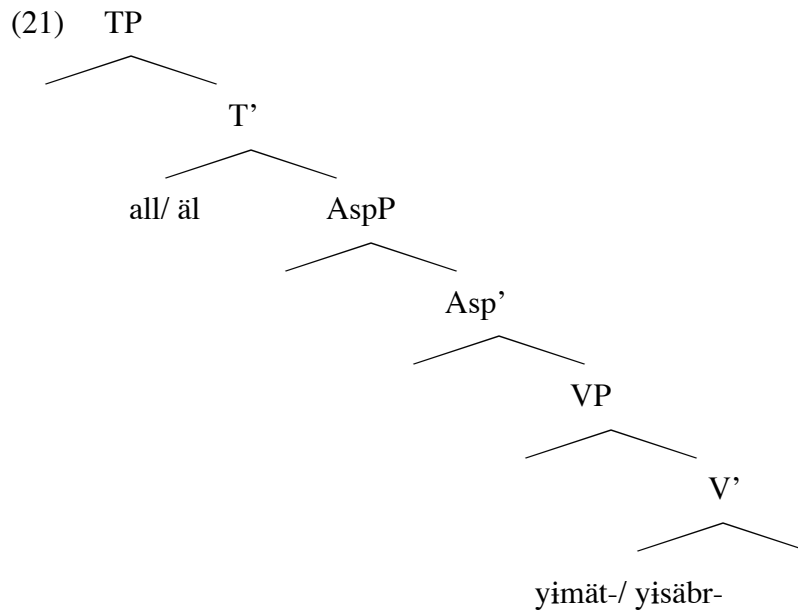
Since in the surface order the auxiliaries *all* and *äl* follow the main verbs, I suggest that AspP as a whole moves to Spec TP as in (22).

(22)   TP
                  /‾‾‾‾‾\
            AspP$_i$ T'
           /‾‾‾‾\   /‾‾‾‾\
    yɨmät-/ yɨsäbr-   all/ äl   t$_i$
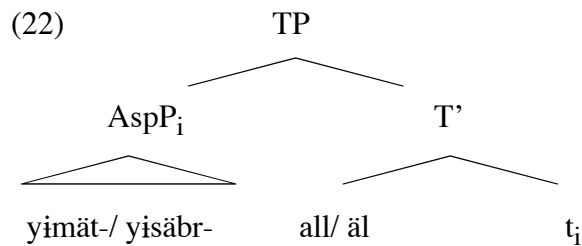
If clauses in (20) are derived as in (22), what triggers the movement of the complement of T to its Spec cannot be Case, since the moved constituent is not an NP/ DP which needs to value its unvalued Case feature. In other words, since the

moved element can only be an IP type XP, in the above case AspP, which does not have an uninterpretable Case feature, it is hard to assume that T values uCase of SU; i.e. nominative Case. It seems that the only reason for raising AspP in (24), to Spec T is EPP, where the EPP feature of T shall be understood as a non-morphological feature, somewhat similar to Lavine and Freidin (to appear), Lasnik (2001), Chomsky (1982, 1998, 1999, 2001), or a PF-feature as in the sense of Holmberg (2000).[12]

3.3.1.3 Nominative Case and Tense

If constructions of the type in (18) and (19) are assumed to have two nominative subjects; i.e. expletive pro and the subjects of the matrix verb, it is the case that T also can check nominative Case in such type and other few constructions, such as the copula constructions of the sort illustrated in (23), (24) and (25).

(23) yonas gäbäre n-äw   (Amharic)

    J.   farmer   Copula$_{pres}$-3ms$_s$

    'Jonas is a farmer'

(24) ana reyiim ana   (Tigre)

    I   tall   I

    'I am tall'

(25) daniel näbiy   (Ge'ez)

    D. prophet

    'Daniel is a prophet'

All the above examples denote present tense. Since they have also counter past tense forms (with a visible tense marker), I assume that in such constructions there is tense and tense projection. [13] However, in no case there is a lower temporal projection. In (24) and (25) there is no verb at all. In (24) the rightmost pronoun is acting as a copula, and known in the literature as pronoun copula (cf. Doron 1986, Shlonsky 1997). In (25), we do not have such an element at all. However, all constructions are grammatical and have a temporal interpretation. In (23), it is clear that there is a visible tense feature, but in (24) and (25), since there is no such feature, I assume that there is an abstract tense feature. This abstract tense will head the tense

projection as others do; and such a projection, I suggest, checks the nominative Case of SU.

3.3.2 Nominative Case in the absence of temporal projections

In the above sections, I have argued that nominative Case in Ethio-Semitic can be checked by temporal projections. In this section, I examine what will check such Case in the absence of temporal projections; i.e. clauses such as imperatives and nominal IPs.

3.3.2.1 Nominative Case in imperatives clauses

In imperative constructions it has been argued that there is no temporal functional categories (cf. Platzack and Rosengren 1998). As is also true for many other natural languages, in Ethio-Semitic, imperatives cannot be marked for tense.

(26) a. hid

$go_{Impr.}2ms$

b. *hid-al

$go_{Impr.}2ms-T_{pers}$

c. *hid   näbbär

$go_{Impr.}2ms\ T_{past}$

Because there is no grammatical evidence for the existence of tense in Ethio-Semitic as well, I assume along with Platzack and Rosengren (1998) that in imperative clauses there is no tense projection in syntax.

I assume that the imperative morphology (or the corresponding feature) will project an FP (in IP), which immediately c-commands the argument structure. However, I assume that the semantic feature of imperative gets its interpretation at CP namely ForceP, in Rizzi's (1997) split -CP. For the sake of clarity, I will state FP as ImprP.

(27) [CP   [ImprP   [vP   SU

     ↑ (Impr)feature movement| ↑   Case checking |

     |_____| |_____|
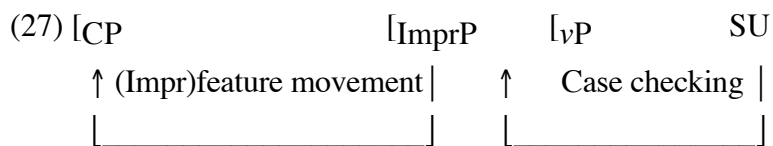
3.3.2.2 Nominative Case in nominal clauses

Infinitival constructions in Semitic are categorically DPs, hence the term nominal clauses (cf. chapter 10). Similar type of constructions in Borer (2000) is considered as nominalized VPs. Since, infinitives, so to say event nominal can have arguments in the same way as verbs, Borer's suggestion is interesting. In Ethio-Semitic, however, it seems that infinitival clauses are not nominalized VPs but nominalized IPs. This is for the following basic reason.

Both arguments, i.e. SU and OB, of the infinitival head in transitive infinitival constructions can have structural Cases; i.e. nominative and accusative respectively. Consider (15) repeated here as (28):

(28) yohannes mäs'haf-u-n   mäfälläg-u-n   awqallähu
    J.nom   book-def-Acc to.want-def-Acc   know.1ss
  'I know that John wants the book'

(28) can be seen analyzed as follows:

(29) pro$_i$ [$_{InfinitivalP=DP}$ yohannes   mäs'haf-u-n   mäfälläg-u-n] awqallähu$_i$

It is clear that in the infinitival construction presented above there is no any temporal projection. However both the arguments have structural Cases. And structural Cases, particularly nominative of a DP, can only be checked in by a functional projection that c-commands the argument structure, in principle, although the movement of DP can be covert. I suggest that what checks nominative in such constructions is a projection in the IP layer, call it $F_{verb}P$ which immediately c-commands the argument structure. But, we cannot state that the content of $F_{verb}P$ is temporal. We only know from its morphology that it has a categorial feature V (see the following section for a brief discussion). Considering Amharic, I will show how the morphology of an event nominal in this language group is.

(30) a. mäfälläg 'to want'   (Amharic)

    b.   ä → verbalizer

               /\

    mä-f ä   ll   ä g → √*flg*

      ↓

    nominalizer
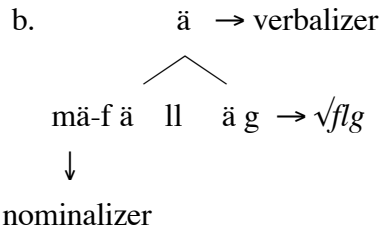
The root is *flg*. The infinitival marker is the prefix *mä*, which is nominal. The internal non-concatenative element, i.e. *ä*, inserted between the radicals can be considered as the marker of the category V. The syntactic assumption that I adopted from Borer (2000), and this morphological order are consistent with the Mirror Principle (Baker 1985, 1988). The reason that we have a grammatical structure like (28) is that nominalization is taking place after both structural Cases are checked. That is, assuming accusative is checked by *v* in the argument structure and nominative by $F_{verb}P = IP$, that immediately c-commands it. Such structure can be represented as follows:

(31) Amharic transitive infinitival clauses

    $[_{DP}$ $[_{NP}$ Nominalizer $[_{F_{verb}P}$ SU_i $[_{vP}$ t_i OB_j $[_{VP}$ V t_j

Whether SU moves overtly as in (31), or remains in situ does not matter, for present purposes. However, if we assume along with Kayne (1994) and Chomsky (1994, 1995) that Specifier-Head-Complement is the basic word order, and the projection of the light verb is the one that checks the Case of the direct object, as adopted here, OB in Amharic must move overtly to Spec *v*P and has to adjoin structurally lower to the base position of SU, "tucking-in", as illustrated in (31).

3.3.3 The feature structure of nominative checking categories

In the above sections, we have seen that, what checks *u*Nom Case of SU can be different categories, Asp, T, Impr and FP (=IP, in nominal clauses) in Ethio-Semitic. In this section, I will examine if there is anything that such projections have in common.

A verb in Ethio-Semitic is a root plus functional categories, such as aspect and mood, and grammatical categories such as N, V can be considered as morphological features. The assumption that roots lack categorial feature is suggested in a number of works, such as Jelkines and Demeres (1994), Marantz (1997), Borer (2000), Chomsky (1998, 1999, 2001).[14] Consider also the following examples:

(32) √*sbr* 'break   (Amharic)

   a. säbbärä (verb)

   b. säbari (adjective)

   c. sɨbɨr   (noun)

As we can see in (32) the categorial features verb, adjective and noun of the lexical items in question can be attributed to inflectional elements, i.e. functional categories. (39) shows some of the functional categories that make the unspecified root a verb in Ethio-Semitic.

(33) √*sbr* 'break' (categoryless)   (Amharic)

   a. sɨbär (imperative) (+V)

   b. säbro (gerund) (+V)[15]

   c. yɨsbär (imperfective) (+V)

   c. säbbärä (perfective) (+V)

Recall that, in infinitives, the nominal marking morpheme is added to the already categorically marked item; but not to the unspecified root (cf. 30). Hence, excluding copula constructions, there is a feature that is shared by all functional categories that checks *u*Nom of SU. This common feature is morphologically expressed as a categorial feature, namely V. I will summarize the feature structure of such functional categories below. (Note that the following illustrations only show the feature structure which is important for present purposes. Otherwise, there can be other additional features such as EPP, and φ-features.)

(34) the feature structure of aspect

   + aspect; i.e. perfective, imperfective, perfect

   + V; i.e. categorial feature

(35) the feature structure of imperative

    + imperative

    + V; i.e. categorial feature

(36) the feature structure of "infinitives" (minus the infinitival marker)

    + V; i.e. categorial feature

As we can see from the above examples, the structural Case checking functional categories morphologically specified for categorial feature V in Ethio-Semitic. Based on such facts, it is logical to claim that those functional categories that have a categorial feature V have structural Case feature, particularly nominative.[16] Hence, in the feature structure of the above-mentioned functional categories we can add +Case feature as shown below.

(37) the feature structure of aspect

    + aspect; i.e. perfective, imperfective, perfect

    + V; i.e. categorial feature

    + Case feature; i.e. structural nominative

(38) the feature structure of imperative

    + imperative

    + V; i.e. categorial feature

    + Case feature; i.e. structural nominative

(39) the feature structure of "infinitives" (minus the infinitival marker)

    + V; i.e. categorial feature

    + Case feature; i.e. structural nominative

If I'm on the right track, since T also checks nominative Case in some limited constructions such as copula construction, it is logical to suggest that T also may (or may not) have uNom Case.

(40) the feature structure of tense

    ± past

    ± Case feature; i.e. structural nominative

This means that nominative Case of SU (in fact, I assume accusative as well) is checked with a corresponding matching Case feature of a functional category, at least in the languages investigated in this chapter.

3.3.3 Brief Summary

In the above section, I have claimed that nominative Case can be checked in Ethio-Semitic not only by tense projection but by other projections such as imperative, infinitival and aspect projections. Imperatives do not have tense and infinitival clauses in Ethio-Semitic are also tenseless. In fact, in some languages infinitives may have tense, i.e. they can be specified for different tenses. However, in Ethio-Semitic that is not the case. Because of this I do not assume the existence of tense projection in this type of constructions; i.e. infinitival and imperative constructions.

However, in this language group, although infinitival clauses do not have tense and, hence a T projection, they are IPs. Meaning, they have a functional category that can check the uNom Case of SU. This suggestion is consistent with (and, in fact, based on) the morphological facts of the languages in question. As we can notice from (36) in ES, infinitives are nominal, but they are not formed directly from the unspecified root. The infinitival marker, which is encoded as nominal, is added after the root is specified as a verb (although other functional categories such as imperatives, various aspectual categories, various types of nominal and adjectives are formed directly from the unspecified root). Since infinitival clauses as a whole are DPs, it has to be the case that the Cases of SU and OB of a transitive infinitival clause get checked before the lexical head of such a clause is nominalized. I will turn now to imperatives.

Imperative is a type of force and, I have suggested that such semantic interpretation has nothing to do in IP but in CP (see part 4 of this dissertation). Imperative clauses lack tense projections. One possible answer to the question what checks nominative, is AgrsP. However, I do not assume this could be the case in Ethio-Semitic. For example, there are some differences in the appearance of agreement element in affirmative and negative clauses. Affirmative imperatives are defective in Chomsky's (1999, 2001) definition since they lack person feature but not negative imperative. However, as discussed above in both affirmative and negative cases there is neither

Case alternation observed in the arguments nor ungrammaticality resulted in such constructions.

With all this, I think, the suggestion made above; i.e. what checks structural nominative Case is a functional category that has corresponding matching Case feature, seems correct. On the other hand, in the above discussion we have seen the existence of multiple agreement but I have not explain how such multiple features can be checked. I will address this point in the following section, before concluding the chapter.

3.4 On multiple agreement

Recall that in Ethio-Semitic both the tense marking auxiliary and the matrix verb may inflect for agreement. Such agreement features may also not be different in terms of completeness. Both agreement elements may be specified for all ϕ-features; i.e. gender, person and number. Consider for example (16), repeated here as (41):

(41) saba zare tɨ-mät'-all-äcc   (Amharic)

    S.   today 3fs$_s$-come$_{impf}$-Aux$_{pres}$-3fs$_s$

    'Saba comes/ will come today'

In (41) *Saba* enters in an Agree relation with the matrix verb and the auxiliary. The auxiliary *all* is a realization of T and it has a full set of phi-features, like the matrix verb. The matrix verb is marked for imperfective aspect. Following the discussion above, I continue to refer to the ϕ-features found along with the matrix verb as ϕ-features of Asp and the ϕ-features found along with the auxiliary as ϕ-features of T.

Since Asp has uninterpretable ϕ-features and a Case feature, following the above suggestion let us assume that the nominative Case and the ϕ-features of *Saba* can be checked by Asp ϕ-features and Case feature. Suppose this is true and the uninterpretable ϕ-features and Case feature of Asp and the uninterpretable Case feature of *Saba* are valued and subsequently deleted. The remaining question is how the ϕ-features of T can be checked in a clause such as (41).

According to Chomsky, "since φ-features of N are interpretable, N is active only when it has unvalued structural Case; once the Case value is determined, N no longer enters into agreement relations and is "frozen in place" (Chomsky 1999: 4; see also Chomsky 2001: 9, fn. 36). So, an element α whose Case is valued via the relation Agree cannot enter in another Agree relation and be a candidate for A-movement. But for Lavine and Freidin (to appear), an element α can be active to the next step of the derivation even if it does not have any unvalued feature. Although we do not have evidence for the movement of *saba* to Spec T in (41) above and *saba* does not have any unvalued feature, we have evidence that it has entered into an agreement relation with T. I suggest that *saba* must able to value the unvalued φ-features of T as schematized in (42).

(42) T$_{φ\text{-features}}$ Asp$_{Case + φ\text{-features}}$ DP

                         ⌊_____⌋ Case & φ-features deletion
                              Agree 1
     ⌊_____⌋ φ-features deletion
                            Agree 2
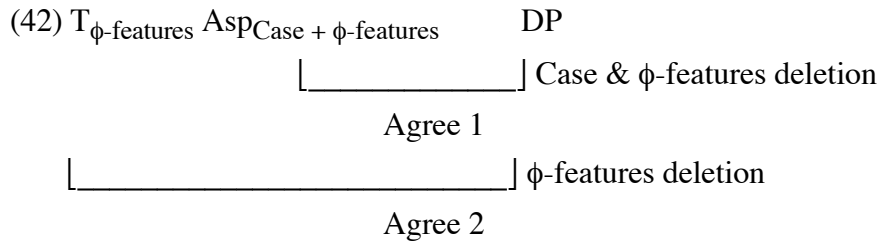
In sum, as shown in (42), I assume that, if the φ-feature of T and the φ-feature of the matrix verb identify the same subject as in (41) above, it has to be the case that the agreeing subject can check both the uninterpretable features of T and Asp although its uninterpretable Case feature is deleted in the lower temporal projection Asp and do not have any unvalued features of its own.

3.5 Conclusion

In this chapter, I have examined the relation of Case and subject agreement and argued that although the checking of structural Case is related with agreement, it has nothing to do with φ-(in)completeness at least in the languages investigated here. This argument is, against Chomsky (1999, 2001) but in line with Carstens (2001). Carstens claims that Agree can delete *u*Case of arguments if only there is a functional category that has matching Case feature, in her case *v*P and TP for structural accusative and nominative respectively. I also claimed that the traditional assumption that Carstens supports is basically true. However, unlike Carstens I suggested that, it is not always the Case that T values nominative Case in Ethio-

Semitic. T checks Case; i.e. nominative, (a) if only there are two nominative SUs and, (b) if structurally lower temporal projection; i.e. AspP, is missing. I have also presented facts where structural Case can be checked in the absence of temporal projections. What checks, in general, nominative Case is, thus, a functional category that has uninterpretable matching Case feature. Excluding T, those nominative Case-checking functional categories are specified for the categorial feature V. Moreover, I have further presented facts from Ethio-Semitic that an element α whose Case is valued and eliminated, can enter in another Agree relation.

Notes on Chapter 3

[1] I refer to multiple occurrence of ϕ-features in various probes of the same clause as "multiple ϕ-features", following Carstens (2001).

[2] See also (2-a) and (1-b) respectively for multiple and single occurrence of agreement in simple non-past constructions.

[3] This point is taken as one of the major criteria for the relation of Case and agreement. See, for example, Giorgi and Pianesi (1997). According to Giorgi and Pianesi (1997: 52) "the generalization that agreement and nominative Case are correlated would be challenged if ... the verb agrees with an argument ... not receiving nominative Case and the other argument has nominative Case".

[4] "Empirical observation shows that an active element E sometimes fails to inactivate the matched element by deleting its unvalued features: E is <u>defective</u>, differing in some property P from an otherwise identical active element E' that induces the deletion operation. If E has a complete ϕ-set, it induces Agree: for example, T with a complete ϕ-set values and deletes structural Case for N, and the ø-set of N (with or without attendant movement). The simplest choice for P, requiring no new mechanisms or features, is completeness: E is defective if it lacks a complete ϕ-set" (Chomsky 1999: 4).

[5] Note that in most Ethio-Semitic languages OSV is the unmarked order in verb "to have", "must" and impersonal constructions (cf. chapter 10).

[6] One may suggest here that *Saba* in (11) is not an accusative object but a dative hence the ungrammaticality of (11-b). This is not true. The overt realization of a dative Case marker with this argument leads to ungrammaticality:

(i) * lä-saba   gänzäb all-ä-at →(all-Ø-at)   (Amharic)
    to/dative-S. money there.is-3ms$_S$-3fs$_O$
    'Saba has money'

(ii) *lä-yonas   gänzäb all-ä-w   (Amharic)
    to/dative-J. money there.is-3ms$_S$-3ms$_O$
    'Jonas has money'

If the objects in the above constructions are dative, we may expect also the literal translation for the above constructions to be 'there is money to Jonas/ Saba' not the literal translation given above in (11). However, this is not true since 'there is money to (somebody)' has different construction in these languages which can be termed as applicative construction. In such applicative construction the object is clearly marked for dative Case.

(iii) lä-saba   gänzäb all-ä-l-at   (benefactive)
    dative-S. money there.is-3ms$_S$-Apll-3fs$_O$
    'there is money to Saba'

Because of these facts, I suggest that in the possessive construction; i.e. excluding the applicative construction of the sort illustrated in (14), the object can be considered as a direct object.

[7] I suggest that the reason that we cannot have either accusative nor dative case on the OB of possessive construction in Amharic is that both OB and SU in such clauses are marked with nominative Case. The former inherent and the latter structural. (Note that nominative is the unmarked Case in Ethio-Semitic.)

[8] For the former, consider (i), from (Carstens 2001: 148).

(i) Elle est morte.

Carstens suggests the following as the possible derivation of (29):

> The subject is a deep object and enters into two agree relations before raising to its surface position. The first is motivated by past participle agreement (PPA) on *morte*, the features of which are, by assumption, deleted in an Agree relation with *elle*. The Case of *elle* appears not to be deleted in this relation, however, as a second Agree relation is then established between *elle* and the subject agreement (SA) on T°, here instantiated as the auxiliary *est*. This deletes both the nominative Case of *elle* and the φ-features of *est*. *Elle* then raises to [Spec,TP] to satisfy the EPP feature of *est* (Carstens 2001: 147).

In (29) both the PPA and SA are φ-incomplete. The former lacks person feature and the latter lacks gender. However, Carstens suggests that the latter checks the structural Case of the goal, *Elle,* but not the former.

(ii) SA$_{person, number}$ PPA$_{gender, number}$ DP
```
                    |_____|   No Case deletion
                           Agree 1
    |_____| Case deletion
                  Agree 2  (Carstens 2001: 148)
```

Although, there is a difference in the missed φ-feature in PPA and SA of (29) and one may consider such difference as crucial for Case deletion, it appears that in some natural languages both probe 1 and probe 2 can have the same set of φ-features. According to Carstens, this is the case in Bantu languages. Consider the following from Carstens (2001: 150):

(iii) a. Juma a-li-kuwa   a-me-pika   chakula   (Swahili)
        J.   3SG-PST-be 3SG-PERF-cook food
      'Juma had cooked food'
   b. (Mimi)   Ni-li-kuwa   ni-nagali ni-ki-fanya   kazi
      (1SG.PRON) 1SG-PST-be 1SG-still 1SG-PERF-do work
      'I was still working'

Because of such facts, Carstens suggests that other than φ-incompleteness the Case checking has to do with the intrinsic behavior of some categories.

[9] However, Carstens does not abandon totally the notion of φ-incompleteness and the failure of feature deletion. According to Carstens there are cases where φ-incompleteness matters; "this is when a goal does not have all the features needed to match the probe" (Carstens 2001: 153). I'm not going to discuss such matter here but see Carstens (2001: § 4.2) and Chomsky (1998, 1999),

for example, in which Chomsky proposes that the expletive *there* as lacking number and gender feature.

[10] Svenonius (2002b) and Pesetsky and Torrego (to appear) have an alternative suggestion for this point. As mentioned already, for them the *u*Case feature of a DP α has a matching interpretable feature in a functional category β. In fact, for Pesetsky and Torrego *i*Case means tense and *u*Case means *u*T. For Svenonius as well *i*Case means aspect and Case is *u*Asp. In this work, I assume along with Pesetsky and Torrego, and Svenonius (2002b) that the Case-feature of a goal α is checked by the matching Case feature of a probe β. However, for reasons which will be clear later in this chapter, I am hesitant to claim that the Case feature of either the probe or the goal is interpretable. I leave this for future research, since I do not have strong arguments in order to support one of the Case features is interpretable. In this regard my claim is somewhat similar with the traditional view, which is recently advocated also by Carstens (2001) and some others.

[11] In this work, following Comrie (1985) tense is considered as a grammatical expression of time.

[12] "We will use the term EPP to refer to the requirement for a specifier rather than a morphosyntactic feature or a property of such features" (Lavine and Freidin to appear: 3). In Holmberg (2000), it is used as a phonological feature; i.e. a feature that attracts any phonologically visible element. See also the various uses of EPP, from historical perspective, Svenonius (2002), Lasnik (2001).

[13] Note that the past tense of (23), (24) and (25) is formed by the copula *näbbär* 'was'.

[14] See also Josefsson (1997) and Holmberg (1992) for Scandinavian languages.

[15] The so-called gerund in Amharic can be considered as perfect (cf. Demeke and Meyer 2001).

[16] Note that it is almost a standard assumption that structural Case assigning categories have intrinsic Case feature; see, for example, Carstens (2001).

Chapter Four: Object Agreement

4.1 Introduction

There are some morphemes in Ethio-Semitic languages, which are referred as object agreements (Amberber 1996, Yimam 1998, Engdashet 1998, Demeke 2000), as object marking morphemes/ clitics (cf. Fulass 1974, Halefom 1994, Petros 1996, 1997, Yabe 2001,) or suffix pronouns (cf. Haile 1970, Teferra 1979, Gutt 1986). Such morphemes are realized affixed to the verb next to the subject agreement morphemes. Assuming that clitics and affixes have different syntactic representation, the morphological affixal nature of such elements in one hand, and their unique semantic role on the other hand, has been a debate for the appropriate representation of such elements in syntax. Those who emphasized on their semantic role consider them as clitics (cf. Yabe 2001) while others, who emphasized on their morphological behavior, consider such elements as affixes and take as a realization of the functional projection Agr_OP (See for example Engdashet 1998, Yimam 1998, Demeke 2000).

In this chapter, I examine the morphological nature and the syntactic behaviour of such elements. In particular, I examine what really such elements are, what role they have in syntax, and how we analyze them.

4.2 Basic Facts

In contrast to the subject agreement elements that appear obligatory in every (verbal) clause, the non-subject agreement elements do not. They appear mostly in relation to emphasized; i.e. contrastively focused XPs, and applied arguments. The forms of those elements and their function are not as such different among Ethio-Semitic languages. The basic form identifies an object XP (DO or IO) and there is also a sort of derived form which has a preposition-like element[1] mostly realized to identify an applied argument or contrastively focused XP. For the sake of simplicity of discussion, I refer to the bare form which does not have a preposition-like element Agro and to the latter one Agrpp without giving any theoretical status for the terms Agro and Agrpp.

4.2.1 Accusative Case and Object Agreement

In a single object construction Agro, i.e. the non-subject agreement which appears without a preposition-like element, is found if the object is definite and in most cases if it is overtly marked for accusative Case. Consider the following Soddo examples from (Leslau 1992: 156). [2]

(1) ab-i   yä-bayy-äw yi-wädd-u-Ø   (Soddo)

     father-the Acc-son-his $3ms_S$-love$_{impf}$-$3ms_O$-AMCM

     'the father loves his son' (Leslau 1992: 156).

(2) yä-abi-ddi   täššäk-ku-nnɨ-t   (Soddo)

     Acc-father-my ask$_{perf}$-$1s_S$-$3ms_O$-AMCM

     'I asked my father' (Leslau 1992: 156)

In other Ethio-Semitic languages the case is also the same; i.e. definiteness and object agreement is strongly related.

(3) a. saba saw-yew-ɨn   agäññ-äcc-ɨw   (Amharic)

       S.   man-def-Acc   find$_{perf}$-$3fs_S$-$3ms_O$

     'Saba found the man'

    b. *saba saw agäññ-äcc-ɨw

    c. * saba saw-yew agäññ-äcc-ɨw

    d. saba saw-yew-ɨn agäññ-äcc

(4) a. yonas yä-ɨc'ä-wi säbbor-ä-nɨ-m   (Ezha)

     J.   Acc-wood-the break$_{perf}$-$3ms_S$-$3ms_O$-T$_{past}$

     'Jonas broke the wood'

    b. * yonas ɨc'ä säbbor-ä-nɨ-m

The ungrammaticality of (3-b) and (4-b) is because of the presence of object agreement marker; and the ungrammaticality of (3-c) is because of the absence of overt accusative marker. However, unlike the above Amharic constructions in Ezha, Chaha and some other Western Gurage languages, the absence of overt accusative marker in the definite DP does not lead to ungrammaticality. Consider (5) and (6):

(5) yonas ic'ä-wi säbbor-ä-nɨ-m   (Ezha)

    J.   wood-the break$_{perf}$-3ms$_S$-3ms$_O$-T$_{past}$

   'Jonas broke the wood'

(6) a. gäyä yä-färäz-nä   näk^{w}äs-ä-nɨ-m   (Chaha)

     dog Acc-horse-my bit$_{perf}$-3ms$_S$-3ms$_O$-T$_{past}$

    'The dog bit my horse'

   b. gäyä färäz-nä   näk^{w}äs-ä-nɨ-m

     dog horse-my bit$_{perf}$-3ms$_S$-3ms$_O$-T$_{past}$

    'The dog bit my horse' (Leslau 1992: 122)

In fact, according to my data, the overt accusative Case marker is rarely realized in Ezha. What is interesting in Ezha, Chaha and in general those languages which allow the accusative marker to be optionally dropped is that, the accusative and the dative markers are morphologically the same; i.e. *yä-*. Compare the data in (6) above with (7) below:

(7) g^{y}eta   yä-barya-ta   at färäz aw-ä-nɨ-m   (Chaha)

   master [dative-servant-his] $_i$ one horse give$_{perf}$-3ms$_S$-3ms$_{Oi}$-T$_{past}$

   'The master give a horse to his servant' (Leslau 1992: 122)

Note that here, the element *yä* is found in Western Gurage languages having almost the same function, i.e. marking accusative and dative Cases. Interestingly the genitive Case is also marked by this same morpheme. In this language group, it may be the case that there is only one overtly realized Case marker, i.e. *yä*, and this Case marker marks simply any XP which needs Case; i.e. other than nominative.[3] Thus, *yä* better be understood with a general term Case marker, since it marks accusative, dative and genitive Cases. Let us return to the issue which I raised above.

Although it seems that definiteness, accusative Case marking, and object agreement are related when it comes to verb "to have", the case is different (recall also the discussion in the preceding chapter). In verb "to have" constructions the object agreement must be present. Moreover, unlike other regular verbs, the accusative marker does not realize with an object, i.e. definite or indefinite. If it does, such constructions will become ungrammatical as illustrated in (8-b).

(8) a. saba   gänzäb all-ä-at →(all-Ø-at)   (Amahric)
      S.(f.) money(m.) there.is-3ms$_S$-3fs$_O$
       'Saba has money' (lit. 'there is money and the money is Saba's')
    b. *saba-n gänzäb all-ä-at →(all-Ø-at)
       S.-Acc money there.is-3ms$_S$-3fs$_O$
       'Saba has money' (lit. 'there is money and the money is Saba's')

As discussed in the preceding chapter *Saba* in (8) cannot be considered as dative object for two basic reasons. First, the overt marking of such elements for dative leads to ungrammaticality.

 (9) * lä-saba   gänzäb all-ä-at →(all-Ø-at)   (Amahric)
       to/dative-S. money there.is-3ms$_S$-3fs$_O$
       'Saba has money'

(10) *lä-yonas   gänzäb all-ä-w   (Amahric)
      to/dative-J. money there.is-3ms$_S$-3ms$_O$
       'Jonas has money'

Second, there is no dative reading which can be obtained from such constructions. For example, we cannot get the expected dative literal translation; i.e. *'there is money to Saba'*, from the clause in (8). This expected meaning has a different construction in this language group which can be termed as applicative construction. And in such applicative construction, the object will be marked for dative/ benefactive Case.[4] Consider the following example from Amharic:

(11) a. lä-saba   gänzäb all-ä-l-at   (benefactive)

        for/dative-S.   money there.is-3ms$_S$-Apll-3fs$_O$

        'there is money for Saba'

    b. saba gänzäb all-ä-l-at   (benefactive)

        S.   money there.is-3ms$_S$-Apll-3fs$_O$

        'there is money for Saba'

In fact, the dative/ benefactive marker *lä-* in the applicative constructions of the sort illustrated in (11-a) is optional as we can notice from (11-b). However in such type of constructions the object cannot be marked with accusative as the ungrammaticality of (12) show.

(12) *saba-n gänzäb all-ä-l-at   (benefactive)

     S.-Acc   money there.is-3ms$_S$-Apll-3fs$_O$

      'there is money for Saba'

In sum, what we have seen above is that in (non-applied) possessive constructions; i.e. excluding the applicative constructions of the sort illustrated in (11), an object can be considered as a direct object unlike (11) which is an indirect object. However, such a direct object cannot be marked for accusative[5] but rather for nominative — OB for inherent and SU for structural.[6] I suggest that, this is because, the functional category that has a matching Acc feature, namely the projection of the light verb, is not available in verb "to have" constructions. Because of this OB cannot be marked for structural accusative Case. If it does, as in (13-b), the *u*Acc Case of OB remains unchecked and violates Case filter hence ungrammaticality resulted. I will show the derivation of such clauses considering the example in (8) repeated here as (13-a).

(13) a. saba gänzäb all-Ø-at   (Amharic)

     S.(f.) money(m.) there.is-3ms$_S$-3fs$_O$

     'Saba has money'

b.   CP

```
                    CP
                   /  \
              saba_i    IP
                       /  \
                      VP
                     /  \
               gänzäb    V'
                        /  \
                    allat    t_i
```
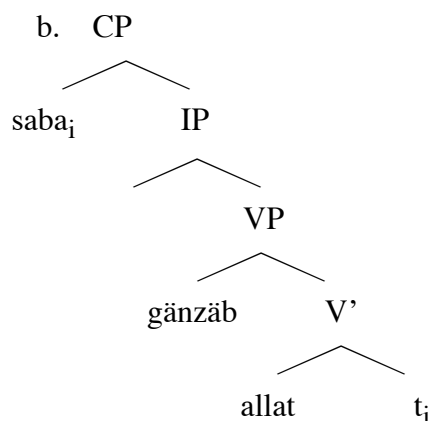
Since my major concern in this section is on the relation of accusative objects and the corresponding agreement features, I will discuss the syntactic derivation of such verb "to have" constructions in detail in chapter 10 and the applicative constructions in section 4.2.3 below. I now summarize and reexamine the points which I have discussed in relation to object DPs and the corresponding agreement before turning to the next section.

I have discussed above that object agreement and accusative marker are totally banned with indefinite DPs. The overt realization of accusative Case and object agreement are strongly related to definiteness but not necessary mean that all definite accusative objects will have overt accusative Case marker or will have corresponding agreement features. Meaning, Case marking and agreement features can be absent even in definite DPs (see, for example, (5) and (6-a). Consider also (14):

(14) yonas anbäsa-w-n   gäddäl-ä   (Amharic)
    J.   lion-the-Acc kill$_{perf}$-3ms$_s$
  'Jonas killed the lion'

When we examine closely constructions which show differences in the presence and absence of object agreement, we find also semantic differences between them. The semantic difference has to do with emphasis. When the object agreement is present then, more emphasis is given to the object. Such constructions may have a sense *of 'not anything else but this one'*. Compare the example in (14) above, repeated below in (15-a), with (15-b):

(15) a. yonas anbäsa-w-n gäddäl-ä   (Amharic)

    J.   lion-the-Acc kill$_{perf}$-3ms$_S$

   'Jonas killed the lion'

  b. yonas anbäsa-w-n gäddäl-ä-w   (Amharic)

    J.   lion-the-Acc kill$_{perf}$-3ms$_S$-3ms$_O$

   'Jonas killed **the lion** (emphasis on *the line*)'

In (15-b) the object is emphasized while in (15-a) it has a normal reading. (The emphasized argument is shown by the bold font.) This informational interpretation is, in fact, recognized by Haile (1970) for Amharic.

If we assume that the presence of object agreement is the one that brought such additional informational interpretation to the object, we may suggest that Agro is encoded with plus focus-like feature, assuming that emphasis is a type of focus.[7] However, attaching a +emphasis feature to the so-called object agreement may raise a serious question, given the fact that there are cases where no overt DP is found agreeing with Agro as depicted in (16).

(16) gäddäl-Ø-at   (Amharic)

   kill$_{perf}$-3ms$_S$-3fs$_O$

  'he killed her'

Furthermore, we have seen that in possessive construction there is no additional informational interpretation to the object although Agro must present. The impersonal constructions are also the same with possessive constructions in that Agro must present without having its coreferent DP any focused reading. Consider (17), for example:

(17) almaz-n   t'äm-Ø-at   (Amharic)

   A.(f.)-Acc thirst$_{perf}$-3ms$_S$-3fs$_O$

  'Almaz is thirsty'

Based on the above facts, it is reasonable to suggest that whenever a DP moves to a position associated with contrastive focus, Agro hops out, otherwise not.[8] However, note that, there is no word order difference between focused and non-focused

construction (cf. 17). I suggest that, this is because the movement of the contrastively focused OB to such a position is covert. I now turn to the examination of those agreement elements in double object construction.

4.2.2 Object Agreement in Double Object Constructions

In double object constructions, the verb will not agree with the direct object rather its agreement is with the indirect object. Note that here, in Ethio-Semitic only a single object agreement is allowed and the agreement in double object is always with the indirect object.

(18) yä-zämmi-hʷan ab-ä-nnɨ-t   (Soddo)

   Acc-brother-his give$_{perf}$-3ms$_S$-3ms$_{IO}$-AMCM

   'he gave to his brother' (Leslau 1992: 156)

(19) a. lä-saba   mäs'haf-u-n sät't'ä-hʷ-at   (Amharic)

      to-S. book-def$_m$-Acc give$_{perf}$-1s$_S$-3fs$_O$

       'I gave the book to Saba'

   b. *lä-saba   mäs'haf-u-n sät't'ä -hu-t

      to-S. book-def$_m$-Acc give$_{perf}$-1s$_S$-3ms$_O$

       'I gave the book to Saba'

(20) gʷeta yä-barya-ta   at färäz aw-ä-n-m   (Chaha)

      master to-servant-his one horse give$_{perf}$-3ms$_S$-3ms$_O$

       'the master gave a horse to his servant' (Leslau 1992: 135)

Sentence (19-b) is only grammatical when the indirect object is masculine in gender so that proper agreement can be held with it.

In the above discussion, note that, I have shown that the object agreement can be realized if only the object is definite. In such double object constructions the indirect object has to be definite too for the realization of such agreement elements. If the indirect object is indefinite there will no be object agreement.

(21) a. l-and   set   mäs'haf-u-n   sät't'ä-hu   (Amharic)
      to-one woman book-def$_m$-Acc give$_{perf}$-1s$_S$
      'I gave the book to a woman'

   b. *l-and   set   mäs'haf-u-n sät't'ä -h^w-at
      to-one woman book-def$_m$-Acc give$_{perf}$-1s$_S$-3fs$_O$
      'I gave the book to a women'

   c. *l-and   set   mäs'haf-u-n sät't'ä -hu-t
      to-one woman book-def$_m$-Acc give$_{perf}$-1s$_S$-3ms$_O$
      'I gave the book to a women'

The ungrammaticality of (21-b) is because Agro identifies the indefinite indirect object *a woman*. The ungrammaticality of (21-c) is because Agro identifies the direct object *the book*. If there is no phonologically realized indirect object in a double object construction, it refers to the phonologically absent indirect object. [9] Consider the following:

(22) ab-ä-nnɨ-t   (Soddo)

   give$_{perf}$-3ms$_S$-3ms$_{IO}$-AMCM
   'he gave to him' (Leslau 1992: 156)

(23) mäs'haf sät't'-ä-w   (Amharic)
    book   give$_{perf}$-3ms$_S$-3ms$_{IO}$
    'he gave him a book'

Note that also in the above section, we have seen that when an object is contrastively focused then the object agreement must present. The same seems true to the realization of agreement in relation to indirect object DPs. Consider the following where (24) has the unmarked reading while (25) has a focus-like reading.

(24) lä-saba   mäs'haf-u-n   sät't'ä-hu   (Amharic)
    to-S.   book-def$_m$-Acc give$_{perf}$-1s$_S$-3fs$_O$
    'I gave the book to Saba'

(25) lä-saba   mäs'haf-u-n   sät't'ä-h^w-at   (Amharic)

   to-S.   book-def$_m$-Acc give$_{perf}$-1ss$_S$-3fs$_O$

   'I gave the book **to Saba**' (emphasis on the *'to saba'*)

The best translation for (25) is that *'I gave the book to Saba (not to anybody else)'*.
I now turn to what I call Agrpp elements.

4.2.3 Applicative and Agreement

The other type of agreement has to do with the identification of applied arguments
or other affected arguments such as instrumental, benefactive and adversive, i.e.
malefactive. In such constructions the agreement affixes are the same with the object
marking agreement affixes that we saw above, except the presence of preposition-
like elements realized along with these agreement morphemes for the identification
of the applied or other affected XPs in which I generally referred to above as Agrpp.
Consider the following Muher examples:

(26) mɨsäkkär-ä-[n-a]-m   (benefactive)

   testify$_{perf}$-3ms$_S$-[Appl-3fs$_{PP}$(Agr$_{PP}$)]-T$_{past}$

   'he testified for her/ in her favor' (Leslau 1992: 203)

(27) mɨsäkkär-ä-[b-a]-m   (malefactive)

   testify$_{perf}$-3ms$_S$-[Appl-3fs$_{PP}$(Agr$_{PP}$)]-T$_{past}$

   'he testified against her' (Leslau 1992: 203)

The instrumental phrase is also identified in the same way like benefactive and
malefactive Cases by Agrpp elements.

(28) bä-tor-u anbäsa-w-n gäddäl-ku-[b-ät]   (Amharic)

   [with-spear-def$_m$]$_i$ lion-def$_m$-Acc kill$_{perf}$-1ss$_S$-[Appl-3ms$_{PPi}$(Agr$_{PP}$)]

   'I killed the lion with the spear' (Baye 1994)

The morpheme that identifies benefactive and dative XPs is the same and the one
which identifies malefactive; i.e. which has a meaning of adversity, against, for the

disadvantage of, to the determinant of; identifies the instrumental Case as well. In the case of Amharic the malefactive and instrumental Cases on the one hand, and the benefactive and dative Cases on the other hand, are identified by the verbal affix –b and –l respectively, which both are realized along with φ-features. Consider the following Amharic examples from Yabe (2001: 3):

(29) yohannɨs mäs'haf-u-n l-aster mälläs-ä-[l-at]   (dative)

    J.   book-the-Acc to-E.   return$_{perf}$-3ms$_S$-[3fs$_{IO}$]

   'John return the book to Esther'

(30) yohannɨs mɨgɨb-u-n   l-aster särra-Ø-[l-at]   (benefactive)

    J.   food-the-Acc for-E. cook$_{perf}$-3ms$_S$-[Appl-3fs$_{PP}$(Agr$_{PP}$)]

   'John cooked the food for Esther'

(31) mäkonɨn-u bä-yohannɨs färräd-ä-[b-ät]   (malefactive)

    officer-the on-J. judge$_{perf}$-3ms$_S$-[Appl-3ms$_{PP}$(Agr$_{PP}$)]

   'The officer judged against John'

(32) yohannɨs bä-rsas-u dabdabe s'af-ä-[b-ät]   (instrumental)

    J. [with-pencil-the]$_i$ letter write$_{perf}$-3ms$_S$-[Appl-3ms$_{PP}i$(Agr$_{PP}$)]

   'John wrote a letter with the pencil'

In the examples (29) and (24), the dative object is recalled by the Agrpp and by the bare Agro. However, this does not mean that both, i.e. Agrpp and Agro, co-refer to the same thing or they have the same function in all instances. For example, if we change the Agro in (24), repeated here as (33-a), with the Agrpp element, the sentence will have different reading.

(33) a. mäs'haf-u-n   lä-saba sät't'ä-h^w-at   (Amharic)

    book-def$_m$-Acc to-S.   give$_{perf}$-1s$_S$-3fs$_O$

   'I gave the book to Saba'

b. mäs'haf-u-n   lä-saba sät't'ä-hu-[l-at]

book-def$_m$-Acc to-S.   give$_{per}$-1s$_s$-[Appl-3fs$_{PP}$(Agr$_{PP}$)]

  'I gave the book (to some body) for the advantage of Saba'

lä-saba in (33-a) and in (33-b), is different in terms of its semantic structure. In the former, it is clearly a dative object whereas in the latter it is a new introduced applied argument. This difference can be identified by the English equivalent translation. When we look the Amharic surface structure in both examples they are identical, except the difference between the presence/ absence of the applicative element *-l-*.[10] They are identical in the sense that they have the same phonological form and they are found in the same word order. Since there is a clear semantic difference and there is also a phonologically null argument in the latter case, it is difficult to assume the same base structure for those examples.

Let us suppose as a priori following Pylkänen (2002) that applicatives head their own projection in the argument structure and an applied argument is introduced in their Spec. Now, assume that the applicative element *l* in the example in (33-b), is an applicative head which project in the argument structure, since it introduces the new argument. If this view is correct, the applied argument *lä-saba* in (33-b) has to be introduced and merged in the Spec of ApplP as in (34).[11] For ease, I will show the structure with the English glosses.

(34) *v*P

```
          vP
         /  \
  pro(=I)    vP
            /  \
     the book_i   v'
                 /  \
                   ApplP
                  /    \
            for Saba    Appl'
                       /   \
                        VP
                       /  \
                  pro^{12}   V'
                            /  \
                        gave    t_i
```
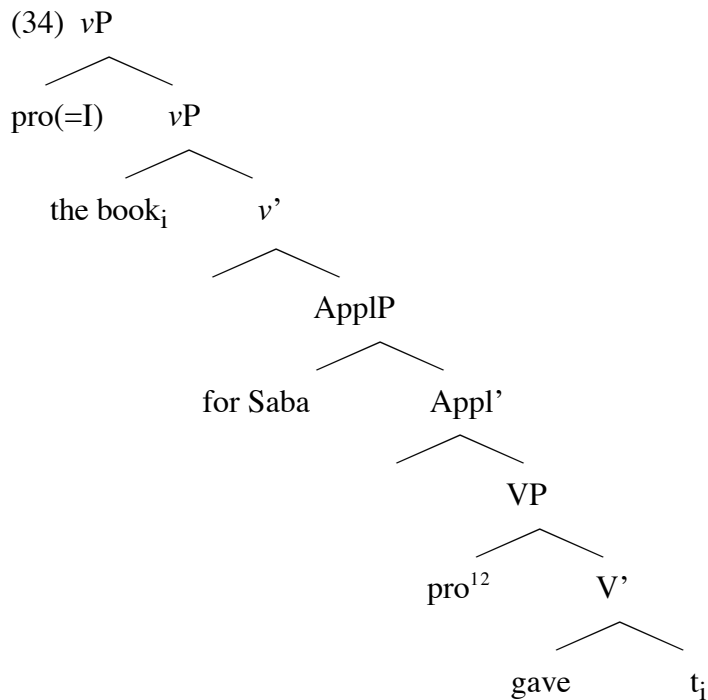
However, the agreement element *at* in (33-a) cannot be considered as heading an applicative projection in the thematic layer because it introduces no argument, rather identifies the already existing argument. Hence, the structure of (33-a) can be illustrated as in (35).

(35) *v*P

```
          vP
         /  \
  pro(=I)    vP
            /  \
     the book_i   v'
                 /  \
                    VP
                   /  \
             to Saba    V'
                       /  \
                   gave    t_i
```
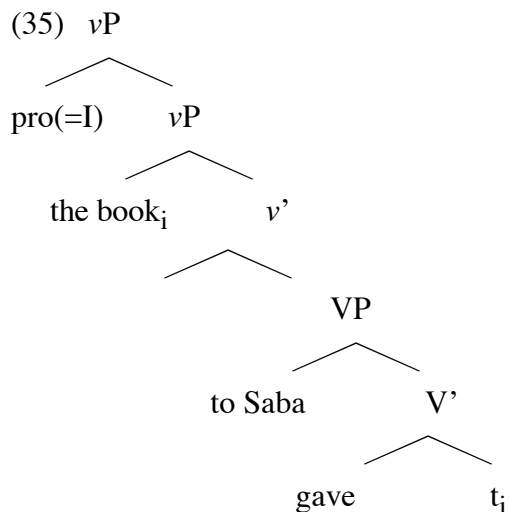
If the element *l* has a role of introducing an argument as evidenced by (33-b), what is the possible reason that it identifies the already existing dative argument in (29)?
[13] This is because, I suggest, the Agrpp element *-l-* has two different grammatical

functions. One of the functions is applicative and the other is a simple reference of (Case) agreement. I assume that, the element *-l-* which we find in the case of (34-b) is an applicative element and introduces a new applied argument. On the other hand, the element *-l-*, which we find in the example (29), is a dative agreement feature and cannot introduce any new applied argument. Hence, the structure of (29) will be similar to that of (35) and not to that of (34) as we can see from (36).

(36) a. yohannɨs mäs'haf-u-n l-aster mälläs-ä-[l-at]   (dative)

      J.   book-the-Acc to-E.   return$_{perf}$-3ms$_S$-[3fs$_{IO}$]

     'John return the book to Esther'

  b. *v*P

yohannɨs   *v*P

   mäs'hafun$_i$ *v*'

          VP

       laster   V'

         mälläsälat   t$_i$
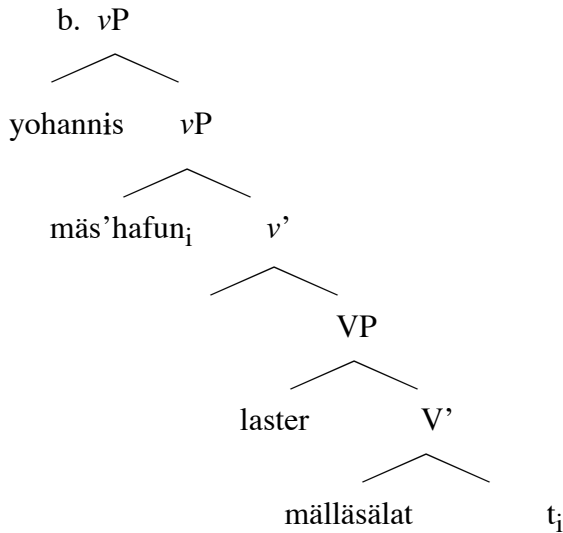
In sum, what I pointed out above is that the element *-l-* in Amharic has the realization of two grammatical categories — a dative Case agreement and an applicative element that has a function of introducing new argument (see also Hetzron 1970). The same is true in other Ethio-Semitic languages, as I have already pointed out above.

There is also one more question, which I would like to address here: Why do we find two different forms; i.e. Agrpp and Agro, for the identification of the dative object? I suggest that this has to do with the s-selection of the individual verb. For example, with the verb in (29) the dative reference cannot be obtained by the bare Agro, unlike (33-a). Consider (37) where the absence of the element *-l-* leads to ungrammaticality.

(37) yohannɨs mäs'haf-u-n l-aster mälläs-ä-[*(l)-at]   (dative)

   J. book-the to-E. return$_{perf}$-3ms$_S$-3fs$_{IO}$

   'John return the book to Esther'

I now briefly summarize the points discussed above.

The preposition-like elements are strongly related to agreement in two senses. One, they are realized with agreement features, i.e. phi-features, and, two they themselves can be agreement features; i.e. a Case agreement feature — could be dative, instrumental etc. or they can be an argument introducing applicative element. In other words, what I call Agrpp can have two different grammatical functions and these functions can be understood as a realization of agreement features; i.e. Case + φ-features or as applicative + φ-features.

As I have already pointed out, dative and benefactive XPs on the one hand, instrumental phrases and malefactive XPs on the other hand, are identified by homophones Agrpp element respectively in Ethio-Semitic languages. While benefactive and malefactive arguments are introduced by the Agrpp, the others are not. What Agrpp does in instrumental and dative Cases is that, it simply agrees with the existing dative or instrumental XPs. As is the case to Agro, the appearance of the Agrpp element as a coreferent to instrumental and other XPs is related also with emphasis. Consider the clause in (32) repeated below as (38).

(38) yohannɨs bä-rsas-u dabdabe s'af-ä-[b-ät]   (instrumental)

   J. [with-pencil-the]$_i$ letter write$_{perf}$-3ms$_S$-[Appl-3ms$_{PPi}$(Agr$_{PP}$)]

   'John wrote a letter with the pencil'

The clause in (38) may have an adversive meaning which may mean that *'he wrote a letter with a pencil in which he is not supposed to use it'*. That means the instrumental phrase *'with a pen'* is an affected constituent which is contrastively focused. Consider also the following example from Haile (1970):

(39) aster bä-bila-w märet-u-n qofär-äcc-[ɨb-ät]   (Amharic)

    E. [with-knife-the]$_i$ ground-the-Acc dig$_{perf}$-3fs$_S$- [3ms$_{PP}$(Agr$_{PP}$)]$_i$

    'Esther dug the ground **with the knife**' (also emphasis on *with the knife*)

In the example (38), the Agrpp element *bät* identifies the instrumental XP *bä-bila-w* which can be considered as an affected/ contrastively focused constituent. The best translation for the sentence in (38), is that *'the knife may not have been supposed to be used for digging the ground.'* One may assume here that the affectedness interpretation that we get from (38) is due to the *b* of Agrpp element. However, that is not true. Consider the following where we have Agro without such element with reference to *the ground*:

(40) aster bä-bila-w märet-u-n qofär-äcc-[ɨw]   (Amharic)

    E. with-knife-the [ground-the-Acc]$_i$ dig$_{perf}$-3fs$_S$- [Agr$_O$]$_i$

'Esther dug **the ground** with the knife' (also emphasis on *the ground*)

The clause in (40) is pragmatically presupposed that *'the ground may not have been dug* (Haile 1970)'. Hence *the ground* can be considered also as an affected argument but without any corresponding applicative-like element. If this is the case, the reason that we get focused reading for the instrumental XP in (38) cannot be attributed to the element *b* of Agrpp. What the element *b* (of *bät*) does in (38) is that, it identifies/ agrees with the Case of *the knife* which is instrumental and *ät* (of *bät*) is a phi-feature agreement with the DP *the knife*. In other words, *b* is Case agreement and *ät* is phi-feature agreement. If that is not the case we will have a construction without the corresponding Agro and Agrpp elements, in fact, having no presupposed meaning as in (41). (Recall also the discussion above.) [14]

 (41) aster bä-bila-w märet-u-n qofär-äcc   (Amharic)

    E. with-knife-the ground-the-Acc dig$_{perf}$-3fs$_S$

    'Esther dug the ground with the knife'

4.2.4 Summary of the Facts

The direct/ indirect object agreement have semantic restrictions: "Object marking is restricted to certain semantic/ interpretive types of an object NP" (cf. Yabe 2001: 4).

They are found mostly if the constituent in question is under emphasis. And, as discussed above, such type of emphasis is only possible in Ethio-Semitic languages if the element in question is definite or partitive.

(42) aster doro-wa-n arräd-äcc-at   (Amharic)

     E. [hen-the-Acc]$_i$ butcher$_{perf}$-3fs$_S$-3fs$_{Oi}$

   'Esther butchered the hen' (cf. Yabe 2001: 4)

(43) aster kä-doro-wocc-wa and-wa-n arräd-äcc-at   (Amharic)

      E. from-hen-pl-3fs$_{pos}$[15] [one-partitive-Acc]$_i$ butcher$_{perf}$-3fs$_S$-3fs$_{Oi}$

    'Esther butchered one of her hen' (cf. Yabe 2001: 4)

Hence, the marking of indefinites may yield ungrammaticality as illustrated in (44).

(44) aster doro arräd-äcc-(*at)   (Amharic)

     E. [Hen]$_i$ butcher$_{perf}$-3fs$_S$-3fs$_{Oi}$

   'Esther butchered a hen' (cf. Yabe 2001: 4)

Furthermore, the Agrpps are also sensitive to definiteness as the ungrammaticality of the example in (45) may show.

(45) *bä-tor anbäsa gäddäl-ku-[b-ät]   (Amharic)

     [with-spear]$_i$ lion kill$_{per}$-1s$_S$-[p-3ms$_{PPi}$(Agr$_{PP}$)]

     'I killed a lion with a spear'

The Agrpp will appear mostly in two instances; (a) in relation to newly introduced argument, or (b) in relation to an existing argument which is under emphasis. The preposition-like element that introduces an applied malefactive XP, is phonologically the same with the one which is used to identify an instrumental XP. Consider the following Amharic examples:

(46) a. bä-tor-u   anbäsa-w-n gäddäl-ku-[b-at]   (malefactive)

     with-spear-def$_m$ [Ø]$_i$ lion-def$_m$-Acc kill$_{per}$-1s$_S$-[Appl-3fs$_{PPi}$(Agr$_{PP}$)]

      'I killed the lion with the spear (for the disadvantage of her)'

b. bä-tor-u   anbäsa-w-n gäddäl-ku-[b-ät]   (instrumental)
  [with-spear-def$_m$]$_i$ lion-def$_m$-Acc kill$_{perf}$-1s$_S$-[p-3ms$_{PP_i}$(Agr$_{PP}$)]
  'I killed a lion with a spear'

The benefactive argument introducing morpheme is also phonologically similar with the non-applied dative argument identifying element as the following Amharic examples may illustrate.

(47) a. bä-tor-u anbäsa-w-n gäddäl-ku-[l-at]   (benefactive)
     with-spear-def$_m$ [Ø]$_i$ lion-def$_m$-Acc kill$_{perf}$-1s$_S$-[Appl-3fs$_{PP_i}$(Agr$_{PP}$)]
     'I killed the lion with the spear /(for the benefit of her)'
    b. lä-saba mäs'haf _ät't'-ku-[l-at]   (dative)
      to-S. book sale$_{perf}$-1s$_S$-[Appl-3fs$_{PP}$(Agr$_{PP}$)]
      'I sold a book to Saba'

In (47-a), the identification of the Agrpp is for the null argument. Such null argument can also be phonologically visible in constructions of the sort illustrated in (47-a); i.e. in benefactive constructions. Consider the following:

(48) bä-tor-u lä-saba anbäsa-w-n gäddäl-ku-[l-at]   (Amharic)
    with-spear-def$_m$ [to-S.]$_i$ lion-def$_m$-Acc kill$_{per}$-1s$_S$-[p-3fs$_{PP_i}$(Agr$_{PP}$)]
    'I killed the lion with the spear to Saba/ (for the benefit of Saba)'

However, if the Case is malefactive, the applied argument cannot phonologically be visible (cf. 46-a). If it does, ungrammaticality will be resulted, as shown by the example in (49).

(49) *bä-tor-u   lä-saba/ saba-n anbäsa-w-n   gäddäl-ku-[b-at] (malefactive)
    with-spear-def$_m$ [to-S./S.-Acc]$_i$ lion-def$_m$-Acc kill$_{per}$-1s$_S$-[p-3fs$_{PP_i}$(Agr$_{PP}$)]
    'I killed the lion with the spear for Saba (for the disadvantage/ to the
     determinant of Saba)'

The only way of preserving the grammatical structure for construction like (49-b) is that by establishing a pseudo-possessive relation between *Saba* and *the lion* as in (50).[16]

(50) bä-tor-u saba-n anbäsa-wa-n gäddäl-ku-[b-at]   (Amharic)

   with-spear-def$_m$ [S.-Acc?]$_i$ lion-3fs$_{pos}$/her-Acc kill$_{perf}$-1s$_S$-[p-3fs$_{PP_i}$(Agr$_{PP}$)]

  'I killed her lion with the spear (for the disadvantage/ to the determinant of) for Saba'

Notice also that, in (50), the constituents *saba-n* and *anbäsa-wa-n* are not in a head-modifier/ complement relation although semantically they are in a sort of possessive-like relation. That is *saba-n* in (50) is not the structural possessor. It is, in fact, a coreferent to a pro possessor, i.e. *her*, in the possessive phrase which is identified by the suffix possessive marker, *3fs$_{pos}$*.[17]

The reason for the ungrammaticality of (49-b) as opposed to (50) can be explained in syntax by considering Pylkkänen's (2000a, 2000b, 2002) proposal to which I now turn.

4.3 Theoretical considerations

4.3.1 Yabe (2001)

In Yimam (1998), Engdashet (1998) and Demeke (2000) the non-subject agreement phenomena are treated as a realization of the syntactic projection Agr$_O$P. Such kind of assumption is challenged by Yabe (2001). Yabe's rejection of such analysis is based on the following points:

(51) a. The subject inflection is a spell out of AgrS. An OM [object marker] is not a spell-out of AgrO. OM is also applicable to a dative object. AgrO is the Acc-checking head.

    b. An OM has interpretational import, say [+focus], and it influences the informational structure. The OM=AgrO approach would not offer any explanation for the fact.

Since Yabe considers the object marking elements as clitics he suggested that such elements has to be generated inside a possessive NP, i.e. in the context of the bare Agro element; in the case of Agrpp, he assumed incorporation of the P element to Agro, i.e. an amalgamation of prepositional element with clitic double NP. Let us briefly see his points.

According to Yabe when there is an object marking element and a coreferent XP such existence is a case of clitic-doubling phenomenon. In the context of the former, to put in his term "an object clitic is generated inside a complex noun phrase structure, along with its doubling object NP, forming a possessive-like structure" (Yabe 2001: 1). For the latter type of phenomenon, i.e. what I call here Agrpp, he suggests that "the clitic head originates in a base position in the complement of P and incorporates into the preposition before incorporating into the verb together with the preposition" (Yabe 2001: 1).

Such a proposal has some strong challenges when one critically examines the non-subject marking elements from clitic versus affixes approach, and from the semantic role that they have. First of all; what Yabe considers as incorporated prepositions are not prepositions. They are, in fact, either Case-agreement features or applicatives as we have seen above. Second; though setting criteria to differentiate between clitics and affixes is almost an impossible task, morphologically and semantically speaking such morphemes do not have any property of clitics known in natural languages. Note that also, the applicative elements found affixed to the verb and the Case markers, which are found along with the coreferent, XP may not have any phonological resemblance. In other words, an Agrpp may coindex with various XPs, which have different Cases. Consider the following examples from Amharic:

(52) a. lä-saba mät't'a-hu-[l-at]   (benefactive)

   [to/dative-S.]$_i$ come$_{perf}$-1s$_S$-[Appl-3fs$_{PP i}$(Agr$_{PP}$)]

   'I came for Saba (for the benefit of Saba)'

  b. lä-saba mät't'a-hu-[b-at]   (malefactive)

   [to/dative-S.]$_i$ come$_{perf}$-1s$_S$-[Appl -3fs$_{PP i}$(Agr$_{PP}$)]

   'I came to Saba/ for the disadvantage of Saba'

(53) a. saba-n gänzäb-wa-n wässäd-ku-[b-at]   (malefactive)

   [S.-Acc]$_i$ money-3fs$_{pos}$/her-Acc take$_{perf}$-1ss-[Appl-3fsPP$_i$(Agr$_{PP}$)]

   'I took Saba's money (for the disadvantage/ to the determinant of her) '

  b. saba-n gänzäb-wa-n wässäd-ku-[l-at] [18]   (benefactive)

   [S.-Acc]$_i$ money-3fs$_{pos}$/her-Acc take$_{perf}$-1ss-[Appl-3fsPP$_i$(Agr$_{PP}$)]

   'I took Saba's money (for the advantage of her)'

  c. bä-bila-w sälat'a kättäf-ku-[b-ät]   (instrumental)

   [with/instrumental-knife-the]$_i$ salad cut$_{perf}$-1ss-[Appl-3fsPP$_i$(Agr$_{PP}$)]

   'I cut salad with the knife'

The applicative element *l* introduces an applied benefatcive argument that has the dative marker *lä* in (52-a) and the accusative marker *n* in (52-b). The applicative element *b* also introduces an applied argument that has the dative *lä* in (52-a), the accusative *n* in (52-b) and the instrumental *bä* in (52-c). If there is as such a phonological resemblance between the verbal affix elements and the elements which are found in the DPs/ PPs is the dative marker *lä* to the applicative element *l* and the instrumental *bä* to the applicative element *b*. If these elements were incorporated prepositions; the applicative elements may not be found with reference to an applied object which is marked with the accusative Case and the verbal element *b* with reference to the dative marker *lä*.[19] Hence, I will not take the applicative head elements as incorporated prepositions.[20]

In the case of bare Agro, as discussed above, the association of the coreferential identification to an object XP in some constructions denotes that such coreferent XP is emphasized. In some other constructions, such as impersonal and verb "to have" constructions, Agro must present in agreement with the object whether the coreferent object is realized overtly or not. In all cases Agro and Agrpp appear always affixed only to a verb and have also a fixed position. Hence, treating an applicative and an agreement affix as clitic doubling or as a case of incorporated prepositions cannot be the case at all, and, thus, Yabe's analysis faces the same problem with those who label such elements as a realization of Agr$_o$P.

4.3.2 Pylkkänen (2000a, 2000b, & 2002)

Pylkkänen (2000a, 2000b, 2002) has an interesting proposal for applicative constructions. Pylkkänen identifies two positions for the applicative projections. One is above the verbal root and the other is below the verbal root. Pylkkänen names the former type *high applicatives* and the latter type *low applicatives* (2000a: 8). According to Pylkkänen (2000b: 3), high applicatives denote a relation between an event and an individual whereas low applicatives denote a relation between two individuals. Low applicatives, for Pylkkänen (2000b: 3), are those heads which, "modify the direct object. They are interpreted as directional possessive relations". Meaning the applied argument and the direct object will enter in a possessive-like relation. Whereas in the case of high applicatives, the relation of the applied argument is not with any individual argument, but rather with the event described by the VP, in general. Her proposed structures for low and high applicatives are illustrated in (54) below.[21]

(54) a. High Applicatives

```
        VoiceP
        /\
    DP      /\
       Voice   /\
            DP    /\
             Appl_Ben  /\
                   V      DP
```

b. Low Applicatives

```
        VoiceP
        /\
    DP     /\
      Voice   /\
           V    /\
             DP    /\
               Appl   DP
```
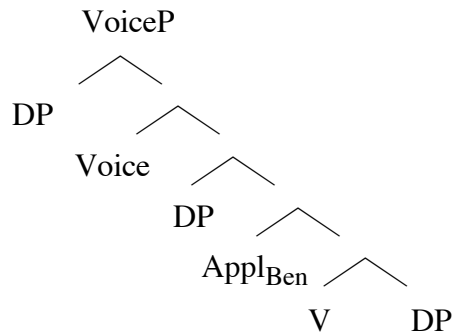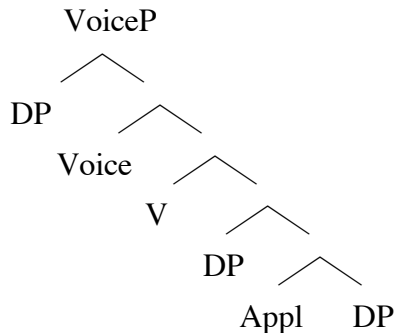
As we can see from the above structure, Pylkkänen's suggestion is that both the *low* and *high* applicatives are projected in what is known as thematic layer. This is because, applicatives add arguments to the verb: "Since applicative affixes add an argument to the verb, the most straightforward hypothesis for their semantics is to say that they are elements which take an event as their argument and introduce an individual which is thematically related to that event" (Pylkkänen 2000b: 2).

4.3.3 The Proposal

Unlike the proposals suggested by Yimam (1998), Engdashet (1998) and Demeke (2000), I assume along with Yabe (2001) that the so-called object agreement in Ethio-Semitic cannot be considered as a realization of the functional projection Agr_OP that checks structural accusative Case of a direct object DP. As we have seen in detail in this chapter, Yabe's rejection of the Agr_OP-approach to Ethio-Semitic so-called object agreement elements seems convincing. Such elements do not have strong relation with accusative Case, as we have seen also in the preceding chapter. I assume in this work following Chomsky (1995b, chapter 4) that what checks accusative Case is a projection of the light verb.[22]

Recall that, what I have called Agrpps are homophone forms that stand for two grammatical categories; one is applicative (+ phi-features) and the other is (minus applicative) agreement feature. Consider also the following:

(55) a. yonas bä-mäkina-w   mät't'a-Ø   (Amharic)

     J.   by-car-def.m   come$_{perf}$-3ms$_S$

   'Jonas came by car'

  b. yonas bä-mäkina-w   mät't'a-Ø-[b-ät]   (Amharic)

     J.   [by-car-def.m]$_i$ come$_{perf}$-3ms$_S$-[Appl-3ms$_{PP}$(Agr$_{PP}$)]$_i$

   'Jonas came **by the car**'(with emphasis on *the car*)

  c. yonas bä-mäkina mät't'a-Ø-[b-at]   (Amharic)

     J.   by-car   come$_{perf}$-3ms$_S$-[Appl-3fs$_{PP}$(Agr$_{PP}$)]

   'Jonas came by car against her'

The example in (55-c) introduces phonologically empty argument *'her'* which is recovered from the corresponding Agrpp element. *'Her,'* in such case, is a new

argument introduced by the applicative head. However, in (55-b) the Agrpp does not introduce any new argument but identifies the already existing instrumental phrase as is evidenced by the example in (55-a).

As I have also pointed out in the above sections, since applicative elements introduce arguments, I suggest following Pylkkänen (2002) that they are projected in the thematic layer. I further assume along with Pylkkänen that there are two positions where such categories project — one is a position structurally lower than the projection of the lexical verb in which the applied argument can enter in a possessive-like relation with the direct object; and, the other is a position structurally higher than the lexical verb projection where the applied object that show no relation to any individual argument is introduced. Following Pylkkänen, I refer to the former as low applicatives and the later high applicatives. The examples in (51), repeated here as (56), are the case of high applicatives; and, the examples in (52) above, repeated here in (57), are that of low applicatives.

(56) High Applicatives

    a. lä-saba mät't'a-hu-[l-at]   (benefactive)

      [to-S.]$_i$ come$_{perf}$-1s$_s$-[Appl-3fs$_{PP}$$_i$(Agr$_{PP}$)]

     'I came for Saba (for the benefit of Saba)'

    b. lä-saba mät't'a-hu-[b-at]   (malefactive)

      [to-S.]$_i$ come$_{perf}$-1s$_s$-[Appl -3fs$_{PP}$$_i$(Agr$_{PP}$)]

     'I came to Saba/ for the disadvantage of Saba'

(57) Low Applicatives

  a. saba-n gänzäb-wa-n wässäd-ku-[b-at]   (malefactive)

    [S.-Acc]$_i$ money-3fs$_{pos}$/her-Acc take$_{perf}$-1s$_s$-[Appl-3fs$_{PP}$$_i$(Agr$_{PP}$)]

     'I took Saba's money (for the disadvantage/ to the determinant of her) '

    b. saba-n gänzäb-wa-n wässäd-ku-[l-at]   (benefactive)

    [S.-Acc]$_i$ money-3fs$_{pos}$/her-Acc take$_{perf}$-1s$_s$-[Appl-3fs$_{PP}$$_i$(Agr$_{PP}$)]

     'I took Saba's money (for the advantage of her)'

The applied argument *saba-n* in (57) is in a possessive relation with the direct object *her money*, hence low applicative. However, the applied argument *to-Saba* in (56) does not enter with any individual into a possessive relation. The relation of such argument is with the whole VP, hence high applicatives. Note that here, the distinction between high and low applicatives in Ethio-Semitic has nothing to do with benefactive versus malefactive Cases as we can see from the above examples. Low applicatives in Ethio-Semitic languages either can be a beneficiary argument (cf. 57-b) or adversely affected argument (cf. 57-a) and vice versa; i.e. high applicatives can be a beneficiary argument (cf. 56-a) or adversely affected argument (cf. 56-b).

Low applicatives in Ethio-Semitic languages either can be marked like the direct object by accusative Case marker (cf. 57-b) or, like indirect object by a dative Case marker as in (58), below.[23]

(58) lä-saba gänzäb-wa-n wässäd-ku-[l-at]   (low applicative)

[to/dative-S.]$_i$ money-3fs$_{pos}$/her-Acc take$_{perf}$-1s$_S$-[Appl-3fs$_{PP i}$(Agr$_{PP}$)]

'I took Saba's money (for the advantage her)'

However, high applicatives cannot be marked with accusative Case as the ungrammaticality of (59) may show. They can only be marked to dative Case (cf. 56).[24]

(59) *saba-n mät't'a-hu-[l-at]   (high applicative)

[S.-Acc]$_i$ come$_{perf}$-1s$_S$-[Appl-3fs$_{PP i}$(Agr$_{PP}$)]

'I came for Saba (for the benefit of Saba)'

There are two alternatives to account the ungrammaticality of (59). One is to say that high applicatives are actually higher than the accusative licensing head, and the other is to say intransitive verbs such as *come*, do not come with accusative licensing head, and applicatives do not create accusative licensing head, unlike causatives.[25] In fact, the APPL head must be lower than the subject introducing head. If we assume the projection of the light verb is the one that checks Acc-Case and introduces a causative argument, it must be the case that the projections of APPL; i.e. both high and low, is lower than the projection of the light verb or the causative head. Hence, I suggest that the ungrammaticality of (59), cannot be because of the APPL projection

is higher than the accusative licensing head but because of the lack of such projection.

Recall that, in the above section, we have seen that in constructions such as (49) we can have an overt adversely affected argument only if there is a possessive-like relation between that argument and the direct object. One wonders why that isn't the case when the adversely affected argument is covert, as in (46-a), repeated below in (60).

(60) bä-tor-u   anbäsa-w-n   gäddäl-ku-[b-at]   (malefactive)
     with-spear-def$_m$ [Ø]$_i$ lion-def$_m$-Acc kill$_{per}$-1s$_S$-[Appl-3fs$_{PPi}$(Agr$_{PP}$)]
       'I killed the lion with the spear (for the disadvantage of her)'

I suggest that the covert adversely affected argument in (60) is introduced by a high APPL. On the other hand the applied argument *saba-n* in (50) cannot likewise be taken to be introduced by the high APPL. This argument is in a possessive-like relation with the existing object. As mentioned above, note that an applied argument which has Acc-Case, in Amharic, is always Low. In this language, high-applied arguments can be realized with *lä-*. The question is why *lä-saba* isn't possible in (49): i.e. why would *lä-* be unable to license an argument of high APPL? The question is made even harder by the fact that this should be possible, given (56-b). In this language, note that, high-applied arguments can be realized with *lä-,* if only the high APPL introduces either a benefactive argument (cf. 50) or a malefactive argument in unaccusative verbs (cf. 56-b). The ungrammaticality of (49) is, thus, bizarre. I do not have either an idea what the possible reason for this could be, and thus, will leave the question open for further research.

I will show below the derivation of low and high applicatives before turning to the structural representation of the non-subject agreement elements in general. I will consider one example from each.

(61) High Applicatives
    a. lä-saba mät't'a-hu-[l-at]   (benefactive)
     [to-S.]$_i$ come$_{perf}$-1s$_S$-[Appl-3fs$_{PPi}$(Agr$_{PP}$)]
      'I came for Saba (for the benefit of Saba)'

b. VoiceP

```
           VoiceP
          /      \
      pro(=I)   Voice'
                  \
                 ApplP
                /     \
            läsaba   Appl'
                       \
                       VP
                        \
                        V'
                         \
                      mät't'ahulat
```
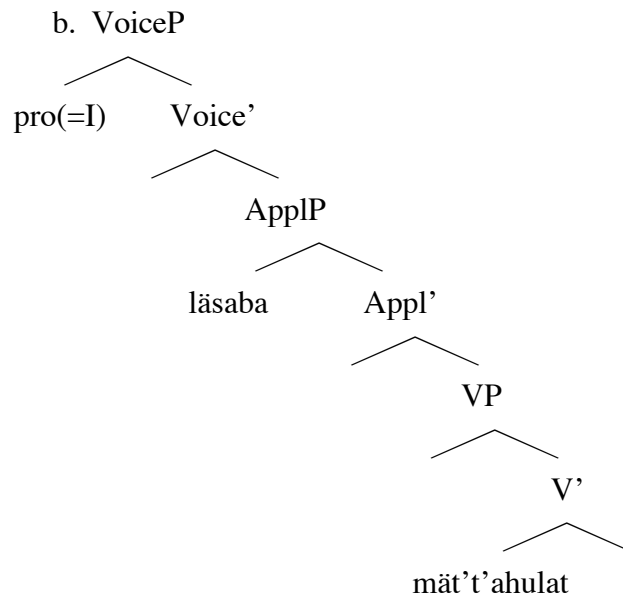
(62) Low Applicatives

a. lä-saba   gänzäb-wa-n wässäd-ku-[b-at]   (malefactive)

   [to-S.]$_i$ money-3fs$_{POS}$/her-Acc take$_{perf}$-1s$_S$-[Appl-3fs$_{PP}$$_i$(Agr$_{PP}$)]

   'I took Saba's money (for the advantage/ to the determinant of her) '

b.   vP

```
           vP
          /    \
      pro(=I)   vP
               /   \
        gänzäbwan_j  v'
                      \
                      VP
                     /   \
                ApplP_i   V'
                /    \    /   \
          läsaba  t_j  wässädkubat  t_i
```

The movement of the ApplP to Spec VP can be attributed to EPP and the movement of the direct object to Spec *v* to Case (+EPP) checking, as in the sense of Chomsky (1995b). The movement of the direct object across the applied object is, in fact, a violation of Relativized Minimality. However, I assume following Ferguson (1996)

that such movement is a possible operation in syntax. According to Ferguson, a phrasal element α can move to a functional category γ across an element β, if β does not have a matching feature with γ and α is the next structurally closest element that has a matching feature (to γ). The applied argument is an IO which does not have structural Case to check, hence it cannot be attracted by the structural accusative checking functional projection (although it is structurally closer to v than DO is). This means that the movement of DO over IO for Case checking cannot be considered as a violation of Rizzi's (1990) Relativized Minimality or Chomsky's (1995) Minimlal Link Condition.

As we may notice in the course of discussion, the direct object and the applied argument in this language group have almost a free order. Consider the order in (63) in relation to (58) above:

(63) gänzäb-wa-n   lä-saba wässäd-ku-[l-at]   (Amharic)
     money-3fs$_{pos}$/her-Acc [to-S.]$_i$ take$_{perf}$-1s$_S$-[Appl-3fs$_{PP}$$_i$(Agr$_{PP}$)]
     'I took Saba's money (for the disadvantage/ to the determinant of her)'

I suggest that such free order between the applied argument and the direct object is because of the optional movement of DO. When DO moves overtly to check its Case as in (62-b), then we get DO structurally higher than the applied object. If its Case gets checked in situ as in (64), then we find the applied argument structurally higher than DO (cf. 63).

(64) vP

pro(=I) v'

          v°   VP

     ApplP$_i$ V'

läsaba   Appl'   wässädkubat   t$_i$
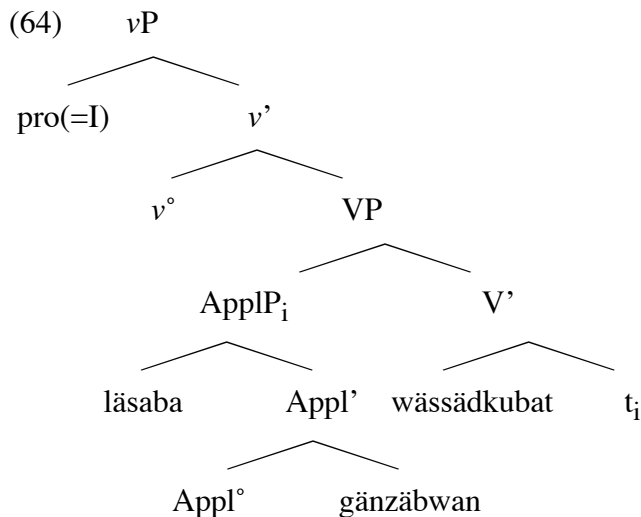
     Appl°   gänzäbwan

However, the overt movement of DO across the applied argument is not available in Amharic when the applied argument is marked like DO for accusative Case.

(65) a. saba-n   gänzäb-wa-n   wässäd-ku-[b-at]   (malefactive)

   [S.-Acc]$_i$ money-3fs$_{POS}$/her-Acc take$_{perf}$-1s$_S$-[Appl-3fs$_{PP_i}$(Agr$_{PP}$)]

   'I took Saba's money (for the disadvantage/ to the determinant of her) '

   b. ??gänzäb-wa-n saba-n wässäd-ku-[b-at]

Although the order between the applied object and the theme seems free in (63) type of constructions, when both are marked for accusative Case as in (65), the only grammatical order is when the applied argument asymmetrically c-commands the direct object.

First, I assume that the accusative Case of the applied argument is also structural. Because of this DO cannot move across IO to check its Case, since IO has also similar Case that needs to be checked. I assume that the accusative Case checking projection *v* can check the Acc-Case of both arguments. I now turn to the main topic of this chapter.

We have seen that applicatives cannot appear without phi-features, hence the term Agrpp. Such applicative Agrpps are phonologically identical with the non-applicative Agrpps. Non-applicative Agrpps and applicative Agrpps are also the same in some other respects. Both can license null arguments. Moreover, if their coreferent XP is overt, it must be under emphasis. Agro and Agrpp are also exactly the same when it comes to these functions. With regard to the latter function, consider also the following examples:

(66) a. yonas bä-qonjo-w sɨni buna t'ät't'a-Ø   (Amharic)

   J.   with-beautiful-the coup coffee drink$_{perf}$-3ms$_S$

   'Jonas drunk coffee with the beautiful coup'

   b. yonas bä-qonjo-w sɨni buna t'ät't'a-Ø-[b-ät]

   J.   with-beautiful-the coup coffee drink$_{perf}$-3ms$_S$-[Appl-3ms$_{PP}$(Agr$_{PP}$)]

As we can see from the above two examples, the instrumental phrase *with the beautiful coup* is not argument in any of them. However, there is a meaning

difference between the two examples, which can be attributed to the Agrpp element. In (66-b), the instrumental XP is contrastively focused whereas in (64-a) there is no such assertion of meaning. In (66-b), more specifically it presupposed that *'Jonas may not supposed to drink with that beautiful coup, or the coup is not supposed to be used for drinking (coffee)'*. However, such (focused) interpretation cannot be attributed to the non-ϕ-features of Agrpp, as I also discussed in the preceding sections. For this, we can look at again the clause in (66). In (66) it is possible to identify the direct object *coffee* by bare Agro as in (67).

(67) yonas bä-qonjo-w sɨni buna-w-n   t'ät't'a-Ø-w   (Amharic)

    J. with-beautiful-the coup [coffee-def-Acc]$_i$ drink$_{perf}$-3ms$_S$-3ms$_{Oi}$

    'Jonas drunk the coffee with the beautiful coup'

The clause in (67) has the best expression when it pragmatically presupposed that *'Jonas may not suppose to drink that particular coffee'*. This contrastively focused constituent appeared without the corresponding Agrpp element but with the bare Agro, that does not have a preposition-like element as we can see form the morphology of (67). As I have already mentioned in verb "to have" and impersonal clauses both Agro and Agrpp appear without their coreferent XP being focused. Furthermore, they can be found in reference with null arguments. Hence, neither Agrpp nor Agro can be considered as contrastive focus marker. But rather, both Agrpp (minus APPL) and Agro, in general, have to be considered as agreement elements. The question is whether such agreement elements need to project having their own projection in syntax.

There are some controversies with regard to whether agreement elements should project on their own right or not. One of the strong arguments in favor of projecting agreement features in syntax is if such projections license/ check Case. However, as we have seen in the preceding chapter and in this chapter as well, there is no evidence that agreement elements; i.e. either subject agreements or non-subject agreements, check Case in the languages under consideration here. I do not see also any other good reason for such elements in Ethio-Semitic to head their own projection in syntax.

4.4 Summary and Remarks

In this chapter, I have shown that the non-subject agreements are not simple agreement elements; i.e. φ-features. We have three varieties of such elements. One is the realization of applicative + φ-features and the second one is the realization of Case-agreement + φ-feature and the third one is a realization of φ-features. In the applicative + agreement Case, I have suggested following Pylkkänen (2000a, 2000b and 2002) that the applicatives will head their own projection ApplP in the argument structure, since they basically introduce arguments.

In this chapter, I have used most of the data from Amharic. This is mainly for reason of avoiding complexity to the readers. As I mentioned in the introduction section of this chapter, the variation among Ethio-Semitic languages in this case is minimal. See, for example, Hetzron (1972, 1977), Leslau (1992, 1995, 1997, 1999), Petros (1996) among many others. The striking morphological difference is found in tense and aspect morphology, which is a subject of the following three chapters.

Notes to chapter 4

[1] It can be considered as an applicative element or Case-agreement feature.

[2] The association of definiteness and accusative Case is found also in Turkic and other languages (cf. Lyons 1968).

[3] Nominative Case is the unmarked Case in Ethio-Semitic languages, in general.

[4] Note that benefactive and dative Cases in most cases are marked by the same morphological element *lä* in Amharic. Note that also, *lä* cannot be used to identify a direct object.

[5] This is, in fact, in contrast with the applicative construction where the object is clearly an IO and be marked with dative/ benefactive Case. However, if the applicative is malefactive the indirect object cannot also be marked by the element *lä* in Amharic (cf. 15-a).

(i) a. * lä-saba   gänzäb all-ä-b-at   (malefactive)
       to/dative-S. money there.is-3ms$_S$-Apll-3fs$_O$
       'Saba has debt'
    b. saba gänzäb all-ä-b-at   (malefactive)
       S.   money there.is-3ms$_S$-Apll-3fs$_O$
       'Saba has debt'

[6] Although in many languages and in most cases, Case and grammatical function, such as nominative and subject, accusative and direct object, dative and indirect object, are related, there are cases where such correlation may not work. A good example of this sort comes from Icelandic and Slavic languages. In Icelandic, for example, we find a dative or an accusative subject and a nominative or a genitive object.

(i) a. Mér banaði kvefið   (Icelandic)
       me.DAT recoverd the.cold.NOM
       I recovered from the cold
    b. Daginn lengir
       the.day.ACC lengthens
       'The day grows longer'
    c. Ég vænti pín
       I.NOM miss you.GEN
       'I miss you' (Svenonius 2000: 6)

[7] Emphasis is considered in the literature as a type of focus known as emphatic focus as opposed to contrastive focus (cf. Echepare 1997). But in the above example, the emphasized argument has been interpreted in contrast with something else. It has the following type of interpretation: *Jonas killed the lion (not anything else)*. Hence, in this particular example emphasis can be considered as contrastive focus rather than emphatic focus. Consider also (i) where the examples in (i) are that of Haile (1970); also cited in Yabe (2001):

(i) a. almaz bet-u-n   bä-mäträgiya-w t'ärräg-äcc-iw   (Amharic)
      A.   [house-the-Acc]$_i$ with-broom-the clean$_{perf}$-3fs$_S$- [3ms$_O$]$_i$
      'Almaz cleaned the house with the broom'

b. almaz bä-mäträgiya-w   bet-u-n   t'ärräg-äcc-[ɨb-ät]
   A.   [with-broom-the]$_i$ house-the-Acc clean$_{perf}$-3fs$_S$-[p-3msPP(AgrPP)]$_i$
   'Almaz cleaned the house with the broom'

As Haile (1970) also points out the best expression for the sentence in (i-a) is that when it is pragmatically presupposed that *'the house may not have been cleaned'*. When it comes to the clause in (i-b), it is pragmatically presupposed that *'the broom may not have been supposed to be used for cleaning the house'* . (See also Yabe 2001). Haile (1970) refers to such elements as specified to +focus-like feature.

Since there is no "uniformity" of meaning for such elements (their meaning ranges from contrastive focus to emphatic and adversely affected emphasized object), I refer simply to this function of these elements as +emphasis feature, or alternatively following Haile +focus-like feature.

^{8} I thank to Tarald Taraldsen for pointing out to me this point.

^{9} Note that here, these languages are pro-drop languages. In fact, not only subjects and objects but also prepositional/ instrumental phrases can be dropped if there is a proper agreement in the verb.

(i) anbäsa-w-n gäddäl-ku-[b-ät]   (Amharic)
   lion-def$_m$-Acc kill$_{perf}$-1s$_S$-[Apll-3msPP(AgrPP)]
   'I killed the lion with it'

(ii) gäddäl-ä-nnɨ-t   (Soddo)
    kill$_{perf}$-3ms$_S$-3ms$_O$-AMCM
   'he killed him' (Leslau 1992: 156)

In (i) the instrumental phrase with it, in (ii) the direct object *him*, in (22) the indirect object *to him* are dropped.

^{10} Note that, the applicative construction of the sort in (33-b) is known in the literature as symmetric applicative, where both the applied argument and the theme show object properties.

^{11} Note that, I do not mean practically that the applicative affix has to be inserted in its own syntactic projection. What I want to point out is that there has to be a projection that introduces new argument as evidenced by the presence of the applicative element –*l* in the above case. I have used the expression that the applicative *l*- as heading the applicative projection for the sake of avoiding complexity.

^{12} It equals to *'to some body'*.

^{13} Note that in (29) the dative argument is not an applied argument; which is introduced by the corresponding element *l* (of Agrpp). We can leave out the Agrpp from such construction without affecting the existence of the dative argument, which is not the case in (33). Consider (i):

(i) yohannɨs mäs'haf-u-n l-aster mälläs-ä   (dative)
    J.   book-the to-E.   return$_{perf}$-3ms$_S$(minus Agrpp)
   'John return the book to Esther'

[14] See for more discussion of this sort Haile (1970).

[15] Her.

[16] Such relation, though not identical to the Ethio-Semitic languages, is found in some other languages. In Japanese, for example, Pylkkänen (2000a: 9) notes that "adversity causatives are imopssible if the affected argument cannot be interprated as standing in a possessive-like relation to the accusative argument".

[17] See for an interesting discussion of this sort Fulass (1971).

[18] This clause has the following sense of interpretation: 'I took Saba's money to deliver to somebody for the advantage of her'.

[19] Recall that also non-applied dative XP (marked by the dative marker), except a few cases, are identified in Amharic by bare Agro not by Agrpp; as I have pointed out above.

[20] One may object this suggestion. As Trald Taraldsen points out to me, it is possible that after incorporation of a preposition takes place its "former" complement may take on any case-marking available. This cannot be the case in the languages under consideration here, however. In these languages, as mentioned above, since such elements introduce a new argument, I do not see any reason to treat them as incorporated prepositions.

[21] Note that, for Pylkkänen (2000b: 4) "the applied object both c-commands the direct object and necessarily scopes over it".

[22] It is a well-known fact that all verbs do not have accusative objects. Intransitive verbs, for example, are known for lacking a DP complement. Those verbs which have an accusative internal argument are assumed to have a projection of a light verb v. The projection v is assumed to be filled by transitivizer and causative morphemes where such grammatical categories are realized morphologically or could be determined lexically as in transitive verbs. Hence, the association of the accusative Case and v seems convincing, and I do not have much to say here.

[23] The sentence in (58) may mean also that *'I brought to Saba her money'*.

[24] Recall that however, this case alteration is not a common phenomenon in this language group. In Tigrinya and most Gurage languages accusative and dative Cases are marked by the same phonological element.

[25] Consider the following that when a causative head introduces an argument, then the direct object takes an accusative Case.

(i) saba-n   a-mät't'a-h^W-at   (Amharic)
  [S.-Acc]$_i$ caus-come$_{perf}$-1s$_S$-3fs$_O$
  'I brought Saba'

PART THREE:
ASPECT AND TENSE

Chapter Five:
The Morphosyntax of Aspect

5.1 Introduction

In the Semitic languages it has been suggested that the verb inflects to some basic grammatical categories such as perfective, imperfective, jussive, imperative etc. In this chapter, I examine the aspectual categories in ES.

Although such grammatical categories have been a subject of study for many years, the distinction and the function of some of them, especially the so-called perfective and imperfective is not clear and cannot be considered as uniform through the Semitic languages. For example, in a recent book Benmamoun (2000), after examining the so-called perfective and imperfective verbs in Egyptian Arabic, Moroccan Arabic, and Standard Arabic, argues that the forms in question have nothing to do with aspect but rather with voice. Since most of the Ethio-Semitic languages are not studied very well the situation is unclear in these languages. In this chapter I will examine, mostly from descriptive point of view, how the basic aspectual categories are expressed in these language. The theoretical consideration of tense and aspect is given in chapter seven.

The notions aspect and tense have to do with time. Tense locates a situation; a term referring here to events and states, with reference to the moment of utterance while aspect refers to time irrespective of deictic center. "Viewpoints and situation types convey information about the temporal aspects of situations such as beginning, end, change of state, and duration. The notion of temporality is distinct from temporal location, although related to it. Aspect is the semantic domain of the temporal structure of situations and their presentation" (Smith 1997: 1).

Hence, according to Smith "the aspectual meaning of a sentence is a composite of the information from the components of viewpoint and situation type" (Smith 1997: 1). This is because types of situations, such as states and events, determine the aspectual reading of a clause.[1] Furthermore, the aspectual reading of a clause can be affected by prepositional phrases. Consider the following examples from Smith (1997: 2):

(1) Mary walked to school

(2) Mary walked in the park

The two examples are different in terms of what can be called their telicity value. (1) is a clause with a telic predicate, i.e. it presents a complete event that has a goal, or natural endpoint, and the information that the goal was reached, whereas in (2) the predicate is atelic, which presents an event that does not involve a goal, and the information that the event was terminated (Smith 1997: 2). Such telicity aspect is assumed to be established in the predicate-argument structure, hence referred in some works as predicational aspect or inner aspect (as opposed to outer aspect, i.e. viewpoint aspect). In this work, I focus only on what is known as viewpoint aspect.[2]

5.2 Perfective and Imperfective

In almost every Ethio-Semitic languages, verbs are traditionally classified as perfective and imperfective.[3] The perfective form is the one which we find in dictionary citation. Both forms, in Semitic in general, are bound and are identified morphologically by their internal structure. They are marked basically by non-concatenative morphemes.[4]

There is a major controversy concerning the forms, which I treat simply as aspect. Some grammarians consider such forms as tenses rather than aspects. That is, the perfective as past tense and the imperfective as non-past. For some others, making such a distinction seems irrelevant and, they use to refer to both forms sometimes as tense and another time as aspect. However, as we will see in this chapter, in Ethio-Semitic languages there is a clear distinction between past and perfective; and non-past and imperfective. The forms in question are primarily aspectual forms and should not be considered as tenses. The situation may be different in non-Ethiopic Semitic languages. Since this is a matter of an empirical fact, I examine the issue in the following sections.[5]

5.2.1 The Morphosyntax of Perfective

The distinction between perfective aspect and past tense is very difficult to draw in the Semitic languages in general. However, a critical examination of these features in natural languages reveals that these two grammatical categories can be distinct.

Perfective is an aspect which is not deictic whereas past is a tense which refers to a past event with reference to a deictic center; i.e. a moment of speech. What is important in identifying a certain grammatical category is to determine whether the form in question is the basic meaning or an implied one (cf. Comrie 1985).[6]

In this section, I examine whether the form, which I simply glossed as perfective in previous chapters, is really an aspect form or a tense marker. [7] However, in order to do this we need to look at the imperfective form to some extent, although, the imperfective is going to be discussed in a separate section.

Note that, the so-called perfective and imperfective verb forms do not behave uniformly in all Ethio-Semitic languages. In simple past and non-past clauses in some languages the perfective and imperfective verb forms may appear with tense markers while in some others not. [8] These facts can be summarized as follows:

(3) Variety one
    bare perfective = past
    bare imperfective = non-past

(4) Variety two
    bare perfective = past
    imperfective + non-past tense marker = non-past

(5) Variety three
    perfective + past tense marker = past
    imperfective + non-past tense marker = non-past

(6) Variety four
    perfective + past tense marker = past
    bare imperfective = present

(7) Variety five
    perfective + main clause marker (AMCM) = past
    imperfective + main clause marker (AMCM) = non-past

When it comes to the appearance of the perfective form in the simple past, varieties one and two mentioned in (3) and (4) are the same. In both varieties the bare perfective form marks simple past. Varieties three and four in (5) and (6) are also the same. In both cases simple past is marked by the addition of the tense marker to the perfective verb form. Hence, if we consider perfective in simple past, the Ethio-Semitic languages can be subsumed into three varieties.

(8) Variety one

    bare perfective = past

(9) Variety two

    perfective + past tense marker = past

 (10) Variety three

     perfective + AMCM = past

These three varieties can also be reduced into two. Those forms that have no visible tense marker can be grouped into one, and those that do not into another. For ease of discussion, I will name the first group PERF-noT languages, and the latter PERF-T languages. I briefly examine each group below.

5.2.1.1 PERF-noT Languages

Most of the Ethio-Semitic languages such as Amharic, Argobba, Harari, Silte, Soddo, Tigre etc. fall into this group. In this group, the bare perfective form; i.e. without tense marker, can denote past tense in matrix clauses as we can see from the following examples.

(11) yonas ambesa gäddäl-ä   (Amharic)

    J.   lion kill$_{perf}$-3ms$_s$

    'Jonas killed a lion'

(12) aan bäharlee dig-a   (Harari)

    me after come$_{perf}$-3ms$_s$

    'he came after me' (Leslau 1958: 14)

(13) qatal-a   (Silte)

   kill$_{perf}$-3ms$_S$

   'he killed'   (Gutt 1983: 6)

(14) gemmät-a   (Argobba)

   estimate$_{perf}$-3ms$_S$

   'He estimated' (Leslau 1997: 46)

(15) ɨñña anbäsa qätäl-nä   (Wolane)

   we lion kill$_{perf}$-3ms$_S$

   'we killed a lion'

(16) abäb ambas ättär-ä   (Endegeñ)

    A. lion kill$_{perf}$-3ms$_S$

   'Abeb killed a lion'   (Nega 1999: 19)

(17) 'ab asmära tä-woläd-ku   (Tigrinya)

    in A.   pass-born$_{perf}$-1s$_S$

    'I was born in Asmara'   (Kogen 1997: 437)

(18) 'angaf-a   (Tigre)

   save$_{perf}$-3ms$_S$

   'he saved' (Raz 1982)

(19) h'or-ä p'awlos Habä dämasqo   (Ge'ez)

   go$_{perf}$-3ms$_S$ P. to D.

   'Pawlos went to Damaskus' (Haile n.d.)

(20) qät't'är-hu   (Mäsqan)

    Kill$_{perf}$-1s$_S$

    'I killed' (Shikur 1989)

(21) lätäm-ä   (Gafat)

   arrive$_{perf}$-3ms$_s$

   'he arrived' (Leslau 1945: 65)

(22) räta mät'af wässäd-o-Ø[9]   (Soddo)

    R.   book   take$_{perf}$-3ms$_s$-*u*(AMCM)

   'Rata took a book'

Although many works fail to address explicitly whether the forms are basically tense or aspect marker there are some works that consider the form as primarily aspect marker. For example, Demeke and Meyer (2001) after examining the Amharic tense system suggest that in this language the basic meaning of the form in question is aspectual. One of the reasons (for taking such a form as perfective) suggested in Demeke and Meyer (2001) is that, it can be used in non-past contexts as in (23).

(23) a. yonas msa-w-n   ɨyyä-bälla-ø näw   (Amharic)

    J.   lunch-def/his-Acc prog-eat$_{perf}$-3ms$_s$ be$_{pres}$(3ms$_s$)

   'Jonas is eating the/ his lunch'

  b. yonas gänzäb ɨnd-agäññ-ä   yɨ-mät'-all

    J.   money comp-find$_{perf}$-3ms$_s$ 3ms$_s$-come$_{impf}$-Aux$_{pres}$

   'Jonas will come as soon as he gets money'

In both examples of (23), the verbs 'eat' and 'find' are in the perfective form whereas they do not mark tense. In (23-a), the tense reading is induced by the copula *näw*; in (23-b) the tense of the subordinate clause is determined by the tense of the main verb which itself is marked by the auxiliary *all*. In fact, the example in (23-b) may trigger another question. Since the time referred by the embedded clause is prior to the time of the matrix clause there is another option to take the form in question as relative past marker. However, this prediction immediately will fade out when we realize the fact that any verb can appear in the embedded clause while having relative past interpretation in the same way as the perfective we saw in (23-b). Consider the examples in (24);

(24) a. yonas gänzäb si-y-agäññ   yɨ-mät'-all   (Amharic)

  J. money comp-3ms$_s$-find$_{impf}$ 3ms$_s$-come$_{impf}$-Aux$_{pres}$

  'Jonas will come when he gets money'

 b. yonas msa-w-n   bält-o   yɨ-mät'-all

  J. lunch-def/poss-Acc eat$_{gerund}$-3ms$_s$ 3ms$_s$-come$_{impf}$-Aux$_{pres}$

  'Jonas will come after he ate his lunch'

In (24-a) the imperfective is used in both subordinate and matrix clauses and the time of the subordinate clause is identical with the one in (23-b). Note also that we can have both perfective and imperfective embedded under a perfective verb, denoting a situation which has taken place prior to the time of the matrix clause (cf. 25).

(25) a. yonas gänzäb si-y-agäññ   hedd-ä   (Amharic)

  J. money comp-3ms$_s$-find$_{impf}$ go/leave$_{perf}$-3ms$_s$

  'Jonas left when he got money'

 b. yonas gänzäb ɨnd-agäññ-ä   hedd-ä

  J. money comp-find$_{perf}$-3ms$_s$ go/leave$_{perf}$-3ms$_s$

  'Jonas left as soon as he got money'

Consider also (26) where the form of the embedded verb is the so-called gerund and the time of reference denoted by the embedded clause is relative past.

(26) yonas gänzäb agäññit-o   hedd-ä   (Amharic)

  J. money find$_{gerund}$-3ms$_s$ go/leave$_{perf}$-3ms$_s$

  'lit. Jonas got money and, then he left'

As we can see from the above examples, it seems the case that the tense interpretation of the embedded clause does not matter at all to the verb forms. Note that also, if the perfective form is a relative past marker when we add tense marker into such a form, we will expect to have perfect reading. Although this is the case in some languages, as we will see later there are languages where the addition of tense marker to the perfective verb form does not produce perfect reading. Thus, taking the

perfective form of the verb as a (relative) past tense marker does not seem convincing. In these languages, there is no evidence that relative past is expressed morphologically. Furthermore, as Leslau observes, "with certain intransitive verbs or with verbs that have the meaning of becoming a condition, or with 'impersonal' verbs, or in general statements, the perfective may express the present, especially if the action occurs at the moment of speech" (Leslau 1995: 290).

(27) tämma-ø-ññ   (Amharic)
    be.thirsty$_{perf}$-3ms$_S$-1s$_O$
    'I am thirsty'

(28) mässäl-ä-ññ
    seem$_{perf}$-3ms$_S$-1s$_O$
    'It seems to me'

(29) mätta-hu
    come$_{perf}$-1s$_S$
    'I am coming', 'I will be right there', 'Here I am!'[10]

This is not, in fact, unique in Amharic. The so-called impersonal verbs of the type in (27) in most Ethio-Semitic languages denote present time. The following examples are from Tigrinya in which according to Teferra (1979: 113) the impersonals with the perfective form usually denote present meaning.

(30) a. t'ämäy-ä-nni   (Tigrinya)
     hunger$_{perf}$-3ms$_S$-1s$_O$
     'I am hungry'
   b. däxäm-ä-nni
    tire$_{perf}$-3ms$_S$-1s$_O$
    'I am tired' (Teferra 1979: 113)

There are also some other verbs such as the verb of existence which denote present tense while having the perfective form.

(31) ɨzih säw   all-ä   (Amharic)

    here man there.exist$_{perf}$-3ms$_S$

   'there is a man here'

Based on the above discussed facts, I suggest that the past tense reading obtained from the perfective verb form in these languages is not the basic meaning. Goldenberg (1964), Demeke (2000), Demeke and Meyer (2001), suggest also the same to Amharic tense system. According to Goldenberg (1964), Demeke (2000), Demeke and Meyer (2001), the form in question is primarily an aspectual marker. However, the question is why such an aspectual form; i.e. perfective denotes past in many constructions, but not say others, such as imperfective. The natural way to account this fact is to assume past tense as a secondary meaning to the perfective. In other words, past tense to the perfective form of the verb in the languages discussed above can be considered as an abstract feature.

(32) The temporal future structure of perfective verb form in PERF-noT languages

    +perfective

    ± abstract tense(past)

5.2.1.2 PERF-T Langauges

In this language group, the interpretation of tense and aspect seems a straightforward matter. In this group since there is a morphological tense marker along with the so-called perfective form, in what can be called simple past, there is no need to think the form in question as marking tense.

In this group, there are two languages from the 2TG — Zay and Muher;   and all, except Endegeñ from the 3TG. In Zay the tense marker is an auxiliary and must appear in simple past, according to Leslau (1999: 68ff.). [11]

(33) a. nädäd-ä-nu   (Zay)

    burn$_{perf}$-3ms$_S$-past

    'it burned'

b. mät'a-a-nu

come$_{perf}$-3ms$_S$-past

'he came' (Leslau 1999: 68)

In Muher and the 3T speech varieties, excluding Endegeñ, the tense marker is a sort of affix. This element is sometimes referred to as main clause marker. However, for the reason which will be clearer in the following chapter and chapter eight, I consider this particle as past tense marker in these languages.[12]

(34) ataxɨlt   qäbbär-ä-m   (Muher)

eucalyptus plant$_{perf}$-3ms$_S$-past

'he planted eucalyptus' (Leslau 1992: 197).

(35) saba cänn-äcc-ɨm   (Ezha)

S. come$_{perf}$-3fs$_S$-past

'Saba came'

As mentioned above, in this language group, the interpretation of tense and aspect is clear. The vocalic melody marks aspect. Unlike the PERF-noT languages, in this group there is no need to assume an abstract tense feature in matrix clauses (which can be associated with such a form since tense is marked morphologically).

(36) Perfective Verb Form

[V$_{+aspect, -tense}$]

5.2.1.3 Summary

In the above discussion we have seen three types of simple clauses with the perfective form of the verb; the Amharic type, the Soddo type and the Ezha type. The Amharic type is found in Amharic, Silte, Endegeñ, Argobba etc. (i.e. the bare perfective marks past in simple clauses); the Soddo type is found in Soddo and Gogot (i.e. the perfective verb form accompanied by main clause marker); and the Ezha type is found in Muher and the 3T speech varieties excluding Endegeñ (i.e.

there is a past tense marker along with the perfective form of the verb in what we call simple tenses). In matrix clauses in the Amharic and the Soddo types I suggest that there is an abstract past tense feature along with the perfective form of the verb. On the other hand, in the Ezha type since there is a visible morphological past tense marker the perfective form of the verb can be considered as having no tense feature.

5.2.2 The Morphosyntax of Imperfective

As mentioned above, the Ethio-Semitic verb forms are classified into perfective and imperfective. This is what the Ethiopian traditional grammarians called primary and secondary verb forms, *qädamay anqäs'* and *kal'ay anqäs'* respectively. The imperfective form is different from the perfective not only in its internal morphology but also by the agreement morphemes attached to this form. In the perfective form the subject agreement morphemes are suffixes and cannot be broken down into further grammatical functions. In the imperfective, however, they are prefixes or prefix - suffix combinations and in most cases they can be broken down into number, gender and person markers (cf. Halefom 1994, Yimam 1988).

As I have grouped the different varieties of perfective/ past into two groups, it is also possible to categorize the appearance of the imperfective form in non-past in all the languages into two groups as well. In the simple non-past tense constructions in Ethio-Semitic languages, there are generally two varieties. In some languages, the imperfective verb form appears with a tense marker; i.e. with an auxiliary or an affix, and in some others it can appear without visible tense marker. I will call languages which have the former type IMPF-T languages and the latter IMPF-noT languages for ease of discussion.[13] I will examine these two groups in sections 5.2.2.1, and 5.2.2.2, respectively.

5.2.2.1 The Imperfective Form in IMPF-T Languages

In languages such as Muher, Amharic, Argobba, Harari, Silte, Wolane, Zay, the imperfective form appears with the present tense marker, to express non-past. In Muher this tense marker is a sort of affix whereas in the other languages in this group it is an auxiliary. Except in Wolane and Silte the present auxiliary is *al(l)-* meaning 'be present, exist' which is assumed to be a triradical root in the earlier history of the languages as evidenced by Ge'ez √*hlw*.

In Muher a simple non-past tense is expressed by a separate tense marker which, in fact, has been traditionally considered as a main clause marker. However, as discussed in chapter eight the elements labeled by Hetzron (1968, 1972, 1977) as main verb markers in Muher, can be taken as tense markers. In the simple non-past, these tense markers are obligatory with the imperfective form of the verb. The vocalic melody can be taken as basically an imperfective aspect marker rather than tense. Furthermore, since the non-past tense is realized with a visible morpheme, it is clear that there is no abstract tense feature associated with the aspectual form in matrix clauses.

(37) ataxɨlt   yɨ-qäbr-u   (Muher)

   eucalyptus 3ms$_S$-plant$_{impf}$-present

   'he plants eucalyptus'(Leslau 1992: 197).

In the other languages in this group, the imperfective form is realized in affirmative main clauses with an auxiliary.

(38) yonas mɨsa-w-n   yɨ-bäl-all   (Amharic)

    J.   lunch-3m$_{poss}$-Acc 3ms$_S$-eat$_{impf}$-Aux$_{pres}$

   'Jonas eats/ will eat his lunch',

(39) bä-yyä qäna-w tämari bed tɨ-hed-äll-ah   (Argobba)

   on-each day-def student house 2ms$_S$-go$_{impf}$-Aux$_{pres}$-2ms$_S$

   'do you go to school every day?'   (Leslau 1997: 50)

(40) kullu ahli-m   išiš   y-adɨj-aal   (Harari)

    all   relatives-the butter 3ms$_S$-bring$_{impf}$-Aux$_{pres}$

   'all the relatives (will) bring butter' (Leslau 1958: 22)

(41) yɨ-säbr-äl   (Zay)

   3ms$_S$-break$_{impf}$-Aux$_{pres}$

   'he breaks/ will break' (Leslau 1999: 78)

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(42) yɨ-säbr-aan   (Silte)

    3ms$_S$-break$_{impf}$-Aux$_{pres}$

    'he breaks/ will break' (Leslau 1999: 78)

(43) yɨ-säbr-an   (Wolane)

    3ms$_S$-break$_{impf}$-Aux$_{pres}$

    'he breaks/ will break' (Leslau 1994: 78)

The case in the languages represented by the examples from (38) to (43) is the same with Muher. In all cases, it is not difficult to consider the imperfective, as an aspect marker rather than tense. This is because the appearance of the auxiliary is to mark tense. This is supported by the fact that, if the auxiliary is changed the sentence will have different readings in terms of time reference, as illustrated by the following examples.

(44) yonas mɨsa-w-n   yɨ-bäla   näbbär   (Amharic)

    J.   lunch-3m$_{pos}$-Acc 3ms$_S$-eat$_{impf}$ Aux$_{past}$

    'Jonas was eating his lunch'

(45) ti-kätb-i när-ti   (Harari)

    3fs$_S$-write$_{impf}$-3fs$_S$ Aux$_{past}$-3fs$_S$

    'she was writing' (Leslau 1958: 21)

(46) yɨ-säbr naar   (Silte)

    3ms$_S$-break$_{impf}$ Aux$_{past}$

    'he was breaking'

In this group, it is clear that the non-concatenative element of the matrix verb does not denote tense since tense is marked either by an auxiliary or by a suffix tense marker.

(47) Imperfective Verb Form in IMPF-T languages

[V$_{+aspect, -tense}$]

5.2.2.2 The Imperfective Form in IMPF-noT languages

As mentioned above, in languages, which belong to this group, there is no visible present tense marker in matrix clauses. That is to say, the imperfective verb form appears without visible tense marker in all clause types — subordinate, main and simple clauses. This type subsumes two varieties. In the first variety, simple non-past is expressed by the bare imperfective form, and in the other by the imperfective + AMCM. In the languages that use bare imperfective form to mark non-past, there is a difference between the 2T languages and the 3T languages. In 2T languages, the construction can be considered as present or future depending on the context whereas in the 3TG, it marks present, not future. Hence, I organize the discussion along these lines in the following sections. I discuss first the bare imperfective in 2T languages, then the imperfective plus AMCM constructions. In the last section, I discuss the bare imperfective in 3T languages.

5.2.2.2.1 Bare Imperfective in 2TG

This group consists of four languages — these are Tigre and Geʻez from the Northern branch, Mäsqan and Gafat from the Southern branch. I examine one language from each subfamily.

5.2.2.2.1.1 Simple Non-past in Mäsqan

Unlike the Amharic type languages, the imperfective form in Mäsqan appears without an auxiliary in matrix clauses and invariably marks non-past. However, in this language the imperfective form can also appear with the present auxiliary *u*. Shikur (1989), classifies these two as simple imperfect and compound imperfect. From the definition he proposes, it is hard to find any clear distinction between the two cases.[14] However, judging from the English glosses of the examples, it is possible to consider the simple imperfect as a simple non-past, and the compound imperfect as present progressive. Consider the following from Shikur (1989: 25 and 27) where he refers to (48) as simple imperfect and (49) as compound imperfect.

(48) yɨ-käfɨt   (Mäsqan)

$3ms_s$-open$_{impf}$

'He opens/ will open'

(49) yɨ-säbr-u   (Mäsqan)

$3ms_s$-break$_{impf}$-Aux$_{pres}$

'He is breaking'

In this language the imperfective form of the verb can also combine with past tense marker as in (50).

(50) yɨ-säbɨr när   (Mäsqan)

$3ms_s$-break$_{impf}$ Aux$_{past}$

'He was breaking'

If the imperfective form were basically non-past tense marker we may not find such a form combined with past tense marker as in (50). In this work, I consider the form which I glossed above as an imperfective form, is basically an aspect marker rather than tense; i.e. non-past. Thus, the use of the bare imperfective form in non-past simple clauses must be explained by associating an abstract non-past tense feature with the basic +imperfective aspect feature. The temporal feature structure of such a form in Mäsqan can be schematized as in (51). [15]

(51) $[V_{impf} = [V_{+aspect, \pm abstract\ tense\ (non-past)}]$

5.2.2.2.1.2 Simple Non-past in Tigre

In Tigre, in simple and matrix clauses the imperfective and the perfective form of the verb denote non-past and past respectively, without visible tense marker in simple and matrix clauses. In Raz (1983), the imperfective form of the Tigre verb is claimed to have three main functions in relation to time reference. The first one mentioned in Raz is its use in the present context. The second one is its use in the future context. And the third one is seen in a discourse which narrates past events. The first two

uses mentioned by Raz are not, in fact, particular to Tigre. These functions are common to all languages classified as 2TG in ES. The third use mentioned in Raz is not particular to Tigre or to any language group at all. It is a common property of most natural languages. In historical and narrating texts it is common to use the present form of a verb in the past context for rhetorical purpose.

(52) ʾɨt [bet mɨhro] kɨl dol ʾassabuH   sʿas-samaa-n ʾɨ-gays   (Tigre)

    to   school   all time in.the.morning at.eight.o'clok 1s$_s$-go$_{impf}$

    'I go to school every day at eight o'clock in the morning' (Raz 1983: 70)

(53) Haqo kɨl'e ma salas mɨʿɨl '-aqabbl   (Tigre)

    after two or three day 1s$_s$-return$_{impf}$

    'I shall return after two or three days' (Ibid.)

As in Mäsqan and also some other languages the imperfective form in Tigre can appear with tense auxiliaries bearing the aspectual meaning while the temporal meaning is recovered from the auxiliaries. Consider the examples in (54) and (55) where the same form of the verb is used in both past and non-past contexts referring to progressive action.

(54) Hɨna hɨdaay nɨ-tfarrar   halle-na   (Tigre)

    we wedding 1pl$_s$-go.out$_{impf}$ Aux$_{pres}$-1pl$_s$

   'we are going out to the wedding' (Raz 1983: 71)

(55) kalɨb ʾɨb gabay lɨ-sʿe   ʿal-a   (Tigre)

    dog   on road   3ms$_s$-run$_{impf}$ Aux$_{past}$-3ms$_s$

   'A dog was running on the road' (Raz 1983: 71)

The Tigre case is similar to Mäsqan. Hence, the suggestion made with regard to Mäsqan fully extends to Tigre.

5.2.2.2.2 Non-past in Soddo and Gogot

Soddo and Gogot belong to the 2T languages. In both the simple past and the simple non-past there are suffixes traditionally considered to be main verb markers which I abbreviate as AMCM.

(56) räta mät'af yɨ-wäsd-u   (Soddo)

   R.   book $3ms_s$-take$_{impf}$-AMCM

   'Rata will take/ takes a book'

Since such elements appear in past and non-past contexts it is reasonable to assume that AMCMs are not encoded with tense feature (cf. chapter 8). The appearance of the imperfective form in these languages is the same with languages discussed above. In these languages too the imperfective can appear with past tense marker to denote past progressive or habitual. Hence, I consider the vocalic melody of the main verb basically marks imperfective aspect. However, recall that in simple and matrix clauses the imperfective + AMCM combination in these languages gives non-past reading; i.e. without visible tense marker. For this, I suggest that, there is an abstract (non-past) tense feature which is attached with the imperfective verb form in such clauses, similar to the ones mentioned above.

5.2.2.2.3 Bare Imperfective in 3TG

In most languages known to have a three tense system, there is a phonologically visible past tense marker realized along with the perfective form of the verb. In this group, there is a language known to have no visible tense marker in the past. This language is Endegeñ, as mentioned above. Note that in all 3T languages, including Endegeñ, the bare imperfective form denotes present tense in a simple clause construction (cf. chapter 6). Although the bare imperfective denotes present tense without visible tense marker, it is hard to consider such a form as primarily tense marker. This is for the same reason provided to the other languages above. Consider (57), (58) and (59) where the imperfective form is used in combination with a tense marking auxiliary.

(57) yɨ-säwɨr-ba   (Endegeñ)

    3ms$_s$-break$_{impf}$-Aux$_{past}$

    'he was breaking'

(58) yɨ-säbɨr   banä   (Chaha)

    3ms$_s$-break$_{impf}$ Aux$_{past}$

    'he was breaking'

 (59) tɨ-ri' baandä   (Ennemor)

    3fs$_s$-sleep$_{impf}$ Aux$_{past}$

    'she was sleeping'

The examples in (57), (58) and (59) may illustrate that the imperfective form in 3T languages is almost the same as in the other IMPF-noT languages. The difference between these two language groups is minimal. In 3TG, the bare imperfective expresses present tense. Meaning, the abstract tense feature is a present tense feature, whereas in other 2T languages in the IMPF-noT group, it is a non-past feature; i.e. present or future tense.

(60) 3TG

   V$_{impf}$ = +aspect

       ±abstract tense (present)

(61) 2TG of IMPF-noT

   V$_{perf}$ = +aspect

       ±abstract tense (non-past, i.e. present or future)

5.2.3 Summary

In all the languages we saw above, the imperfective and the perfective are primarily aspectual forms. Categorizing these forms as imperfective and perfective equally valid in every Ethio-Semitic language. Whether the bare verb occurring in such

forms denotes past, present or non-past, or whether it is combined with tense marking elements in a simple clause, does not make any difference with respect to this conclusion. In this respect the variation between the various Ethio-Semitic languages is minimal. None of them primarily represents tense through non-concatenative morphology. Tense in such cases, however, can be considered as secondary meaning, in Comrie's (1985) terminology. That is the perfective aspect may have an abstract past and the imperfective an abstract non-past. It is because of this that we get non-past and past readings from the imperfective and perfective forms respectively in matrix clauses. In the following section, I discuss progressive and perfect constructions.

5.3 Perfect and Progressive Constructions

The distinction of tense versus aspect is a controversial issue in linguistics, although the case is addressed a long time ago. In some works it is not clear as to which functions are considered as an aspect and as to which structures are considered as tense. This controversy specially lies on progressive and perfect. In fact, such controversy cannot be considered as surprising since both tense and aspect have to do with time. Both are temporal relations where aspect asserts about the internal constituency of a situation whereas tense measures the time of assertion from the moment of speech. I examine the semantics of tense and aspect in detail in chapter seven. In this section, we will see how such combined expressions such as present perfect and past perfect, present progressive and past progressive expressed in the languages under investigation here.

5.3.1 Progressive

Progressive aspect is marked in two ways in Ethio-Semitic languages. In some languages such as Amharic, Soddo and Tigrinya there is an independent concatenative morpheme for such grammatical function whereas in some other languages there is no such morpheme. I name the former one type A and the latter one type B for ease of discussion.

5.3.1.1 Progressive in Type A Languages

Progressive aspect in Amharic, Soddo and Tigrinya is expressed in two ways. One is by adding the prefixes *iyyä, iyä* and *inda* in Amharic, Soddo and Tigrinya respectively, to the perfective form of the verb.

(62) a. mɨsa-w-n   iyyä-bälla-ø näw   (Amharic)

      lunch-3mpos-Acc prog-eat$_\text{perf}$-3ms$_\text{S}$ Aux$_\text{pres}$(3ms)

    'He is eating his lunch'

  b. mɨsa-w-n   iyyä-bälla-ø näbbär

    lunch-3mpos-Acc prog-eat$_\text{perf}$-3ms$_\text{S}$ Aux$_\text{past}$

    'He was eating his lunch'

(63) a. nab gazɨ'a ɨnda-mas''-a ɨyy-u   (Tigrinya)

    to home prog-come$_\text{perf}$-3ms$_\text{S}$ Aux$_\text{pres}$-3ms$_\text{S}$

    'he is coming to home'

  b. nab gazɨ'a ɨnda-mas''-a ner-u

    to home prog-come$_\text{perf}$-3ms$_\text{S}$ Aux$_\text{past}$-3ms$_\text{S}$

    'he was coming to home'

(64) a. aster iyä-mät't'a-t-n   (Soddo)

    A. prog-come$_\text{perf}$-3fs$_\text{S}$-Aux$_\text{pres}$

    'Aster is coming'

  b. aster iyä-mät't'a-t näbbär

    A. prog-come$_\text{perf}$-3fs$_\text{S}$ Aux$_\text{past}$

    'Aster was coming'

The other way of expressing progressive aspect in these languages is by the imperfective form of the verb plus tense marking auxiliaries.

(65) mɨsa-w-n   yɨ-bäla   näbbär   (Amharic)

   lunch-3mpos-Acc 3ms-eat$_{impf}$ Aux$_{past}$

   'He was eating his lunch'

(66) yɨ-bällɨ'   ner-u   (Tigrinya)

    3ms-eat$_{impf}$ Aux$_{past}$-3ms$_s$

   'He was eating his lunch'

However, Imperfective + Aux construction may have various meanings. For example, in the case of non-past such construction denotes future, present, or present habitual depending on the context. The most productive way of expressing "progressive" aspect is by adding the prefix *ɨyyä* in Amharic, *ɨyä* in Soddo and by the prefix *ɨnda* in Tigrinya. [16] In general, what's particular to this group is that, it has a distinct marker for progressive aspect.

5.3.1.2 The Progressive in Type B languages

Most of the Ethio-Semitic languages fall into this group. Languages in this group do not have a separate concatenative morpheme to denote progressive. In this group, the imperfective form of the verb expresses progressive aspect. In such cases tense is denoted by auxiliaries; especially when the action or situation is taking place in the past. Consider the following:

(67) yɨ-säwɨr-ba   (Endegeñ)

    3ms$_s$-break$_{impf}$-Aux$_{past}$

    'He was breaking'

(68) käbädä yɨ-c'an ba/ ban-ä   (Ezha)

    K. 3ms$_s$-come$_{impf}$ Aux$_{past}$ /Aux$_{past}$-3ms$_s$

    'Kebede was coming'

As we can see from the above examples, past progressive is expressed by the combination of the past auxiliary and the imperfective form of the verb. In such examples, it is natural to see tense as expressed by the auxiliary and progressive as expressed by the form of the main verb. However, in the present progressive, we do not find any tense auxiliary in 3T languages such as Ezha and Endegeñ. Consider the following:

(69) yɨ-säwɨr   (Endegeñ)

    3ms$_S$-break$_{impf}$
    'He is breaking'

(70) käbädä yɨ-c'an   (Ezha)

    K. 3ms$_S$-come$_{impf}$
    'Kebede is coming'

These type of constructions also denote present tense (cf. chapter six). Thus, (69) and (70) may also mean present tense as in *lit. 'he breaks'* and *lit. 'Kebede comes'* respectively.

In Tigre, Mäsqan and Ge'ez, although simple non-past is expressed by the bare imperfective verb form in the present progressive construction, the present tense is realized morphologically as a form of auxiliary. Consider the following examples:

(71) a. yɨ-mäs'ɨ' hal-o   (Ge'ez)

    3ms$_S$-come$_{impf}$ Aux$_{pres}$-3ms$_S$
    'he is coming'

  b. yɨ-mäs'ɨ'

    3ms$_S$-come$_{impf}$
    'he comes/ will come'

(72) a. yɨ-säbr-u   (Mäsqan)

    3ms$_S$-break$_{impf}$-Aux$_{pres}$
    'He is breaking'

b. yɨ-käfɨt

    $3ms_s$-open$_{impf}$

   'He opens/ will open'

(73) Hɨna hɨdaay nɨ-tfarrar   halle-na   (Tigre)

    we wedding$1pl_s$-go.out$_{impf}$ Aux$_{pres}$-$1pl_s$

   'we are going out to the wedding' (Raz 1983: 71)

In Eastern Gurage languages unlike the above languages there are phonologically visible tense markers in both present progressive and non-past. The tense markers have, however, different shapes, phonologically speaking, while the form of the matrix verb is the same imperfective as in the other languages in this group; i.e. type B.

(74) a. yɨ-hed-al   (Wolane)

     $3ms_s$-go$_{impf}$-Aux$_{pres}$

    'lit. he goes/ will go'

  b. yɨ-hed-an

    $3ms_s$-go$_{impf}$-Copula$_{pres}$

    'lit. he is going'

5.3.2 Perfect Constructions

The morphological characteristics of past and present perfect constructions in Ethio-Semitic can be summarized as in (75) below.

(75) Present and past perfect in Ethio-Semitic

   a. Variety one

    Gerund + tense marker

   b. Variety two

    Perfective form + tense marker

For ease of discussion, I call the variety one type languages "Gerund-Variety" and the variety two languages "Perfective-Variety".

5.3.2.1 The Gerund-Variety Languages

An independent form which is termed as gerund in Ethio-Semitic is found only in Amharic, Argobba, Tigrinya and Ge'ez. In these languages, perfect is constructed from the so-called gerund form and auxiliaries.[17] The auxiliaries mark tense whereas the main verb marks aspect. That means the absolute tense reading is obtained from the auxiliaries whereas the perfect reading is obtained from the internal morphology of the main verb.

(76) a. yonas anbesa gädl-o-all   (Amharic)

     J.   lion kill$_{gerund}$-3ms$_S$-Aux$_{pres}$

   'Jonas has killed a lion'

  b. yonas anbesa gädl-o   näbbär

     J.   lion   kill$_{gerund}$-3ms$_S$ Aux$_{past}$

   'Jonas had killed a lion'

(77) a. mät'ɨd-u-l   (Argobba)

     come$_{gerund}$-3ms$_S$-Aux$_{pres}$

   'he has come/ arrived'

  b. mät'ɨd-u   ɨmbär

    come$_{gerund}$-3ms$_S$ Aux$_{past}$

   'he had come/ arrived'

Other than Amharic, Ge'ez, Tigrinya and Argobba such constructions, i.e. present perfect and past perfect, are expressed by the perfective form of the main verb and tense auxiliaries. I discuss such construction in the following section.

5.3.2.2 The Perfective-Variety Languages

Languages which belong to this group have perfect construction by the perfective form of the verb. Since perfect and perfective are two different aspects,

the perfective form shall be understood as having two different functions: that of perfective and perfect. I discuss briefly this point in chapter seven.

(78) läqäm-t-an   (Wolane)

   collect$_{perf}$-3fs$_S$-Aux$_{pres}$

   'she has collected' (Leslau 1994: 144)

(79) nakat-ka naar   (Silte)

   beat$_{perf}$-2ms$_S$ Aux$_{past}$

   'you(m.s) had beaten' (Gutt and Mussa 1997: 920) [18]

In some other Gurage languages there are some interesting phenomena. As already noted in Soddo, Gogot and Mäsqan simple past is expressed by the bare perfective form of the verb, whereas the present perfect is expressed by the perfective form of the verb and by the addition of the suffix *m*. Consider the following examples:

(80) Simple past

   a. ge-yi acc-o→(u-ä)   (Soddo)

     house-the close$_{perf}$-3ms$_S$-AMCM

    'The house is closed'

   b. qät't'är-hu   (Mäsqan)

     Kill$_{perf}$-1s$_S$

    'I killed'

   c. säbbär-ätt-i   (Gogot)

     break$_{perf}$-3fs$_S$-AMCM

    'She broke'

(81) Present perfect

   a. ge-yi acc-u-m   (Soddo)

     house-the close$_{perf}$-3ms$_S$-*m*(T$_{pres}$)

    'The house is closed'

   b. qät't'är-hu-m   (Mäsqan)

killperf-1ss- *m*(Tpres)

'I have killed'

   c. säbbär-ätt-m   (Gogot)

     breakperf-3fss- *m*(Tpres)

   'She has broken'

For these languages, i.e. Soddo, Gogot and Mäsqan, it seems natural to assume what brings a sense of present reading is that the suffix element *m*. Though, this is a natural way of interpreting this fact, when we look at the counter past perfect form in these languages, i.e. Soddo, Gogot and Mäsqan, we find some unexpected construction. In this languages we find the morpheme *m* along with the past tense marker in pluperfect. Consider the following:

 (82) Past perfect

   a. ge-yi acc-u-m näbbär   (Soddo)

     house-the closeperf-3mss-*m* Auxpast

   'The house was closed'

   b. qät't'är-hu-m bannä   (Mäsqan)

     Killperf-1ss-*m* Auxpast

   'I had killed'

   c. säbbär-ätt-m näbbär   (Gogot)

     breakperf-3fss- *m* Auxpast

   'She had broken'

It is important here to examine what the reason for this is. There are two ways to deal with this issue. One is to assume *m* as a morphological marker for perfect and the other is to take such element as a present tense marker; in which its realization restricted with reference to perfect. If we assume the former, what gives a sense of present time reference in the present perfect construction is a phonological zero tense marker.[19] However, such suggestion is unlikely to be true, especially when we examine such construction in the other Ethio-Semitic languages. In almost all Ethio-Semitic languages, such grammatical categories are expressed by at least two components, i.e. the verb and a phonologically

visible tense marker, mostly an auxiliary. Thus, it seems the case that the morpheme *m* in Soddo, Gogot and Mäsqan is a present tense marker. If this suggestion is true, the appearance of such morpheme with the past tense auxiliary in the past perfect/ pluperfect construction is unexpected and, hence, needs explanation.

Note that, as discussed in the following chapter in more detail, other than Soddo, Gogot and Mäsqan the suffix morpheme *m* is found in Muher and in most 3T languages being, in fact, a past tense marker. Though in these two groups, it has two different references; i.e. past in one group and present in the other; its appearance in past perfect is the same. Meaning, in both language groups it appears in pluperfect construction along with the past tense marking auxiliary. Hence, it might be wise to take such element as also specified for some other features — affirmative main clause features.[20] The feature structure of such element can be understood as in (83).

(83) the future structure of *m*

    + tense

    + AMCM

If the element *m,* in Soddo, Gogot, Mäsqan, and the 3T languages, has the feature structure illustrated in (83), one possibly suggests that, in the pluperfect construction it has only AMC-features but not tense (cf. 84).[21] If this suggestion is correct, it means that the element *m*, cannot be considered as contentless in pluperfect construction.

(84) the feature structure of *m* in pluperfect

    - tense

    + AMCM

This is true especially when we look this element with respect to other AMCMs. AMCMs will not appear along with *m*. Consider the following examples:

(85) a. räta mät'af wässäd-ä-m   (Gogot)

    R. book take$_{\text{perf}}$-3ms$_{\text{s}}$-*m*(T$_{\text{pres}}$)

'Reta has taken a book'

b. räta mät'af wässäd-ä-m näbbär

    R.   book take$_{perf}$-3ms$_s$- *m* Aux$_{past}$

    'Reta has taken a book'

(86) a. säffär-ä-m   (Soddo)

    measure$_{perf}$-3ms$_s$ -T$_{pres}$

    'he has measured'

b. *säffär-o-ø-m

    measure$_{perf}$-3ms$_s$ -AMCM-T$_{pres}$

    'he has measured'

The examples in (85) and (86) are, I think, a strong support for the above claim that in the case of pluperfect the morpheme *m* can be understood as specified for AMC-features only — not to tense. If this is the case, the morpheme *m* in pluperfect construction in Soddo, Gogot, Mäsqan (and in most 3T languages as well) can not be a realization of TP rather it is a realization of a functional projection which is associated with its affirmative main clause features.[22]

5.4 Summary

In this chapter, I have examined the major aspectual categories in Ethio-Semitic languages. We have seen that both perfective and imperfective in ES may or may not appear with visible tense markers in what is known as simple tenses. In all occasions, however, such forms can be considered primarily as aspectual categories. In languages/ constructions where such forms appear without visible tense marker, I suggest that there is an abstract tense marker. That is why we get tense reading without visible tense markers.

In this chapter we have seen also the perfect and progressive constructions. In ES perfect tenses can be constructed in two ways. In one group of languages, it is expressed by the gerund form of the verb and tense marking auxiliaries, and in

the other group of languages, it is expressed by the perfective form of the verb and tense marking particles.

(87) Perfect constructions
   a. type one
     perfective + tense marker
  b. type two
    gerund + tense marker

In the case of progressive, we have seen two types of languages. One type of languages have a progressive marker and the other group of languages do not have such element. Those two groups in general have three varieties. These varieties can be listed as follows:

(88) Progressive constructions
    a. Variety one
     bare imperfective verb form
   b. Variety two
    progressive marker + perfective verb form + tense marking auxiliary
  c. Variety three
    imperfective verb form + tense marking auxiliary

I will address the derivation of the various aspectual categories that we saw in this chapter, in chapter seven since there are some crucial points that we have to see first with regard to the tense system of these languages.

Notes to Chapter 5

[1] In fact, for some other grammarians, aspect is basically a viewpoint of a situation. According to this view the various situation types cannot be considered as aspectual forms rather the realization of part of the components of viewpoint. For example, if we take the words *begin* and *stop* in many works they are considered as aspectual verbs. However, if we assume that a situation has three components as in (i), every situation type (i.e. including the so-called aspectual verbs), according to Kamp and Reyle (1993), can be explained by relating the eventualities described by the verbs to the schema presented below.

(I)   preparatory phase   culmination point   result state

          I   II   III   (Kamp and Reyle 1993: 558)

Let us consider the following examples and the explanation provided by Kamp and Reyle (1993: 558):

(ii) a. Mary began to write the letter.
     b. Mary stopped writing the letter.

Although, in the case of most verbs we can explain the eventualities as part and whole, when it comes to verbs of the type mentioned above, it can be understood as follows: "In the case of [(ii-b)] the relation is not simply one of part and whole. Rather, the sentence *asserts* that the part leading up to the culmination point (part I) was broken off before the culmination point was reached. And [(ii-a)] describes *initial phases* of writing events, i.e. initial segments of phase I of schema [(i)]" (Kamp and Reyle 1993: 559).

[2] In fact, the distinction between viewpoint aspect and telicity aspect is not in sharp contrast. The notion of telic has some thing to do with perfectivity and atelic with imperfectivity. However, such association is not always coincides. In Semitic almost all predicates can be marked for perfective and imperfective, however, not for telic and atelic values. For example, the predicate *love, hate,* are generally assumed to be atelic, on the other hand *die, win* are telic, and cannot have both oppositions, however, as in other verbs in ES they have perfective and imperfective forms.

[3] This is also the fact to other Semitic languages.

[4] In most works on Ethio-Semitic the terms "perfect" and "imperfect" are used for what I call here "perfective" and "imperfective" respectively. However, except a few works most of them do not explain why they refer to such forms as "perfect" and "imperfect". In linguistics the term perfective is used to denote a grammatical function which has to do mostly with the completion of an action or a situation, whereas the term perfect is used to denote an action or a situation which starts at some point in the past, but is relevant at the time expressed by the absolute tense. Such forms in most traditional works on Ethio-Semitic languages, see for example Leslau's several works, are understood as "compound" forms. This is because mostly the verb combines with an auxiliary to denote such meaning. In this work, however, I use the terms "perfective" and "perfect" as corresponding to different concepts in grammar, and examine how these aspects are expressed in the languages under investigation here.

[5] In fact, aspect and tense unlike mood have to do with time. Consider, for example the following few definitions: "The internal temporal contour of a situation provides the conceptual basis for the notion of aspect, which refers to the grammaticalization of expression of internal temporal constituency" (Comrie 1985: 6). Maslov also states the following; "aspect, tense, and taxis are all grammatical categories of the verb (and of predicates in general), and they all have to do with the idea of time, which, however, is regarded from different view-points in each of these categories" (Maslov 1988: 63). He further mentions that "aspect 'assesses; or characterizes the denoted 'action' (event, process, situation, state etc.) as it progresses or as it is distributed in time, but irrespective of the moment of speech or, as it were, of the time of another action, mentioned or implied" (Ibid.). Comrie also specifically mentioned tense and aspect as follows: "Tense relates the time of the situation referred to some other time, usually to the moment of speaking" (Comrie 1976: 1-2). However, "aspects are different ways of viewing the internal temporal constituency of a situation" (Comrie 1976: 3). Such an outlook constitutes the base for an approach that considers tense and aspect as temporal relations. I examine in detail the theoretical implication of this approach to aspect in chapter seven.

[6] "When a form is said to have more than one meaning, it is often the case that one of these meanings seems more central, more typical than the others. In such cases, it is usual to speak of this central meaning as the basic meaning" (Comrie 1976: 11).

[7] Note that, as I pointed out above, Benmamoun (2000) suggests that in Egyptian Arabic, Moroccan Arabic and Palestinian Arabic the vocalic melody associated with the so-called perfective and imperfective verbs do not mark either aspect or tense. They are markers of voice. However, the so-called perfective verb, is specified by an abstract (past) tense feature. According to Benmamoun this is, however, not true for the imperfective verb. The so-called imperfective verb in those three dialects is considered as unspecified for any tense or aspect feature. This assumption becomes the basis for Benmamoun to account the various grammatical differences observed between clauses constructed from the so-called perfective and imperfective verbs in those three dialects of Arabic. In Ethio-Semitic this is not so. First, the so-called perfective and imperfective distinction, i.e. the morphological marking with the vocalic melody, cannot be associated with voice. Voice in general has nothing to do with the vocalic melody. In almost all Ethio-Semitic languages voice is expressed by concatenative morphemes. Passive voice for example is expressed by the prefix *t(ä)* whereas the active voice can be considered as the unmarked one. Hence, questioning the basic morphological marking relates to aspect and tense.

[8] I use the term bare perfective and bare imperfective when the forms in question appear in a given clause without visible tense marker.

[9] The vowel *o* which is transcribed as third person masculine singular subject marker is not, in fact, a simple agreement marker. The agreement marker for third person masculine singular subject is *ä*. In subordinate clauses we find *ä* instead of *o*. In this language, there is a phonological process which change [ä + u] sequence into a single phoneme *o*. Thus, in the above Soddo example, *o* can be analyzed morphologically as [ä + u] → *o*. That is why I glossed in the morphological line *u* in the place of the empty position noted in the transcription.

[10] It can also mean 'I came'.

[11] As Leslau (1999: 68 ff.) points out the Zay enclitic *nu,* should not be identified with the auxiliary *aan* in Silte which may appear with the perfective form of the verb, since the Silte

construction have different readings from the one in Zay. In Zay, the construction denotes simple past, but the Silte construction can be considered as a present perfect. Consider (i), and for more discussion see the following chapter.

(i) nakat-a-an   (Silte)
      beat$_{perf}$-3ms$_S$-Aux$_{pres}$
   'he has beaten' (Gutt and Musa 1997: 916)

[12] In Mäsqan, Soddo and Gogot there is also an element *m* which can conjugate with the perfective form of the verb. However, this element is not found obligatorily in main clauses, i.e. along with the perfective form or the imperfective form. Its appearance is associated with a grammatical category known as perfect. Consider (i-a) where the bare perfective denotes simple past while, when the element *m* attaches to such a form, it will have a reading of present perfect.

(i) a. säbbär-ä   (Mäsqan)
       break$_{perf}$-3ms$_S$
     'He broke'
    b. säbbär-ä-m
       break$_{perf}$-3ms$_S$-*m*
     'He has broken'

(ii) mss-i mat't'a-ø-m
     man-def come$_{perf}$-3ms$_S$-*m*
      'He has come' (Goldenberg 1970: 93)

Unlike Muher and the 3T languages in Soddo, Gogot and Mäsqan the morpheme *m* can be considered as present tense marker (cf. section 5.3).

[13] These terms are suggested to me by Peter Svenonius.

[14] Note that, in Shikur (1989) the term perfect and perfective and the term imperfect and imperfective are used interchangeably.

[15] Note that Mäsqan belongs to the languages represented as variety one in (4). That is, it does not have visible tense marker in simple past as well. For such varieties, recall that, I suggested the temporal feature structure of the perfective form to be as in (i).

(i) $[V_{perf} = [V_{+aspect, \pm abstract\ tense\ (past)}]$

[16] I will question in chapter seven whether progressive is a different aspect than imperfective in the languages under consideration here.

[17] This is true also to many other natural languages. For example, consider the following example from Russian:

(i) on byl privyk-ši   (Russian)
     he was accustom-GER.(PF.ASP)
    'he was accustomed' (Maslov 1988: 69)

[18] Note that, the present tense marker auxiliary is realized as an affix in Silte (cf. table I) and Wolane whereas the past form is free in Silte and Wolane. In fact, the past auxiliary is a free morpheme in many other languages. However, in a few languages, it can be realized cliticized to the verb. Consider the following:

(i) säppär-hu-ba   (Endegeñ)
     break$_{perf}$-1s$_s$-Aux$_{past}$
   'I had broken' (Nega 1999: 34)
(ii) näqär-ä-m   banä   (Chaha)
     pull$_{perf}$-3ms$_s$-*m* Aux$_{past}$
   'he had pulled out' (Leslau 1950/ 1992: 135)

In Endegeñ, as we have seen above the past perfect form is expressed by the perfective form of the verb and the suffix *ba*, which is the past form of the auxiliary 'be present'. The same is true in Chaha as the example in (ii) may show. In Chaha, unlike Endegeñ the unabbreviated form of the past auxiliary is used and realized as free. Note that, *ba* is a short form of the auxiliary *banä*. The short form is realized cliticized to the verb but not the full form. I assume that the cliticization, of such element to the matrix verb will take place in the phonological component. Note that also, in 3T languages, although it is clear that there is a past perfect construction, there is no present perfect construction. For example, my Ezha informant, who is a fourth year linguistics student (at the time of data collection — the year 2000), unable to find a present perfect construction in Ezha.

In Silte and some other few languages, the shape of the present auxiliary is dependent on the Agr morphemes found affixed to the verb. Because of this, it is difficult to single out a single phonological form for the present auxiliary mentioned to Silte. The situation can be compared with main verb markers in languages such as Soddo and Gogot. Since they have almost similar phonological shapes they might belong to the same origin where through out the passage of time these speech varieties develop different grammatical category on their own way. Or one reserved the old grammatical function which their common ancestor had while it went some other grammaticalization process in the other languages. Consider the following table: (*Imps* below in the table stands for impersonal.)

Table I: the simple past and the present perfect in Silte with the root √*nkt* 'beat' (Gutt and Mussa 1997: 919 & 220)

		Simple Past		Present Perfect		
		V$_{perf}$+Agr$_s$	Agr$_s$	V$_{perf}$+Agr$_s$+Aux$_{pres}$	Agr$_s$	Aux$_{pres}$
Sg.	1	nakatku	ku	nakatkoo	ku	o
	2m	nakatka	ka	nakatkaa	ka	a
	2f	naka__	_	naka__ee_	_	ee_
	3m	nakata	a	nakataan	a	an
	3f	nakatt	t	nakattaat	t	taat
Pl.	1	nakatna	na	nakatnaan	n	aan
	2	nakatkumu	kumu	nakatkumoommu	kumu	ommu
	3	nakatu	u	nakatoon	u	on
	Imps	nakakti	i	nakateen	i	en

[19] This kind of construction is also common among Slavic languages. In what we call present perfect construction in this language group, it is common to find the present tense be "marked" by zero (cf. Maslov 1988). The following examples are from Russia.

(i) u menja rabota napisa-n-a   (Colloquial Russian)
   at me work-NOM.F. write-PAST PASS.PART.(PF.ASP) NOM.SG.F.
   'I have my work written' (Maslov 1988: 80)

(ii) u nas protopl-eno   (Colloquial Russian)
    at us heat-PAST PASS.PART.(PF.ASP) N(impers)
    'our room(house) is heated' (We have our room heated) (Maslov 1988: 81)

[20] Recall the previous discussion that in these Gurage languages we find elements that mark affirmative main clauses. See for a breif discussion on the nature of those elements chapter 8.

[21] I will examine what really AMC-features mean in chapter eight.

[22] See chapter eight for brief discussion and the syntactic representation of AMCMs.

Chapter Six:
The Tense System of Ethio-Semitic

6.1 Introduction

In this chapter, we turn to the tense system of Ethio-Semitic languages. In the preceding chapter, when I examined the basic aspectual categories, I also touched occasionally the tense constructions in these languages. What follows here, is a systematic re-examination of these.

6.2 Tense in Monoclausal constructions

In chapter five, I have pointed out that the Ethio-Semitic languages, in terms of their tenses, can be grouped into two — the two tense group (2TG) and the three tense group (3TG).[1] Languages which belong to the 2TG, distinguish two tenses, morphologically — past versus non-past. That means, in the non-past, the present and the future tenses have the same morphological form. Languages which belong to the 3TG distinguish three tenses; past, present and future. In both language groups there can be a visible tense marker or tense can be expressed by an abstract tense feature (cf. chapter five).

I examine, the 3T languages in section 6.2.1 and, then in section 6.2.2 the 2T languages. In section 6.2.3, I summarize the basic facts observed in both group of languages. [2]

6.2.1 The 3TG

All the Western Gurage languages, except Muher, have a morphological three tense system.[3] (Muher and all the other Ethio-Semitic languages do not syntactically distinct three tenses.) I first examine the past, then the present and the future tenses. Finally, a brief summary will be provided.

6.2.1.1 The Past Tense

Simple past in most 3TG is expressed as in (1) and (2).

(1) käbbädä wärr-ä-m   (Ezha)

    K.   go$_{perf}$-3ms$_s$-past

    'Kebbede went'

(2) näqär-ä-m   (Chaha)

    pull$_{perf}$-3ms$_s$-past

    'he pulled out' (Leslau 1950/ 1992: 135)

As we can see from the above examples in Ezha and Chaha the past tense is marked by the suffix element *m*.[4] This is true to all speech varieties in Western Gurage languages except Endegeñ. As already mentioned, in Endegeñ, however, the bare perfective form; i.e. without visible tense marker, denotes past tense:

(3) säppär-hu   (Endegeñ)

    break$_{perf}$-1s$_s$

    'I broke'

6.2.1.2 The Non-past Tense

In this group, the non-past tense can be divided into two, present and future. While the present is expressed by the bare imperfective form of the verb, the future is marked by some independent morphemes which are also encoded with mood.

6.2.1.2.1 Present

The bare imperfective form can denote present tense in all the 3T speech varieties.

(4) i-säwir   (Endegeñ)

   1s$_S$ -break$_{impf}$
   'I break'

(5) käbbädä yi-c'än   (Ezha)

   K.   1s$_S$-come$_{impf}$
    'Kebede comes'

(6) yi-räxib   (Chaha)

   3ms$_S$-find$_{impf}$
   'He finds' (Leslau 1950/ 1992: 135)

Recall that, in the preceding chapter, in the simple present of 3TG I have suggested that an abstract present tense is encoded on the imperfective form of the verb. That is why we get present tense reading from bare imperfective form in these languages. Meaning, in constructions such as (4), (5) and (6), the temporal feature structure of the imperfective form of the verb can be understood as follows:

(7) + aspect
    + (present) tense

6.2.1.2.2 Future

In this language group, the future tense is divided into two, namely, the definite future and indefinite future.[5] The definite - indefinite alternation is mostly associated with modality, which is related to exactness/ certainty and uncertainty:

> The definite future is used for future events the forthcoming happening
> of which is considered certain, already decided on, no more
> questionable. The indefinite future expresses future tainted with feelings
> of any kind: hope, expectation, promise or threat, doubt, wish, suggestion

- it would happen; fear, worry, wish-lest it happen, contingency: what will happen if something else takes place (real conditional) (Hetzron 1977: 85-86).

6.2.1.2.2.1 Indefinite Future

The indefinite future is a form which is used to express the speakers uncertainty or doubt about the future occurrence of a situation or an action. This form, like the definite future has its own morpheme, i.e. *-se* in Endegeñ and other Peripheral Western Gurage speech varieties; *-šä* in Geyto, Chaha and some other Central Western Gurage speech varieties; and *-še* in Ezha. These elements are added to the jussive form of the verb.[6]

(8) ɨ-sɨr-se   (Endegeñ)

    1s$_S$-break$_{juss}$-T$_{fut}$

    'I might break' (Nega 1999: 41)

(9) käbbädä yɨ-sbɨr-še   (Ezha)

    K.   3ms$_S$-break$_{juss}$-T$_{fut}$

    'Kebbede might break'

(10) yɨ-nxäb-šä   (Chaha)

    3ms$_S$-find$_{juss}$-T$_{fut}$

    'He will find' (Leslau 1983/ 1992: 138)

6.2.1.2.2.2 Definite Future

As mentioned above, the definite - indefinite future alternation has something to do with the speaker's attitude to the proposition. The definite future is used to express an action or a situation which the speaker feels is certainly going to occur. It is formed by suffixing the morpheme *-de/ -te*, or *-k^{w}e* to the imperfective form of the

verb. The realization of *-de* and *-te* is phonologically conditioned in Endegeñ. *-te* is used after long vowels and diphthongs whereas *-de* elsewhere (cf. Nega 1999: 38).

(11) a. yɨ-säwɨr-de   (Endegeñ)

      3ms$_s$-break$_{impf}$-T$_{fut}$

     'he will break'

  b. tɨ-säwɨr-aa-te

    2fpl$_s$*i*-break$_{impf}$-2fpl$_s$*i*-T$_{fut}$

    'you (feminine, plural) will break' (Nega 1999: 39)

(12) a. käbbädä yɨ-säbɨr-te   (Ezha)

     K. 3ms$_s$-break$_{impf}$-T$_{fut}$

    'Kebbede will break'

  b. käbbädä yɨ-c'än-te

     K. 3ms$_s$-come$_{impf}$-T$_{fut}$

    'Kebbede will come'

(13) yɨ-räkɨb-te   (Chaha)

    3ms$_s$-find$_{impf}$-T$_{fut}$

   'He will find'

6.2.1.2 Summary and Explanation

If we exclude Endegeñ, we can reach the following generalization about the morphological realization of tense in 3TG.

(14) Generalization on the morphology of tense in 3TG (preliminary version)
    If there is a morphological visible past tense marker there has to be a
    morphological visible future marker and vise versa.

This generalization holds true for almost all 3T speech varieties. As noted above, the exception is Endegeñ. Endegeñ has a future marker, but does not mark past with visible morpheme.

In the preceding chapter, I have mentioned that a simple morphological form can be considered basically as a marker of a single grammatical category. However, it's also true that such a form may denote some other grammatical functions, and in some instances the basic grammatical function may be "suppressed"; or in Comrie's term "neutralized".[7]

Recall from our previous discussion that, the non-concatenative morphemes such as aspect and mood are the ones which are responsible for the formation of the word class Verb. It means that in any clause (verbal construction), morphologically speaking, there is at least one functional category specified for a categorial feature. This functional category can be modal or aspectual in nature based on the basic meaning that the form in question has. Assume now that the morphological form found in the present tense construction is basically imperfective. However, in such constructions, the form has a present tense reading as well as imperfectivity.

If we assume a syntactic projection of functional categories on purely morphological grounds we will have a structure where aspect and tense occupy the same syntactic node in the present tense of 3TG as in (15).

(15) [TP/AspP [VP

However, as discussed in chapter three, what is important in the syntactic derivation is features. Although the feature tense and aspect are realized in the present tense of 3TG in a single morpheme they have different role in syntax and must project heading their own projections (cf. chapter 7). As discussed in the following chapter, Asp and T establish a temporal ordering between two time denoting arguments of their own.

This suggestion is supported by the morphology of the past and future constructions of these languages. Since there are independent tense markers in the past and future tenses of 3TG, it is logical to assume that there is an independent tense projection along with the aspectual projection. Hence, in all present, future and past of 3TG I assume that there are always projections of aspect and tense as in the following:

(16) [TP [AspP [VP

6.2.2 The 2TG

Unlike the 3T languages, the 2T languages only distinguish between past and non-past tenses, where the non-past is indistinct between present and future. However, the morphosyntax of the 2T systems is not the same across speech varieties. In this regard, we find four different types:

(17) type one
     perfective + tense marker = past
     imperfective + tense marker = non-past

(18) type two
     bare perfective = past
     imperfective + tense marker = non-past

(19) type three
     bare perfective = past
     bare imperfective = non-past

(20) type four
     perfective + AMCM = past
     imperfective + AMCM = non-past

135

For ease of discussion, I call type one languages ASP-T languages, type two IMPF-Aux languages, type three ASP-noT languages, and type four ASP-AMCM languages. I discuss each group below, without going in detail since we have seen already the general temporal properties of these varieties in the preceding chapter.

6.2.2.1 Tense in ASP-T Languages

perfective + tense marker = past
imperfective + tense marker = non-past

This group consists of Muher and Zay. In both tenses, there are morphemes which can be considered as tense markers.

6.2.2.1.1 Muher

The expression of tense in Muher is some what different than the other 2T languages. In Muher, in the past and non-past constructions, we find tense marking morphemes. In previous works such as Hetzron (1968), such morphemes are considered as main verb markers. However, such morphemes cannot be considered as main verb markers and labeled with the forms which we find in the case of Soddo and Gogot (cf. chapter 8). This is basically for the reason that the morphemes which we find in the simple past and in the simple non-past constructions are quite different. Consider the following examples:

(21) a. säbbär-ä-m

   $break_{perf}$-$3ms_s$-T_{past}

   'He broke'

   b. yɨ-säbr-u

   $3ms_s$-$break_{impf}$- T_{pres}

   'He breaks'

(22) a. ataxɨlt qäbbär-ä-m

  eucalyptus plant$_{perf}$-3ms$_S$-T$_{past}$

  'He planted eucalyptus' (Leslau 1981/ 1992: 197)

 b. ataxɨlt yɨ-qäbr-u

  eucalyptus 3ms$_S$-break$_{impf}$-T$_{pres}$

  'He plants eucalyptus'

In fact, as we will see in more detail in chapter eight, the morphemes which we find in the non-past construction in Muher is almost identical with the so-called main verb markers in Soddo and Gogot. However, this does not mean that they have the same function in all the languages.

6.2.2.1.2 Zay

In Zay, unlike Muher both tense markers; i.e. past and non-past, are not simple affixes, although they are realized cliticized to the main verb as in (23).

(23) a. nädäd-ä-nu

  burn$_{perf}$-3ms$_S$-Aux$_{past}$

  'it burned' (Leslau 1999: 68)

 b. yɨ-säbr-äl

  3ms$_S$-break$_{impf}$- Aux$_{pres}$

  'He breaks/ will break' (Leslau 1999: 83)

6.2.2.2 Tense in IMPF-Aux Languages

 bare perfective = past
 imperfective + Aux = non-past

In this group, as in the ASP-noT languages, past tense is marked by the bare perfective form, whereas non-past is marked by the present auxiliary which is added

to the imperfective form of the verb. This type of tense system is found in Amharic, Silte, Wolane, Harari and Argobba. [8]

(24) a. nakat-ku   (Silte)

    beat$_{\text{perf}}$-1s$_S$

    'I beat' (Gutt and Mussa 1997: 919)

   b. ti-nakat-aat

    3fs$_S$-beat$_{\text{impf}}$-Aux$_{\text{pres}}$

    'she beats/ will beat' (Gutt and Mussa 1997: 922)

(25) a. anbäsa gäddäl-ä   (Amharic)

    lion   kill$_{\text{perf}}$-3ms$_S$

    'he killed a lion'

   b. yonas mɨsawn   yɨ-bäl-all

    J.   his.lunch.Acc eat$_{\text{impf}}$-3ms$_S$

    'Jonas eats/ will eat/ is eating his lunch'

(26) a. mohamod anbäsa qättäl-ä   (Wolane)

    M.   lion   kill$_{\text{perf}}$-3ms$_S$

    'Mohamed killed a lion'

   b. yi-hed-al

    3ms$_S$-go$_{\text{impf}}$-Aux$_{\text{pres}}$

    'he goes/ will go'

(27) a. tɨmay   bä-wädäj-ɨyä färäs aräggäz-ku   (Argobba)

    yesterday on-friend-my horse ride$_{\text{perf}}$-1s$_S$

    'I rode on my friends horse yesterday' (Leslau 1997: 46)

   b. yɨ-neggɨd-äl

    3ms$_S$-trade$_{\text{impf}}$-Aux$_{\text{pres}}$

    'he trades/ will trade' (Leslau 1997: 47)

(28) a. baazzinabee   hammisti amät tägeebäl-a   (Harari)

in.our.country five   year stay$_{perf}$-1s$_S$

'he stayed in our country for five years' (Leslau 1958: 14)

b. abdulahi wij yi-wud-al

A.   child 3ms$_S$-like$_{impf}$-Aux$_{pres}$

'Abdulahi likes a baby' (Teshome 1992: 14)

6.2.2.3 Tense in ASP-noT Languages

bare perfective = past
bare imperfective = non-past

What is particular to this group is that, the bare perfective form marks past and the bare imperfective marks non-past. [9] This group consists of languages such as Mäsqan, Ge'ez, Gafat and Tigre.

(29) a. qät't'är-hu   (Mäsqan)

kill$_{perf}$-1s$_S$

'I killed'

b. yɨ-säbr

3ms$_S$-break$_{impf}$

'He breaks/ will break'

(30) a. wä-räkäb-ä   yosef mogäs bä-qɨdmä 'ɨgzi'- u   (Ge'ez)

and-get$_{perf}$-3ms$_S$ J.   honor prep-front lord-his

'And Joseph found grace in his sight' (Gen 39, 4)

b. wäld-yä yɨ-bälɨ' h'ɨbɨst-ä

child-my 3ms$_S$-eat$_{impf}$ bread-Acc

'my child eats bread' (Haile n.d.: 42)

The same auxiliary which marks present tense in Amharic and other similar languages is found in Geʻez and other languages in this group. However, such constructions have different readings from the Amharic type languages. In the Amharic type languages, they are simple non-past construction, i.e. present/ future, whereas in the others, they are present progressive constructions. Consider the following Geʻez example and see, for more discussion, chapter seven.

(31) yɨ-mäsʼɨʻ   hal-o   (Geʻez)

   3ms$_S$-come$_{impf}$ Aux$_{pres}$-3ms$_S$

   'he is coming'

6.2.2.4 Tense in ASP-AMCM Languages

   perfective + AMCM = past
   imperfective + AMCM = non-past

In this group along with the perfective and imperfective aspects we find the so-called AMCM in simple and matrix affirmative clauses. That's why I call this group ASP-AMCM. This group consists of two languages both from North Gurage. These are Soddo and Gogot. Consider the following examples:

(32) a. tɨ-säbr-i-n   (Soddo)

      2fs$_{Si}$-break$_{impf}$- 2fs$_{Si}$ -AMCM

      'you (s.f.) break/ will break'

   b. säbbär-h^{y}ɨ-n

     break$_{perf}$-2fs$_S$-AMCM

     'You (s.f.) broke'

(33) a. tɨ-säbr-ɨ-n   (Gogot)

   2fs$_{\mathrm{s}}$*i*-break$_{\mathrm{impf}}$- 2fs$_{\mathrm{s}}$*i* -AMCM

   'you (s.f.) break/ will break'

   b. säbbär-šɨ-n

   break$_{\mathrm{perf}}$-2fs$_{\mathrm{s}}$-AMCM

   'You (s.f.) broke'

As I have discussed in the preceding chapter, since the morphemes attached to the perfective and imperfective markers are morphologically the same and can be taken as affirmative main clause markers (cf. chapter 8) the tense system of this group languages can be understood along the lines suggested to ASP-noT languages. That means in both contexts, i.e. in past and non-past, we can assume an abstract tense marker to be attached to the aspectual forms.

6.2.2.5 Some Remaining Points

As we have seen above, in 2T languages the distinction of tense is between past versus non-past, being non-past morphologically indistinct between present and future, i.e. the same form marks present and future. However, in some works we find some forms referred to as future tense construction: "An imminent future composed of "imperfect + 'in order to' + 'is' is found in Soddo" (Hetzron 1977: 85). Such kind of constructions in Amharic, for example, in Yimam (1987 E.C.), Beyene (n.d.), Fantaye (1964 E.C.) are also referred to as near future tense. However, they are clearly modal constructions which can be referred to as mood of intention. The misunderstanding of such modal construction as tense construction by Hetzron and many others is not, in fact, a new case. Based on Amharic as briefly discussed by Demeke and Meyer (2001), when this modal construction situated in the non-past context, it implies near future. Because of this, it could be easily mistaken as near future tense (see also Lyons 1967). Such kind of reading is in Comrie's (1985) term "implicature" but not a "meaning" of the form in question. Consider the following example which Hetzron provides from Soddo.

(34) Ø-alf-ɨyyän-ɨn   (Soddo)

   1s$_s$-go$_{impf}$-int-Aux$_{pres}$

 'I am about to go' ('It is so that I go') (Hetzron 1977: 85)

Consider also the following construction in Amharic:

(35) l-i-mäta n-äw   (Amharic)

   int-3ms$_s$-come$_{impf}$ Aux$_{pres}$-3ms$_s$

 'he is about to come'

As we have seen from (34) and (35), the subject in question is intended to come. This kind of intended action by implicature refers to the action expressed by the matrix verbs in (34) and (35) is going to take place in the near future, i.e. not far from the moment of speech. However, this is an implied meaning one can deduce from the context, but not the basic meaning of the grammatical form in question. This can be easily manifested if we change the absolute time reference to the past as in (36).

(36) l-i-mäta näbbär   (Amharic)

   int-3ms$_s$-come$_{impf}$ Aux$_{past}$

  'he was about to come'

(37) Ø-alf-ɨyyän näbbär   (Soddo)

   1s$_s$-go$_{impf}$-int Aux$_{past}$

  'I was about to go'

As we can see from (36) and (37), the constructions above *l-i-mäta* and *Ø-alf-ɨyyän* are simply modal in which the time of reference is determined by the auxiliary *näbbär*. Hence, such constructions can be considered basically modal.

On the other hand, Rose (1996a) notes that, in Muher, there is a future tense which is similar to the 3T languages. If Rose is right, it means that Muher is the only language which marks morphologically three tenses; i.e. having visible morphemes, for present, future and past.[10] However, in previous works, such as Hetzron (1972), Muher is described as having no future marker. Ronny Meyer (p.c.) also supports Hetzron claim.[11] Meyer further suggested me that it might be the case that Rose has got her data from wrong informants. Her informant might be from the 3T speech variety who probably mixed up Muher with 3TG.[12]

Meyer (2000), on the other hand, questions the Zay clitic auxiliary suffixed with the perfective form of the verb in simple past. According to Meyer, such morpheme is not an auxiliary rather a combination of focus and main clause markers. I prefer to leave this issue open for further research.

If the discussion so far is correct in order to incorporate the facts on 2TG, we have to revise the descriptive generalization forwarded based on the data on 3TG above in (14). I repeat the generalization below as (38) for ease of reference.

(38) Generalization on the morphology of Ethio-Semitic tense (preliminary version)
    If there is a morphological visible past tense marker there has to be a morphological visible future marker and vise versa.

However, this generalization cannot hold true to Muher and Zay (if Leslau 1999 is correct). In Muher (and Zay), though there is a morphological visible past tense marker there is no future marker. Hence, in order to include such facts we have to revise the above generalization as follows:

(39) Generalization on the morphology of tense (final version)
    If there is a morphological visible future tense marker there has to be a morphological visible past tense marker.

However, the Endegeñ case is an exception. Recall that, in Endegeñ, there is a phonological visible marker for future tense, but not for past. Past is marked by bare perfective form of the verb.

6.5 Tense in Subordinate and Relative Clauses

In Ethio-Semitic languages, subordinate and relative clauses do not allow to have an affixal tense markers. Except the Eastern Ethio-Semitic languages, the clitic tense auxiliary also will be deleted in subordinate and relative clauses, (especially, if there is an overt complementizer). Consider the following examples:

(40) a. yonas s-i-mät'a   i-hed-all-hu   (Amharic)

    J.   comp-3ms$_S$-come$_{impf}$ 1s$_S$-want$_{impf}$-Aux$_{pres}$-1s$_S$

   'lit. I will go when Jonas comes'

  b. *yonas s-i-mät'a -all   i-hed-all-hu

    J.   comp-3ms$_S$-come$_{impf}$-Aux$_{pres}$ 1s$_S$-want$_{impf}$-Aux$_{pres}$-1s$_S$

(41) a. huma zɨnab yɨ-zänb yɨ-mäsl-äññ-äl   (Argobba)

   today rain 3ms$_S$-rain$_{impf}$ 3ms$_S$-seem$_{impf}$-1s$_{IO}$-Aux$_{pres}$

   'It seems to me that it will rain today'

  b. *huma zɨnab yɨ-zänb-äl yɨ-mäsl-äññ-äl

   today rain 3ms$_S$-rain$_{impf}$-Aux$_{pres}$ 3ms$_S$-seem$_{impf}$-1s$_{IO}$-Aux$_{pres}$

   'It seems to me that it will rain today' (Leslau 1997: 50)

(42) a. näqär-ä-m   (Chaha)

   pull.out$_{perf}$-3ms$_S$-T$_{past}$

   'he pulled out'

  b. yä-näqär-ä

   comp-pull.out$_{perf}$-3ms$_S$

   'he who pulled out' (Lesalu 1992: 133)

However, unlike the above type of tense markers, the past tense auxiliary *näbbär* 'was', which is found in almost all languages under consideration here with slight phonological differences, is found in subordinate and relative clauses.

(43) a. yonas hed-o   indä-näbbär   sämc-ey-all-ähu   (Amharic)

    J.   go$_{gerund}$-3ms$_s$ comp-Aux$_{past}$ hear$_{gerund}$-1s$_s$-Aux$_{pres}$-1s$_s$

  'I heard that Jonas had gone'

  b. *yonas indä-hed-o-all   sämc-ey-all-ähu

    J.   comp-go$_{gerund}$-3ms$_s$-Aux$_{pres}$ hear$_{gerund}$-1s$_s$-Aux$_{pres}$-1s$_s$

  'I heard that Jonas has gone'

As the above examples in (43) show, the past tense auxiliary *näbbär* can appear in subordinate clauses, unlike the present tense auxiliary *all* in Amharic. For most of the languages under consideration here, some of the tense markers do not appear in subordinate and relative clauses whereas some of the auxiliaries do. I call those tense markers which cannot appear in subordinate clauses (along with the complementizers) functional tense markers and abbreviate as FTM, and the other auxiliaries that can appear in subordinate clauses as lexical tense markers and abbreviate as LTM. For example, I consider here the Amharic and Argobba auxiliaries *al(l)* (cf. 40 & 41), the element *m* in (42) as FTM and the auxiliary *näbbär* in (43) as LTM.

As we saw in the above examples, FTMs and complementizers are not compatible. However, we know that tense and complementizers do project from different layers. Hence, what makes T incompatible with complementizer cannot be its tense feature rather some other feature which has a property of the C-system. What kind of feature could it be?

One of the possible suggestion can be +finite feature. However, such suggestion is unlikely to be the case. In these languages it is very difficult to produce any evidence that embedded clauses are non-finite,. For example both subordinate and main

clauses do not have any difference with regard to agreement. If we attribute finiteness to tense, we do not also expect LTMs to appear in subordinate clauses.[13] Furthermore, as we will see in chapter 9, FTMs are incompatible with negation, be it in matrix or in subordinate negative clauses. It means that, finiteness cannot draw a line between subordinate and matrix clauses. Hence, what makes FTMs incompatible with complementizers does not seem the case that the former specified for finite feature, while the subordinate clauses introduced by complementizers lack such specification. Moreover, since finite phrase is assumed to project in the IP-domain (cf. Holmberg and Platzack 1995) the incompatibility of FTMs and complementizers cannot result from competing to the same projection.

Since force is assumed to determine a type of a clause, such as +declarative, +imperative etc., the most likely suggestion is that such a feature to be one of force features. I assume that both FTMs and complementizers are specified for different force features. It is because of this that they are incompatible.[14] We have, in fact, additional evidences that support this claim (cf. chapter 9).
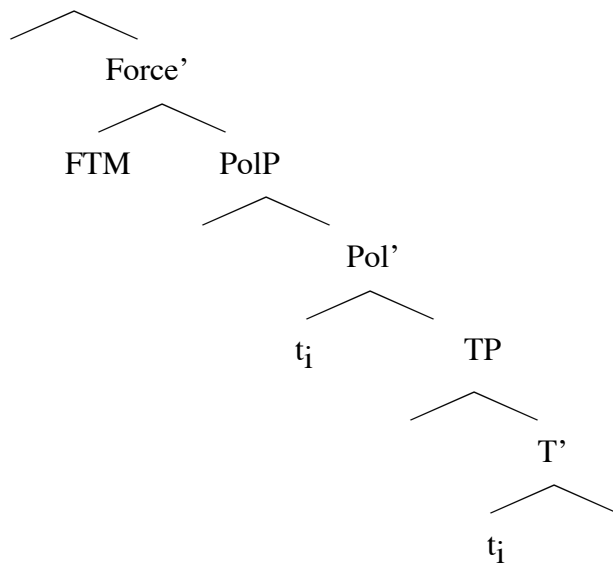
(44) The feature structure of FTMs
+ force
+ tense

Note also that as mentioned above, FTMs are incompatible with negation (see for detailed discussion chapters eight and nine). For the reason discussed in those chapters FTMs can be considered as specified to polarity feature as well. Hence, the feature structure of FTMs can be understood as in (45).

(45) The feature structure of FTMs
+ force
+ tense
+ polarity

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I suggest that FTMs, especially the auxiliary first project heading TP and then check their polarity and force feature by movement as in (46).[15] (Possible intermediate and other functional categories are omitted from 46.)

(46) ForceP
```
        ForceP
          \
        Force'
        /    \
      FTM    PolP
               \
              Pol'
              /  \
            t_i   TP
                   \
                   T'
                   /\
                  t_i
```

On the other hand, the reason that we find the lexical tense marker auxiliaries (LTM), such as *näbbär* in (42) above, along with the complementizer, I suggest, is because such auxiliaries head a verbal projection as in (47).

(47) V_{aux}P
```
       V_aux P
          \
        V_aux'
        /    \
      LTM     CP
               \
               IP
```
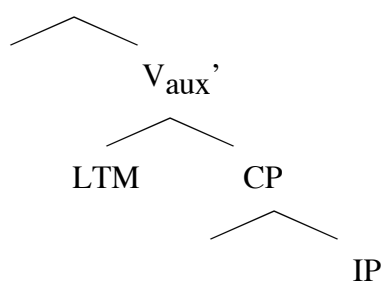
Based on the above suggestion, let's examine the structure of the following clauses:

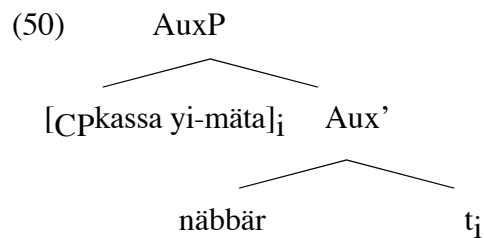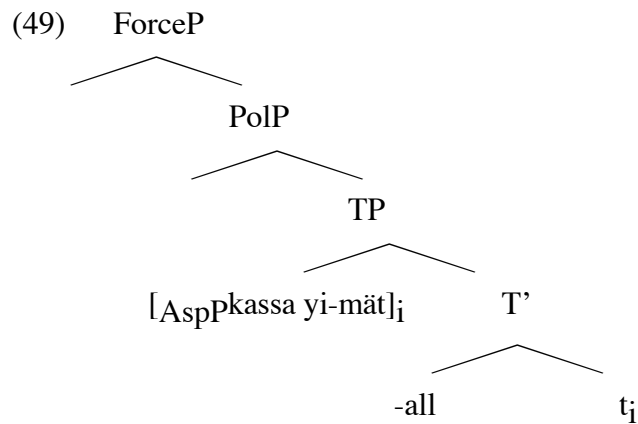(48) a. kassa yi-mät-all (Amharic)

    K.   3ms$_S$-come$_{impf}$-Aux$_{pres}$

   'Kassa will come'

  b. kassa yi-mäta näbbär

    K.   3ms$_S$-come$_{impf}$ Aux$_{pres}$

   'lit. Kassa was coming, Kassa used to come'

Recall from the above discussion that, the tense marker of (48-a) is FTM whereas the one in (48-b) is LTM. I suggest the structure of the former to be (49), and the latter (50).

(49)   ForceP

          PolP

               TP

      [$_{AspP}$kassa yi-mät]$_i$ T'

              -all   t$_i$

(50)   AuxP

   [$_{CP}$kassa yi-mäta]$_i$ Aux'

          näbbär   t$_i$

In (49) I assume that the auxiliary moves first to the polarity head and, then to the head of C, covertly to check its (positive) polarity and force features. In both cases, there are also movements of the respective complements of the auxiliaries to the

Spec of the projection which the auxiliaries head. Such movements can be attributed to EPP. I now summarize the facts discussed in this section.

In this section, I have shown that some tense auxiliaries behave like affix tense markers while others behave as verbal. The verbal auxiliaries head in syntax a lexical projection whereas the functional auxiliaries a functional projection TP. The major distinction between such elements comes from the syntactic behavior that they show. FTMs cannot be embedded under another clause with overt complementizers and cannot appear in negated clauses (cf. chapter nine). Such tense markers are also incompatible with AMCMs (cf. chapter 8). LTMs, on the other hand, behave differently with all these cases. The feature structure of LTMs can be understood as in (52). (Recall that the feature structure of FTMs is given as in (51).

(51) The feature structure of FTMs
    + tense feature
    + positive polarity feature
    + force feature

(52) The feature structure of LTMs
    + tense feature

As we can see from (52), the lexical tense markers are neutral to polarity and do not specified to force feature. However, the FTMs are specified to polarity and force features. The major syntactic difference between the two, I assume, is because of such feature specification.[16]

6.4 Summary

We have seen that tense in Ethio-Semitic language can be expressed morphologically, and the languages can be grouped into 2TG and 3TG. There are different varieties in both tense groups. I summarize briefly all the varieties below.

(53) 2TG (Simple tenses)

  a. type one
    bare perfective = past
    bare imperfective = non-past
  b. type two
    perfective + AMCM = past
    imperfective + AMCM = non-past
  c. type three
    bare perfective = past
    imperfective + non-past tense marker = non-past
  d. type four
    perfective + past tense marker = past
    imperfective + non-past tense marker = non-past

(54) 3TG (Simple tenses)

  a. type one
    perfective + past tense marker = past
    bare imperfective = present
    imperfective + future tense marker = future
  b. type two
    bare perfective = past
    bare imperfective = present
    imperfective + future tense marker = future

In section 6.3 we have seen that subordinate and relative clauses drop most tense markers, what I called functional tense markers. The only tense marker allowed to appear in such clauses is LTM. In languages where tense is not expressed by phonologically visible elements, I suggest that, there is an abstract tense feature. I also assume here that in subordinate and relative clauses, where the tense markers

are dropped, tense is expressed as in ASP-noT languages by an abstract feature. This assumption can also be supported by negative clauses.

In ES, although, many languages express simple tenses in different ways, when it comes to negation there is only one variety; i.e. all the varieties we summarized above in (53) and (54) will be reduced into one. All ES has only two tense oppositions — past and non-past. Whereby past is expressed by the bare perfective form of the verb, non-past is expressed by the bare imperfective form of the verb. In all cases, there is neither visible tense marker nor AMCM (see the discussion in chapters eight and nine). Because of this and the facts discussed in this chapter, I suggest that in every ES language, the perfective and the imperfective have always a potential to host an abstract tense feature, be it in subordinate, negative or affirmative matrix clauses. Hence, without exception the temporal feature structure of perfective and imperfective verb forms in ES can be understood as follows:

(55) + aspect
    ± tense

Imperfective will host an abstract non-past, and perfective will host an abstract past. This happens if only tense is not expressed morphologically. This is true regardless of the language groups.

In this chapter, in general, I have discussed the various tense aspect constructions in Ethio-Semitic languages and show where the similarities and differences are. In the following chapter, I will present a comprehensive theoretical explanation for such morphological complex temporal categories considering a theory that treats tense and aspect as temporal relations.

Notes to Chapter 6

[1] See also Hetzron (1977).

[2] Since the morphological nature of tense and aspect is complex in these languages as we might have noticed in chapter five, my major concern here is describing the facts. The detail theoretical analysis is given in the following chapter.

[3] This is based on Demeke's (2001) classification of Ethio-Semitic. According to this classification, note that Muher is part of Western Gurage rather than Northern Gurage and Mäsqan, which is a 2TG and previously classified as Western Gurage, is classified in Demeke (2001) as Northern Gurage.

[4] The morpheme *m,* which I glossed above as a past tense marker, is sometimes considered as an affirmative main verb marker. This is because, it does not appear in subordinate and negative clauses, as the following examples show.

(i) yä-näqär-ä(*-m) (Chaha)
    comp-pull$_{perf}$-3ms$_S$-past
    'he who pulled out' (Leslau 1950/ 1992: 135)

(ii) an-näqär-ä(*-m) (Chaha)
    neg-pull$_{perf}$-3ms$_S$-past
    'he didn't pull out' (Ibid.)

However, since this morpheme never appears in the non-past constructions, it is hard to consider it as a (-tense) main verb marker in this language group. The impossibility of the co-occurrence of *m* and the negation marker makes it somewhat similar to other tense markers in Ethio-Semitic languages in general (cf. chapter 9). I will examine in detail the nature of this particle in chapter eight.

Since (i) and (ii) mimics the behavior of other tense markers, and since *m* is found only with the past tense interpretation, I continue to consider this morpheme in these speech varieties as a past tense marker. In other words, the basic meaning of the form in question is tense.

[5] However, according to Leslau (1950/ 1992), this division does not exist any more in Chaha since both forms are used interchangeably. Nevertheless, Leslau's position is unclear on this matter. In the same book on page148, he states that there is a clear distinction in the usage of the two forms. The two forms of the future in Chaha and Ennemor are as follows (Leslau 1983/ 1992):

(i) Imperfective   + te (Chaha)
                   + k^{w}e (Ennemor)

(ii) Jussive   + šä (Chaha)
               + se (Ennemor)

There is another contradictory statement in Leslau (1992): In the "Outline of Chaha" (Leslau 1950) he takes the future marker *šä* as a free form, however in the "Brief Outline of Chaha and Ennemor" (Leslau 1983), he considers the same morpheme as a bound form. This is reflected in his transcriptions. Consider the following:

(i) yɨ-nxäb-šä   (Chaha)

   3ms$_s$-find$_{juss}$-T$_{fut}$

  'He will find' (Leslau 1983/ 1992: 138)

(ii) yɨ-nkäb-šä   (Chaha)

   3ms$_s$-find$_{juss}$ T$_{fut}$

  'He will find' (Leslau 1950/ 1992: 135)

However, since in almost all the speech varieties this morpheme is realized as an affix and in other works such as Petros (1996) the Chaha *šä* is also transcribed as an affix, I consider it in this work as an affix.

[6] See also Hetzron (1977: 85).

[7] In fact, strictly speaking with the idea of features in the framework of minimalism, which I am adhering in this work, there is no feature neutralization or suppression as such. A feature can be realized independently having its own separate phonological form, or it can be realized along with another feature or features, i.e. appended to what can be considered as other's phonological form or else totally absent.

[8] In Wolane there is a difference between simple non-past and present progressive. In simple non-past the auxiliary is *-al* (or its other phonological variant) 'there.is, there.exists', however in present progressive the tense marker is the copula 'be'. Compare the example in (26-b) with the following example:

(i) yi-hed-an   (Wolane)

   3ms$_s$-go$_{impf}$-Cop$_{pres}$

  'he is going'

Note that, in both cases other than the tense markers the form of the main verb is the same; i.e. it is imperfective.

[9] The same is true in some dialects of Arabic. See for the discussion on Classical Arabic, Comrie (1976, §4.4) and for Standard, Moroccan and Egyptian dialects of Arabic Benmamoun (2000).

[10] As recalled from the above discussion other 3T languages do not have visible tense morpheme for present tense.

[11] Sharon Rose (p.c.) dose not consider Muher to have three tenses any more.

---

[12] This is, in fact, a very common phenomenon in the Gurage region. A person who claims to speak one speech variety may turn out to be a speaker of another dialect. Since most of them are multilingual they may mix also one speech variety with the other. This is specially hard to notice when the informant's parents have two different speech varieties; i.e. when a mother speaks one speech variety and a father another speech variety.

[13] The other problem is, in languages where tense is expressed by an abstract feature it is hard to find any significant morphological difference between subordinate and matrix clauses.

[14] As discussed in chapter nine FTMs, in fact, also have polarity value but not complementizers. Complementizers can be found in both negative and affirmative clauses. They are polarity neutral.

[15] Such movement, however, are covert as we will see later. Hence, the illustration in (46) is for ease of understanding.

[16] Note that, the feature structure of FTMs and LTMs illustrated in (51) and (52) above is based on what is relevant for the present discussion. It might be the case that both tense markers specify for some other features, such as ϕ-features.

Chapter Seven:

The Theoretical Implication of Considering Tense and Aspect as Temporal Relations

7.1 Introduction

In chapter five and six I presented the basic descriptive facts on aspect and tense in Ethio-Semitic languages. In those chapters what my concern was examining, re-examining and identifying what really morphologically marks aspect and what marks tense. In this chapter, I critically examine the nature of those grammatical categories in relation to the theory which I am going to adopt and develop here. The main point of this chapter is, thus, to provide a systematic theoretical explanation for the facts discussed in the preceding two chapters.

7.2 Tense and Aspect as Temporal Relations

In section 7.2.1, I examine the theory of tense, and in section 7.2.2, I present a general theory of aspect.

7.2.1 Some points on the Theory of Tense

Stowell (1995, 1996) develops a theory in which the semantics of tense derives from independently motivated syntactic principles. According to Stowell, tense is a dyadic predicate which takes two time-denoting arguments as its complement and as its external argument (see also Zagona 1995). For Stowell, the two time-denoting arguments are represented as Zeit Phrases (ZP) where the internal argument contains the Situation Time E-T which is denoted by VP, and the external argument ZP denotes the Utterance Time S-T which is projected at the Spec of TP, "where it is assigned a temporal theta-role by T" (Stowell 1996: 280).[1] In fact, for Stowell there is "no necessary connection between the temporal theta-role assigned to this position and the denotation of Speech Time [S-T]" (Ibid.). He refers it as Reference Time argument R-T. However, his Reference Time R-T differs from Reichenbach's (1947) Reference Time: "It simply refers to a time relative to which the Event Time ZP is ordered. In a main clause, it happens that the Reference Time ZP denotes the Speech Time [S-T], but in subordinate clauses, it typically denotes the Event Time [E-T] of the immediately higher clause" (Stowell 1996: 280). For Stowell, note that,

both the internal and external argument ZPs, have no "fixed indexical denotation" (Ibid.). For the sentence *John hit the ball*, Stowell (1996: 281) provides the following structural representation:

(1)
```
                    TP
                  /    \
         R→ ZP           T'
                       /    \
                    T°         ZP← E
                   PAST      /      \
                  'after'  OPi        Z'
                                    /    \
                                  Z°       VP
                                        /    \
                                     ZPi       VP
                                      |      /    \
                                     [e]   DP       V'
                                          /\       /\
                                       John     hit the ball
```
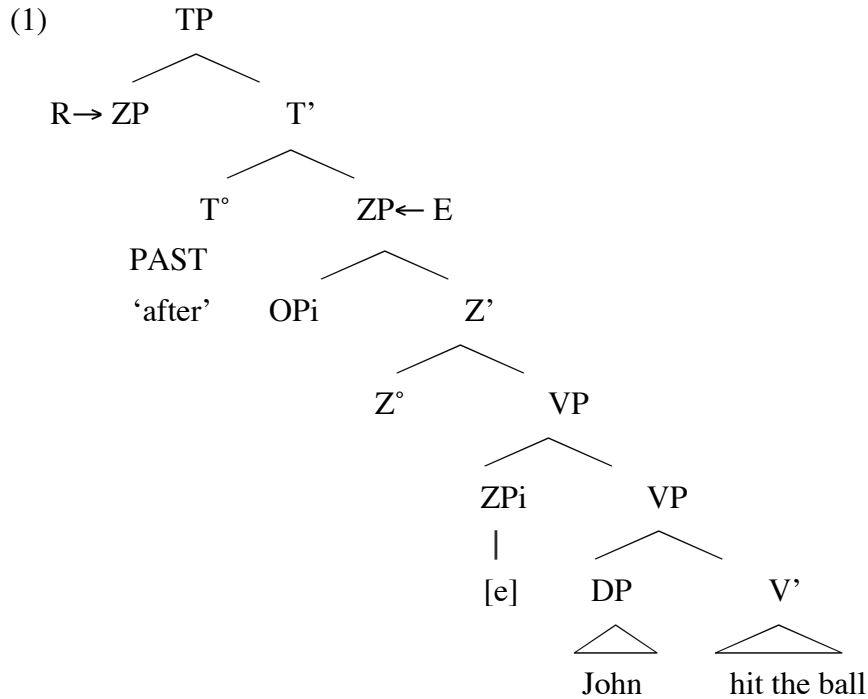
In the above structure, the internal argument of T is the Event Time E-T and the external argument, which is the Reference Time, denotes the Speech Time S-T. T, in this case Past, itself establishes an ordering between these two times, in a sense what after does: S-T PAST E-T to mean "'the Speech Time is after a time ZP: at which John hit the ball'" (Ibid.).

From Stowell and Zagona, I adopt the notion that tense is a predicate which takes two time-denoting arguments and itself establishes a relation between the two temporal arguments. However, as it becomes more clear later, unlike Stowell following Klein (1996), I assume that tense relates the utterance time S-T with the assertion time A-T.[2] Furthermore, following Demirdache and Uribe-Etxebarria (2000) rather than ZP, TP takes as its complement another time relational projection AspP where the event time project at the Spec of VP.

7.2.2 Aspect as Temporal Relations

According to Smith (1997), aspect conveys a viewpoint; and, "aspectual viewpoints present situations with a particular perspective or focus, rather like the focus of a camera lens" (Smith 1997: 2). The role of aspect is, thus, "to focus (pick out) an interval in the temporal contour of the event described by a sentence. Only the time interval focused by aspect is visible to semantic interpretation, hence, ... 'what is visible is asserted'" (Demirdache and Uribe-Etxebarria 2000: 161). And, according to Klein (1996: 190), "aspect is basically a temporal restriction on what is asserted".

Klein further points out that "aspects are purely temporal relations between the time at which some situation obtains and the time for which an assertion is made by the utterance which describes this situation" (1996: 190). Following such kind of reasoning, Klein examines the various semantic definitions given in relation to the Russian perfective and imperfective aspects and argues that those aspectual forms can and must be defined based on purely temporal relations.

Let us assume, following Klein (1996) that the time interval of a situation that aspect focuses is the Assertion Time A-T, where the Assertion Time is to mean "the time for which an assertion is made (or to which the assertion is confined)" (Klein 1996: 687; also quoted in Demirdache and Uribe-Etxebarria 2000: 161). The relation between the assertion time A-T and the event time E-T is assumed to be that of ordering or inclusion. For example, A-T can be ordered after E-T, cotemporal with E-T, or be contained within E-T. According to Klein (1996: 688- 689), "it is these approach varying temporal relations between [A-T] and [E-T] which are expressed by aspect marking". I adopt here the notion that aspect establishes a temporal relation between the time of assertion A-T and the event time E-T.
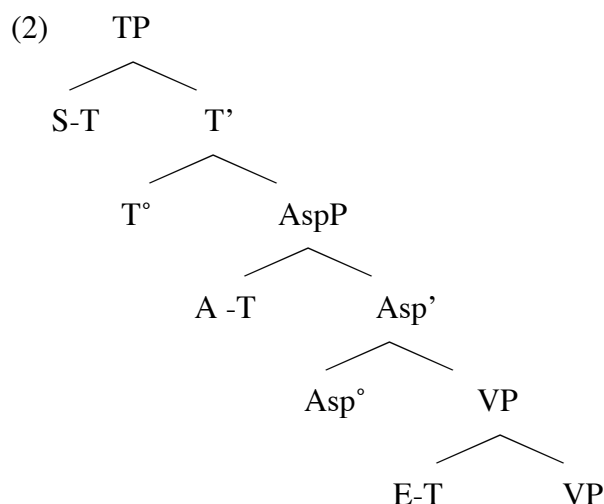
7.2.3 The Semantic and the Syntax of Tense and Aspect

In the above two sections, I have presented, though separately, an approach which treats tense and aspect as temporal relations. In this section, we will see how these two grammatical concepts interact in a simple clause.

From semantic point of view, as discussed above, in the definition of tense and aspect three time spans have a role; these are the assertion time A-T; the time for which the assertion is made (or to which the assertion is confined); the utterance time S-T and the time of situation E-T, the time for which the situation obtains (cf. Klein 1996: 687). As we have seen above, according to Klein (1996), aspect and tense have to be seen as derived from the same set of semantic primitives since both relates two times. While aspect relates the event time to the time of assertion; tense relates/ orders the time of assertion; i.e. the time interval focused by aspect, to the utterance time.

From syntactic point of view, it has been suggested that both aspect and tense head their own projections in syntax (see, for an earlier suggestion Ouhalla 1988). Following Stowell's theory of tense, Demirdache and Uribe-Etxebarria (2000) propose that, both temporal projections take time-denoting phrases as their argument. If this view is correct, it means that both tense and aspect have dual role in syntax: "as lexical heads, they have argument structure that they project into the syntax...; as functional heads, they can enter into feature-checking relations (i.e. Case, categorial, and/ or φ-features)" (Demirdache and Uribe-Etxebarria 2000: 158).[3] The general phrase structure suggested by Demirdache and Uribe-Etxebarria is given in (2).

(2)   TP
```
(2)        TP
        ╱      ╲
      S-T       T'
             ╱     ╲
           T°      AspP
                ╱      ╲
             A -T      Asp'
                    ╱       ╲
                 Asp°        VP
                          ╱     ╲
                        E-T      VP
```

According to this proposal, the syntax and semantics of tense mirror the syntax and semantics of aspect.[4]

7.4 Examining the Syntactic Representation of Tense and Aspect in Ethio-Semitic

In the above sections, I have discussed a theory which takes both aspect and tense as predicates that establish a temporal relation between two time-denoting arguments. In this section, I examine how such a theory will handle the various aspectual and temporal categories discussed in the preceding two chapters.

7.4.1 Perfective and Imperfective

7.4.1.1 Summary of the facts

As recalled from the discussion in the preceding chapters, in Ethio-Semitic the distinction of perfective and imperfective is easily traceable from their morphology. In any clause, both the perfective and imperfective may or may not appear in their bare forms, i.e. without visible morphological tense marker (cf. 3 and 4). However, if there is no visible tense marker in any simple or matrix clause, the association of the perfective and imperfective forms with reference to time is clear. The perfective is with past and the imperfective is with non-past (cf. 4). Beside these facts, the perfective may construct with tense marking elements to denote a reading of perfect whereas the imperfective to denote progressive or habitual (cf. 5).

(3) a. ataxɨlt   qäbbär-ä-m   (Muher)

    eucalyptus plant$_{perf}$-3ms$_s$-past

    'he planted eucalyptus' (Leslau 1992: 197).

  b. ataxɨlt yɨ-qäbr-u

    eucalyptus 3ms$_s$-plant$_{impf}$-present

    'he plants eucalyptus'

(4) a. ɨñña anbäsa qätäl-nä   (Wolane)

    we lion kill$_{perf}$-3pl$_s$

    'we killed a lion'

b. yɨ-käfɨt   (Mäsqan)

$3ms_S$-open$_{impf}$

'He opens/ will open'

(5) a. kätäb-a när-a   (Harari)

write$_{perf}$-$3ms_S$ Aux$_{past}$-$3ms_S$

'he had written'

b. yi-kätb när-a

$3ms_S$-write$_{impf}$ Aux$_{past}$-$3ms_S$

'he was writing'

7.4.1.2 The Semantics of Perfective and Imperfective

7.4.1.2.1 Introduction

According to Klein (1996) the Russian imperfective and perfective are defined as
follows: "the perfective is characterized by the fact that the time for which an
assertion is made has a common subinterval with the source state as well as with the
target state" (Ibid.: 689). Regarding to the imperfective Klein (1995: 689) suggests
that; "in the imperfective, the assertion time must not have a common subinterval
with the target state". Klein schematised these as follows:

(6) PERFECTIVE

T-AST OVL T-SS AND T-AST OVL T-TS

(7) IMPERFECTIVE

T-AST OVL T-DS AND T-AST NOT OVL T-TS (Klein 1995: 689) [5]

Let's assume along with Klein that the basic semantic difference between perfective
and imperfective can be expressed as in (6) and (7). For the present purpose,
however I refer the two subevents as a single entity and the time denoted by that
entity as an event time E-T.[6] On the other hand, there are crucial points to consider
when it comes to Ethio-Semitic. In most Ethio-Semitic languages past progressive,
present perfect and past perfect are periphrastic constructions, and in such cases the

progressive reading is obtained by the imperfective form whereas the perfect reading is obtained by the perfective form (cf. chapter five). In Demirdache and Uribe-Etxebarria's (2000) kind of theory perfect and past are assumed to establish the same type of relation, that is *after*; the former at the aspectual projection whereas the latter at tense projection.[7] Because of these facts, as a priori let us suggest that the imperfective form establishes a relation of inclusion whereas the perfective form is that of inclusion or ordering; where what is asserted is ordered after the time of the event of the VP or contemporary to it, in Ethio-Semitic languages.[8]

(8) Perfective form
   a. A-T overlap E-T
   b. A-T after E-T

(9) Imperfective form
  A-T within E-T

I will examine these points in detail in the following sections.

7.4.1.2.2 The Semantics of Perfective

As mentioned above, perfective and perfect in most Ethio-Semitic languages have the same morphological structure. In other words, the perfective form also is found in perfect construction. Consider the following examples:

(10) a. säppär-hu-ba   (Endegeñ)
     break$_{perf}$-1s$_s$-Aux$_{past}$
     'I had broken' (Nega 1999: 34)
   b. nakat-ka naar   (Silte)
    beat$_{perf}$-2ms$_s$ Aux$_{past}$
    'you(m.s) had beaten'
   c. läqäm-t-an   (Wolane)
    collect$_{perf}$-3fs$_s$-Aux$_{pre}$
   'she has collected' (Leslau 1994: 144)

d. däbäl-ä-nu   (Zay)

  arrive$_{perf}$-3ms$_S$-Aux$_{pre}$

  'he has arrived' (Leslau 1992: 556)

Even in languages which have a distinct form for perfect aspect; such as Amharic, Tigrinya; the perfective form may have a function of perfect in some contexts. Let us consider first the following construction in Amharic where the converb has a form of perfect.

(11) mɨsa-w-n bält-o yɨ-mät't'-all   (Amharic)

  lunch-his-Acc eat$_{perfect}$-3ms$_S$ 3ms$_S$-come$_{impf}$-Aux$_{pres}$

The natural equivalent translation for (11) is that *'he will come after he eats his lunch'* meaning after eating. In almost all converbial constructions the semantic interpretation/ implication of 'after completing...' which is asserted by the converb is a common feature.[9] On the other hand, when we look at the perfective verb form in subordinate clauses, it has the same temporal assertion with the perfect verb forms, i.e. the so-called gerund/ converb, as exemplified in (11) above. Consider the following examples;

(12) a. mɨsa-w-n   ɨndä-bälla-Ø   yɨ-mät't'-all   (Amharic)

    lunch-his-Acc comp-eat$_{perf}$-3ms$_S$ 3ms$_S$-come$_{impf}$-Aux$_{pres}$

    'he will come after completing/ as soon as he finished eating his lunch'

  b. mɨsa-w-n   kä-bälla-Ø   yɨ-mät't'-all

    lunch-his-Acc comp-eat$_{perf}$-3ms$_S$ 3ms$_S$-come$_{impf}$-Aux$_{pres}$

    'he will come if he eats/ finished eating his lunch'

As we can see from the above examples, what is asserted in the subordinate clause by the perfective form of the verb lies on the time interval which extends after the culmination point of the eating event E marked in (13) by slashes-2 //////////////$_2$. I call this type of reading of the perfective form of the verb the perfect reading and abbreviate as PRP to mean that the perfect reading of perfective form. If it does not have such a reading I call PR to mean that the form in question has only a reading of

perfectivity which the assertion does not extend beyond the culmination point of 2-state verbs or distinguished state of 1-state verbs in the terminology of Klein (1996) as indicated by (14) and ///////////////$_1$ in (13).[10]

(13) PR and PRP

   B-S   E-S

  ///////////////$_1$//////////////$_2$

(13) can be represented as in (14) and (15):

(14) PR
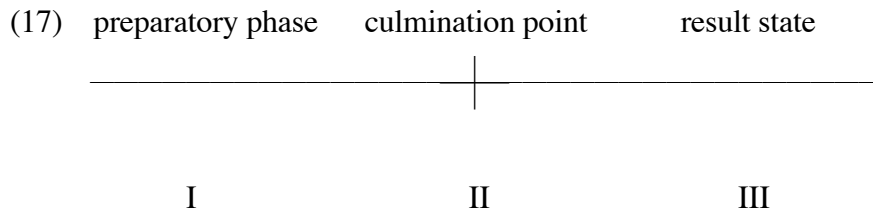
   B-S   E-S

  ///////////////

(15) PRP

   B-S   E-S

        ///////////////

As we can see from the representation in (14), in the case of PR there is an assertion about the source state, i.e. the beginning of eating in (12), and there is also an assertion on the culmination of the event. In the case of PRP, the assertion extends beyond the culmination point as slashes-2 (//////////////$_2$) represents. Hence, the interpretation of 'after...' in the above examples which is obtained by the perfective form of the verb (but not by the perfective aspect) is due to the assertion which is made by the speaker that lies after the culmination point which I represented in (13) as //////////////$_2$ (and in particular see (15)). This is exactly the representation suggested by Smith (1997) for the "simple" perfect construction. Kamp and Reyle (1993) also propose a similar representation for this aspect. I will discuss this point in detail below.

As we know from lexical semantics, the components of an event can be broken down into the following stages.[11]

(16)   cause   process   result

```
        _____|_____|_____
                        |              |
```
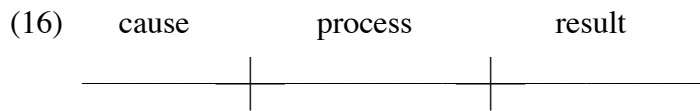
This is roughly corresponds to Kamp and Reyle (1993: 558) schemata presented in (17).

(17)   preparatory phase   culmination point   result state

```
        _____|_____
                                      |
```

          I   II   III

The aspectual properties that play a role, according to Kamp and Reyle, are the types mentioned on the above schematized diagram. Consider for example, the following clauses and the explanation from them below.

(18) Mary wrote a letter
(19) Mary was writing the letter (but she didn't finish it)
(20) Mary has written the letter (Kamp and Reyle 1993: 558)

The example in (18), which can be considered as simple past, differs from the corresponding clause in (19), and (20). (18), which also has a reading of perfective, according to Kamp and Reyle, refers to the writing event as a whole (consisting of I and II in the diagram presented in (17) above), the progressive refers to only part I since nothing is asserted about the culmination point in which Mary's finishing of writing, and perfect refers to the state resulting from the event, i.e. stage III, which lies after the culmination point (Kamp and Reyle 1993: 558ff.). What I suggest as a representation of perfect in (15) exactly corresponds to the result state of (16) and (17) which is stage III of Kamp and Reyle (1993).

Note that, past tense is defined as S-T after A-T and a complete reading of time will be obtained when a relation is established between A-T and E-T. Note also that, in the phrase structure what heads the aspectual and tense projections are the morphological aspectual and tense markers or, in fact, the corresponding features. In

Muher, Zay and in what is called three tense languages (3TG); with the exception of Endegeñ, past is morphologically marked as in (21).

(21) Simple Past
    Perfective + affix/Aux$_{past}$

Forget about the controversy between lexicalist and non-lexicalist hypotheses; and assume that the past tense marker in (21) occupies the head of TP and the perfective marker occupies the head of AspP and both establish temporal relations. Thus, the whole temporal relation for (21) type of languages reads as in (22).

(22) S-T PAST A-T PR E-T

Note that, in the above discussion, I have pointed out that what is perfective aspect (PR) is that an assertion of time which includes the beginning and the culmination point. That is, the assertion time binds the event time and hence, both are cotemporal (cf. Demirdache and Uribe-Etxebarria 2002: 5, Klein 1996: 689). Borrowing the terminology of Klein (1995) I continue to use the term overlap for the cotemporal time relation. Hence, (22) reads as in (23).

(23) S-T after A-T overlap E-T

If morphology is the one which determines syntactic representation as in (23), what will be the structure of simple past and past perfect in languages such as Endegeñ which mark past by the bare perfective form of the verb and past perfect by the addition of past auxiliary into such a form, as in (24)? Apart from this question, we may also be interested to know the reason for the following question: What will be the difference of simple past in languages exemplified by (21) and past perfect in Endegeñ type languages?

(24) Endegeñ type languages
  a. Simple Past =
    Perfective

b. Past Perfect =
   Perfective + Past Auxiliary

For (24-a), since there is no morphological tense (past) marker one of the suggestion is to assume, following Demirdache and Uribe-Etxebarria (2002), that no ordering relation is established between A-T and S-T by the tense projection. Meaning, S-T, the external argument of TP, binds its internal argument A-T.[12] On the other hand, since the form in question is marked for perfectivity it is natural to assume that the AspP can establish a relation between its two temporal arguments as in the following:[13]

(25) S-T, A-T PR E-T

(25) shall be understood as in (26):

(26) S-T no relation A-T overlap E-T

What (26) entails that there is only a relation between the time of assertion and the time of situation. Since, T is not morphologically realized, we considered such projection as establishing no relation between S-T and A-T; i.e. T°'s external argument binds its internal argument. However, we know that in a simple past the time of situation is before the time of utterance. It is logical, thus, to ask how such reading, i.e. simple past, is obtained from the bare perfective form in languages such as Endegeñ, Amharic, Ge'ez etc. with the structure suggested in (25).

Note that, since the aspect of the verb in (24-a) is PR (not PRP) the relation which can be established by the aspectual head can only be inclusion not that of ordering as depicted in (25) and (26). Hence, the only way to get the simple past reading is by the syntactic head T°. That is, the phonologically zero tense head has to establish the relation after as in (27).

(27) S-T PAST A-T

Thus, the whole temporal structure of simple past in languages exemplified in (24-a) above will also be the same as languages which have a morphological structure as in (21). That is (22), repeated here as (28).

(28) S-T PAST A-T PR E-T

I will address the other points of the morphological similarity of simple past in one language to past perfect in another in section 7.4.4.3.

7.4.1.2.3 The Semantics of Imperfective

The imperfective in Ethio-Semitic has progressive and habitual readings. This is consistent with Comrie's (1976) observation where imperfectivity in many languages can be classified as follows:

(29) Classification of aspectual oppositions
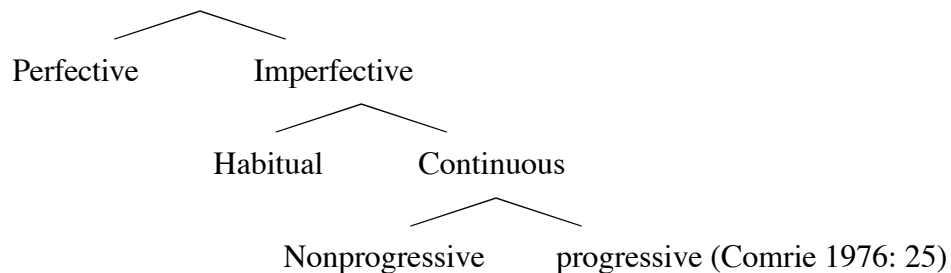
Recall that the bare imperfective form may appear in matrix clauses in many Ethio-Semitic languages and refers to a non-past time. While past establishes a relation *after,* present establishes a relation somewhat similar to *within* (cf. Stowell 1995, Demirdache and Uribe-Etxebarria 2000). In the same line, progressive aspect is assumed in Demirdache and Uribe-Etxebarria's (2000), see section 7.4.2, to establish a relation between its two time-denoting phrases A-T and E-T similar to the present tense; i.e. *within* . Consider (30-a) and (-b);

(30) a. Present
        S-T within A-T
    b. Progressive
       A-T within E-T

If this suggestion is correct, since progressive and imperfective have the same form in almost all the languages under consideration here, it is natural to assume that they have the same temporal relation. Hence, (30-b) can also be considered as a

representation of imperfective as well; i.e. the assertion time is within the time of situation (cf. 31). This is, in fact, the general definition given in many literature to this aspect. Imperfectivity can be viewed as "explicit reference to the internal temporal structure of a situation, viewing a situation from *within*" (Comrie 1976: 24).[14]

(31) Imperfective
    A-T within E-T

If the bare imperfective form marks present or non-past, i.e. present-future, in what I call IMPF-noT languages in chapter five, one of the analyses can be as illustrated in (32) below. [15]

(32) Present tense in 3TG
        S-T, A-T imperfective E-T

(32) reads as follows:

(33) S-T no relation A-T within E-T

What is assumed in (33) is that S-T and A-T have the same temporal relation with E-T. However, S-T and A-T do not establish any kind of relation with respect to each other. Recall that, the event time E-T, which is denoted by VP, is an internal argument of AspP where the assertion time A-T is an external argument that projects from the Spec of it. TP, on the other hand, has an external argument S-T and takes the aspectual phrase as its complement. Hence, the relation between S-T, which is not in the complement domain of AspP, and E-T, which is an internal argument, can only be inclusion. However, we have excluded this type of analysis in section 7.4.1.2.2 above. In that section we have seen that the past tense T, whether expressed by an abstract feature or visible morphology, has the same role in syntax. In both cases it establishes the same temporal ordering; i.e. *after*, between its two time-denoting arguments S-T and A-T. Recall that, in the preceding two chapters I have pointed out that when a bare imperfective found in simple non-past, there is also an abstract tense feature. In such cases, it is logical to assume that the abstract tense feature will head a tense projection and the head of such projection can establish a

relation similar with those that have visible tense morphology. The present tense in 3TG, thus, shall be represented as in (34); not as in (33) above.

(34) Present tense in 3TG and non-past of 2TG

     S-T within A-T within E-T

I will come back on this issue in more detail later.

7.4.2 The Syntactic Representation of Perfective and Imperfective

In the above sections, when I examine the semantics of these aspects I have also discussed the syntactic facts. In this section, for ease of understanding, I will discuss the syntactic facts in a very comprehensive manner. Before examining to the syntactic representation of perfective and imperfective aspects in a simple clause, I summarize the empirical facts introduced in section 7.4.1.1, here from typological perspective.

(35) Simple past

    a. Option One

      Bare Perfective (or Perfective + AMCM)

          Languages: All the 2T languages, except Zay and Muher; and

                    Endegeñ from 3TG

    b. Option Two

      Perfective + Tense Marker

          Languages: Zay, Muher and 3TG except Endegeñ

(36) Simple Present (in 3TG)/ Non-past in 2TG

    a. Option One

      Bare Imperfective (or Imperfective + AMCM)

          Languages: North Ethio-Semitic, Gafat, Soddo, Gogot, Mäsqan and all

                the 3T languages

    b. Option Two

      Imperfective + Tense Marker

          Languages: Argobba, Amharic, Muher, Silte, Harari, Wolane and Zay

Languages exemplified by (35-b), i.e. languages that mark simple past by a perfective plus visible tense marker, and (36-b), i.e. languages that have visible tense marker in the non-past, can be represented as in (37) and (38) respectively.

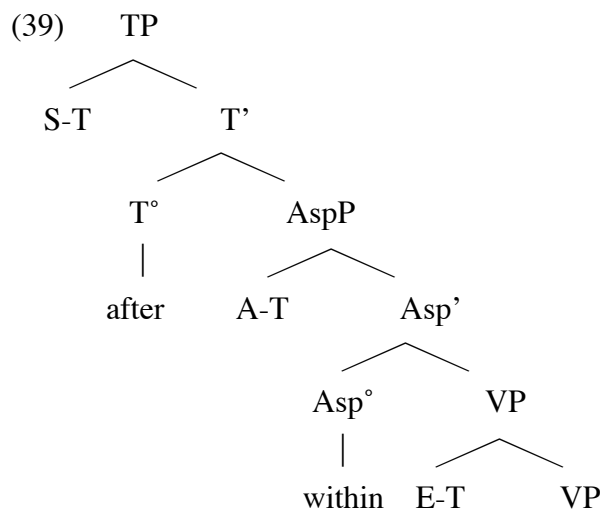(37) The phrase structure of languages represented by (35-b)

```
            TP
          /    \
        S-T      T'
               /    \
             T°       AspP
             |       /    \
           after   A-T      Asp'
                          /      \
                       Asp°        VP
                        |        /    \
                    overlap    E-T      VP
```
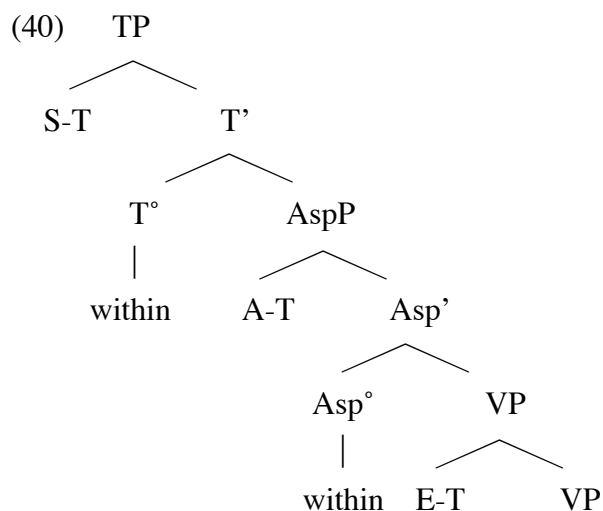
(38) The phrase structure of languages represented by (36-b)

```
            TP
          /    \
        S-T      T'
               /    \
             T°       AspP
             |       /    \
          within   A-T      Asp'
                          /      \
                       Asp°        VP
                        |        /    \
                    within     E-T      VP
```
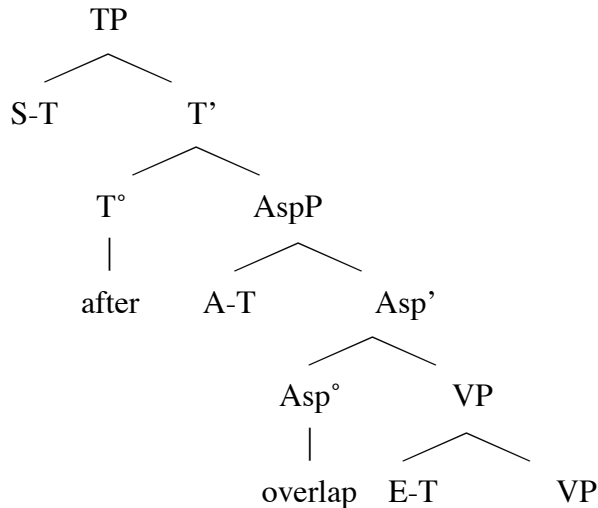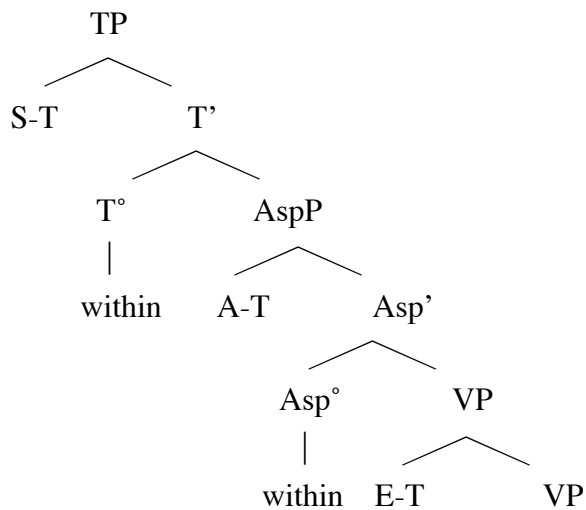
However, as I have argued above, languages that do not have visible tense markers behave semantically and syntactically exactly the same with languages that have visible tense markers, hence (37) and (38) must also represent the languages in (35-a) and (36-a) respectively. I now turn to progressive construction.

7.4.3 The Syntactic Representation of Progressive

As I pointed out above, in Demirdache and Uribe-Etxebarria (2000: 165), it is suggested that "both present tense and progressive aspect are spatiotemporal predicates with the meaning of within". This is based on the fact that progressive aspect does not assert about the culmination of an event or a situation. It simply sees a situation as progressing. Hence, the assertion time lies *within* the event time. (39) represents the phrase structure of past progressive.

(39)
```
              TP
            /    \
         S-T      T'
                /    \
              T°      AspP
              |      /    \
            after  A-T    Asp'
                        /    \
                     Asp°     VP
                     |       /   \
                  within   E-T    VP
```

By analogy the present progressive can be represented as follows, i.e. by replacing the relation past into present.

(40)
```
              TP
            /    \
         S-T      T'
                /    \
              T°      AspP
              |      /    \
           within  A-T    Asp'
                        /    \
                     Asp°     VP
                     |       /   \
                  within   E-T    VP
```

The structure proposed in (40) for present progressive and the structure proposed for simple present in (38) is exactly the same. The 3T languages do not morphologically differentiate between present progressive and simple present tense. Hence, the identicality of the two structures seems a natural fact. However, in Ge'ez and Tigre, for example, the bare form of the imperfective marks non-past, whereas in the present progressive there is an addition of a tense marking auxiliary. This difference, I think, needs explanation. Before further discussing this problem, I briefly summarize how progressive is expressed in this language group.

All Ethio-Semitic languages express the progressive aspect by the imperfective form of the verb. However, there are few languages which have additional means of expressing this aspect. Based on this observation, I divided these languages in chapter five into two groups: type A and type B. Type A represents those languages which have additional means of expressing progressive aspect, whereas type B represents those languages which do not have a distinct grammatical category to express progressive. In the latter both progressive and imperfective have the same form. In this section, for the sake of explicitness I identify other groups which I call them here type C and type D.

The type A languages are not many; these are Tigrinya, Soddo and Amharic (and probably Argobba and Gogot though I do not have data on these languages to prove this fact). As mentioned already, what is particular to this language group is that it has a distinct way of marking progressive aspect. The progressive markers are the prefixes *ïyyä, ïyä* and *inda* in Amharic, Soddo and Tigrinya respectively. In such cases the time reference is expressed by the copula 'be' as shown with the following examples.

(41) a. mɨsa-w-n   ɨyyä-bälla-ø   näw   (Amharic)

     lunch-3m.pos-Acc   prog-eat$_{perf}$-3ms$_S$ Aux$_{pres}$(3ms$_S$)

    'He is eating his lunch'

   b. mɨsa-w-n   ɨyyä-bälla-ø   näbbär

     lunch-3mpos-Acc   prog-eat$_{perf}$-3ms$_S$ Aux$_{past}$

    'He was eating his lunch'

(42) a. nab gazi'a ɨnda-mas''-a   ɨyy-u   (Tigrinya)

to home prog-come$_{perf}$-3ms$_S$ Aux$_{pres}$-3ms$_S$

'he is coming to home'

b. nab gazɨ'a ɨnda-mas''-a   ner-u

to   home prog-come$_{perf}$-3ms$_S$ Aux$_{past}$-3ms$_S$

'he was coming to home'

(43) a. aster   ɨyä-mät't'a-t-n   (Soddo)

A.   prog-come$_{perf}$-3fs$_S$-Aux$_{pres}$

'Aster is coming'

b. aster ɨyä-mät't'a-t   näbbär

A.   prog-come$_{perf}$-3fs$_S$ Aux$_{past}$

'Aster was coming'

The type B languages do not have a separate morpheme to denote progressive action. In this language group, progressive aspect is expressed by the imperfective form of the verb. In such languages the present progressive form is the same with simple present where it is determined from the context. Consider the following examples from Ezha and Endegeñ:[16]

(44) yɨ-säwɨr   (Endegeñ)

3ms$_S$-break$_{impf}$

'He is breaking'

(45) käbädä yɨ-c'an   (Ezha)

K. 3ms$_S$-come$_{impf}$

'Kebede is coming'

In this type of languages there has to be a tense marker when the action or situation is taking place in the past. Consider the following examples:

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(46) ɨ-säwɨr-ba   (Endegeñ)

   1s$_\text{S}$-break$_\text{impf}$-Aux$_\text{past}$

   'I was breaking'

(47) käbädä yɨ-c'an ba/ ban-ä   (Ezha)

   K. 3ms$_\text{S}$-come$_\text{impf}$ Aux$_\text{past}$ /Aux$_\text{past}$-3ms$_\text{S}$

   'Kebede was coming'

(48) ti-qaba naar   (Silte)

   3fs$_\text{S}$-paint$_\text{impf}$ Aux$_\text{past}$

   'she was painting' (Gutt and Mussa 1997: 920)

(49) yɨ-säbɨr   banä   (Chaha)

   3ms$_\text{S}$-break$_\text{impf}$ Aux$_\text{past}$

   'he was breaking'

(50) tɨ-ri' baandä   (Ennemor)

   3fs$_\text{S}$-sleep$_\text{impf}$ Aux$_\text{past}$

   'she was sleeping'

As we can see from the above examples, past progressive is expressed by the combination of the past auxiliary and the imperfective form of the verb. In those examples, it is not hard to notice tense as expressed by the auxiliary and the progressive aspect expressed by the form of the main verb.

There is a little difference within what I called type B languages in chapter five. Like the South Ethio-Semitic languages, in Ge'ez and Tigre, which are two of the North Ethio-Semitic languages, the past progressive is expressed by the imperfective form of the verb and the past form of the auxiliary 'be'. However, unlike other type B languages, especially the 3T languages, the present progressive is formed in Ge'ez and Tigre by the imperfective form of the verb and the present auxiliary 'be'. This is also true to Mäsqan. Mäsqan, like Ge'ez and Tigre expresses simple non-past by

bare imperfective verb form, but adds an auxiliary in the case of present progressive as the example in (51) may show.

(51) a. yɨ-käfɨt   (Mäsqan)

　　　3ms$_S$-open$_{impf}$
　　　'He opens/ will open'

　　b. yɨ-säbr-u

　　　3ms$_S$-break$_{impf}$-Aux$_{pre}$
　　　'He is breaking'

I name languages which have the above type of distinct present progressive construction type C. This can be schematized as follows:

(52) present progressive and simple non-past in type C languages
　　　non-past = bare imperfective
　　　present progressive = imperfective + Auxiliary

Recall that, the bare imperfective form, i.e. without tense auxiliary, is found in a simple clause in 3TG, Gafat, Soddo, Gogot, Mäsqan and North Ethio-Semitic languages. When it comes to tense, in 3TG such construction denotes simple present whereas in North Ethio-Semitic and other IMPF-noT, it denotes present or future depending on the context. Note that here, in IMPF-T languages, unlike type C languages, non-past is expressed by adding present auxiliary to the imperfective form of the verb. However, as mentioned already, such construction has present progressive reading in type C languages. Consider the above Mäsqan examples and the additional examples from Ge'ez below:

(53) a. näbär-ku   'ɨ-s'eli   (Ge'ez)

　　　Aux$_{past}$-1s$_S$ 1s$_S$-pray$_{impf}$
　　　'I was praying/ I kept on praying'

　　b. yɨ-mäs'ɨ'   hal-o

　　　3ms$_S$-come$_{impf}$ Aux$_{pres}$-3ms$_S$
　　　'he is coming'

c. yɨ-mäs'ɨ'

   3ms$_s$-come$_{impf}$

   'he comes/ will come'

In (53-c) we find the bare imperfective form having a reading of non-past; i.e. present/ future. In (53-b), we find an addition of tense auxiliary and the clause has a present progressive reading. This is true also to Tigre (cf. Raz 1983: 71ff., Beaton and Paul 1954 20ff.) and Mäsqan as we have seen above. Thus, the major difference between type B and type C is that, in type B there is no difference between simple present tense and present progressive constructions, whereas in type C non-past and present progressive have different constructions.

The other type, which I call it here type D, is different from type C in one respect. In type D both non-past and present progressive there are visible tense markers. Consider the following examples:

(54) a. yɨ-hed-al   (Wolane)

    3ms$_s$-go$_{impf}$-Aux$_{pres}$

    'lit. he goes/ will go'

  b. yɨ-hed-an

    3ms$_s$-go$_{impf}$-Copula$_{pres}$

    'lit. he is going'

As we can see from the glosses in (54) in simple non-past, the tense marker is an auxiliary whereas in present progressive it is a copula. Bear in mind this, and let us now turn to the discussion, which I raised above.

Recall that the present tense is represented as in (38). As we have seen above, since the present and the present progressive are basically morphologically the same in 3T languages, I have suggested that the syntactic representation of those forms is the same.

However, the problem is that how do we account the type C and type A languages where we have morphological difference between present progressive and simple

non-past tense. Let us assume for explicitness that in the non-past (of 2TG and present of 3TG), the relation *within* which is established at the head of AspP is basically imperfective whereas in the progressive it is progressive as in (55) and (56) respectively, although the semantic difference between the two is questionable (see below).

(55) Non-Past

```
                    TP
            ┌────────┴────────┐
          S-T               T'
                       ┌──────┴──────┐
                      T°           AspP
                       │       ┌─────┴─────┐
                    within   A-T         Asp'
                                    ┌──────┴──────┐
                                  Asp°           VP
                                    │       ┌─────┴─────┐
                              Imperfective E-T         VP
                                 'within'
```

(56) Progressive

```
                    TP
            ┌────────┴────────┐
          S-T               T'
                       ┌──────┴──────┐
                      T°           AspP
                       │       ┌─────┴─────┐
                    within   A-T         Asp'
                                    ┌──────┴──────┐
                                  Asp°           VP
                                    │       ┌─────┴─────┐
                              progressive  E-T         VP
                                 'within'
```
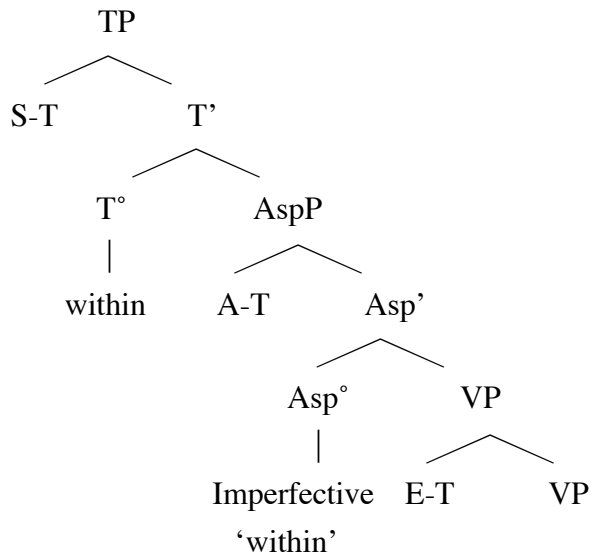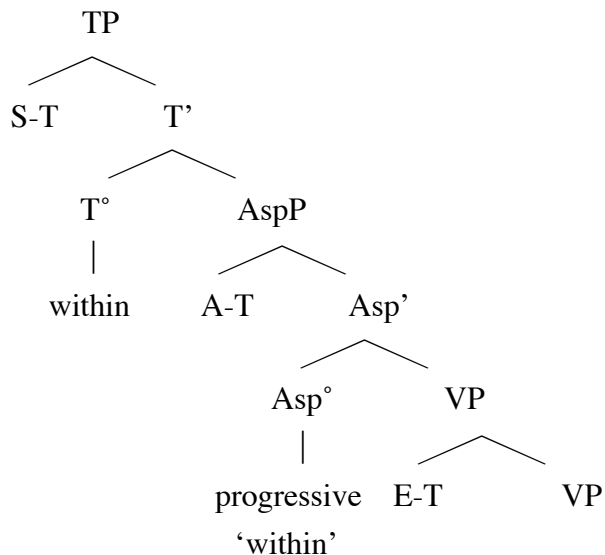
One may wonder what really the structures in (55) and (56) represent. There are two options for this. One is to assume that they represent one and the same thing.

Meaning, the imperfective and progressive are not different aspects. The other is that they represent two different aspects. That means, though progressive and imperfective establish the same temporal ordering between the two temporal arguments, represented here as *within,* they are different ways of viewing a situation. They establish the same relation because what is asserted is within the internal structure of the event. I examine these two points here.

The viewpoint of both the imperfective and progressive, as noted above, can be schematized as in (57) assuming a situation, i.e. an event, which has a beginning B-S and an endpoint E-S, where the viewpoint is marked by slashes.

(57) B-S   E-S

   /////////////

As we can see from (57), what is focused by the slashes is what is asserted by the speaker. And what is asserted is within the event only corresponds to the beginning but not to the endpoint as suggested by Klein (1996), Kamp and Reyle (1993) and many others.[17] As discussed already "the role of aspect is to focus a time interval in the temporal contour of the event described by a sentence. The time focused by aspect is the assertion time" (cf. Demirdache and Uribe-Etxebarria 2000: 163). Thus, in both cases what the relation Asp entails is that what is asserted is within the situation. If the assumption that considers progressive and imperfective as different aspects is correct, it means that what indicates the situation as it is progressing, continuing or not is the internal temporal structure of the viewpoint itself. In the above (57) structure the internal composition of the focused viewpoint (slashes) itself. If this assumption is correct, it means that the aspectual heads may have dual functions; i.e. not only simply establish a temporal ordering but also they assign their semantic feature. This assumption is, however, contrary to the theory which I adopt in this work. According to Stowell (1995, 1996), the temporal head only establish a temporal relation and does not assign any temporal feature. For Klein (1995), aspect and tense establish a temporal relation and do not assign their features.[18]

Hence, if the assumption that considers progressive and imperfective as different aspects is true, it means that there is a problem in a theory that considers tense and aspect as predicates, which establish temporal relations between two time-denoting

arguments. However, the assumption that considers progressive and imperfective as different aspects is not correct. It is hard to find any semantic difference between imperfective and progressive. If this is the case, the question which we need to ask here is that why do we find two different forms, say present progressive different from simple non-past, in what I called type A and type C languages. I will try to answer this below.

Note that, in Ethio-Semitic we have different present progressive form in languages which have only two tenses; where the non-past is ambiguous between present and future. Even in these languages, though there is a different construction for progressive, the simple non-past equally expresses present progressive (cf. chapter five). The present progressive form is used in 2T languages when there is a need to be specific in time, i.e. to make a special reference to the present. If the progressive form is used, there is no possibility of future reference. Consider, for example, the following constructions from Amharic:

(58) a. ïyyärot'-ä   näw   (Amharic)

      prog.run-3ms$_S$ Copula$_{pres}$(3ms$_S$)

     'He is running'

   b. yï -rot'-all

     3ms$_S$-run$_{impf}$- Aux$_{pres}$(3ms$_S$)

    'He runs', 'He will run', 'He is running'

As we can see from (58-b), the simple non-past construction has a reading of present, future and progressive. The only way to differentiate the meanings is by the context. But when it comes to (58-a), it only refers to present. Hence, it seems that the existence of a separate form for progressive in 2T languages is not because there are different viewpoints which are asserted by the imperfective and by the progressive but because of the necessity to be more specific in time. This assumption can be disproved, in fact, if one finds an independent progressive form in 3T languages, since present and future have distinct forms. But, as we have seen in the preceding chapters as well as in this chapter above, we do not have a separate progressive form in the 3T speech varieties — present tense and present progressive are expressed by the same form.

Recall also that in type C and type D languages the only difference between present progressive and simple non-past lies on the nature of tense marking element. In type C in simple non-past, the tense marking element is an abstract feature whereas in present progressive it is an auxiliary. In type D languages we find an auxiliary in the non-past and a copula in the present progressive. In both type of languages, however, the form of the main verb is the same, i.e. imperfective. Therefore, I conclude that there is no progressive feature as such different from imperfective. Both have to be understood as the same aspectual feature. If I am on the right track, it means that there is no feature which is assigned by the aspectual progressive head different than imperfective. This, in turn means the aspectual head may not assign any feature at all, rather it establish a temporal relation which is *within* in the case of progressive and imperfective consistent with Klein's (1995) and Demirdache and Uribe-Etxebarria's (2000) claim. Hence, nothing contradicts the theory which is adopted here. I now turn to the syntactic representation of perfect.

7.4.4 The Syntactic Representation of Perfect

In Ethio-Semitic, there are two forms for perfect tense constructions, as we saw in chapter five. These are gerund + tense and perfective + tense. The former type of languages is not many. These are Tigrinya, Amharic, Ge'ez, Gafat and Argobba. Others belong to the latter type. In the former type of languages, although this is not unique to them, simple past is marked by the bare perfective form of the verb. Based on the above argument, assume now here the so-called gerund and perfective form can establish the same ordering relation to their arguments; i.e. after. This is what past does in T°.[19] However, recall that perfective form also establishes another time relation; i.e. overlap.

As I suggested in the previous section, simple past and past perfect in Tigrinya, Soddo, Argobba, Gafat and Ge'ez can be represented as in (59) and (60) respectively.

(59) Simple Past

```
                        TP
                      /    \
                  S-T       T'
                          /    \
                       T°        AspP
                       |        /    \
                     after   A-T      Asp'
                                    /     \
                                Asp°        VP
                                 |        /    \
                         perfective form  E-T    VP
                              'overlap'
```

(60) Past Perfect in Gerund-Variety

```
                     TP
                   /    \
               S-T       T'
                       /    \
                    T°        AspP
                    |        /    \
                  past    A-T      Asp'
                 'after'         /     \
                             Asp°        VP
                              |        /    \
                           gerund   E-T    VP
                           'after'
```
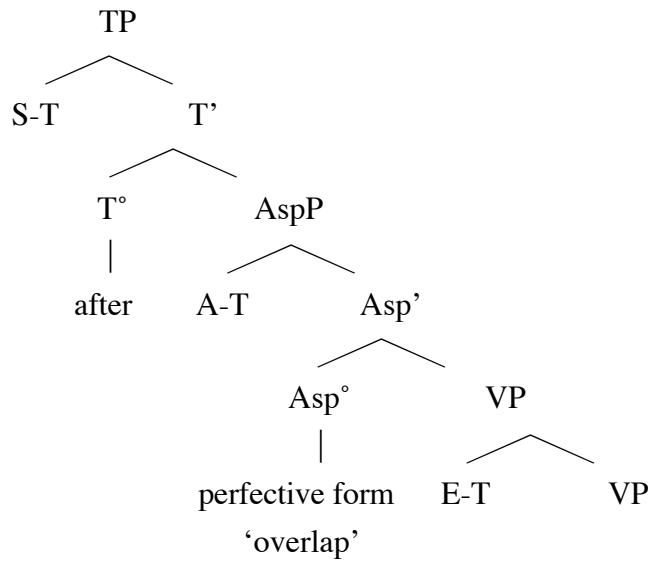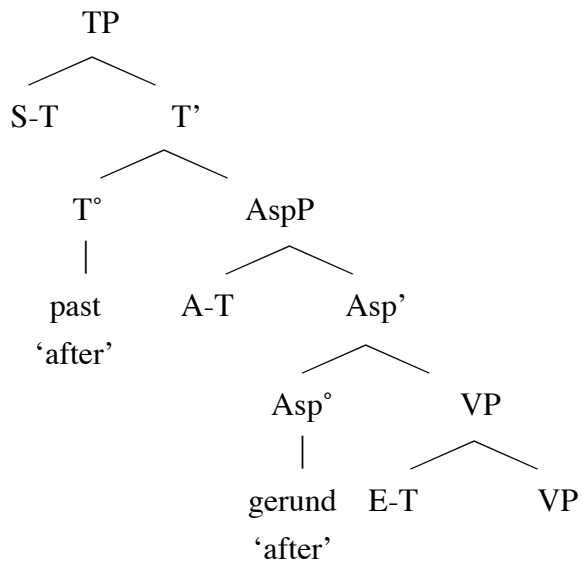
For the present perfect, along with Demirdache and Uribe-Etxebarria (2000), I suggest the structure in (61) to be the case.

(61) Present Perfect in Gerund-Variety

```
              TP
            /    \
         S-T      T'
                /    \
              T°      AspP
              |      /    \
          present  A-T     Asp'
          'within'       /     \
                      Asp°      VP
                      |        /   \
                   gerund   E-T     VP
                   'after'
```
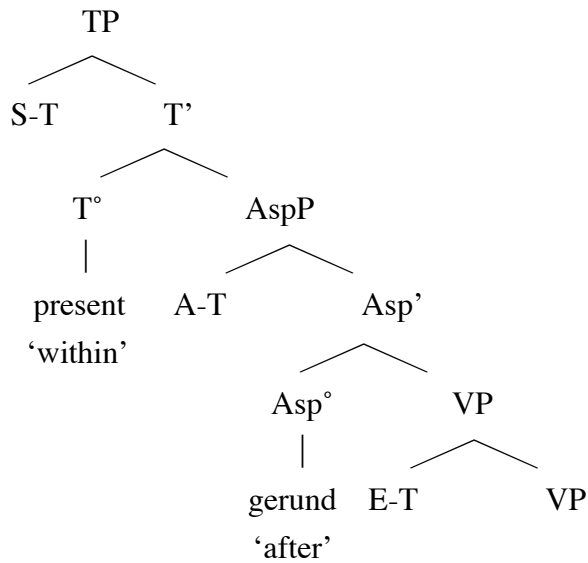
Let us now turn to the languages where perfect is expressed by the perfective form of the verb. That is present and past perfect is expressed by the perfective form + auxiliary. In this group, we find two types of languages when it comes to simple past construction. In some languages, simple past is expressed by the bare perfective form of the verb and in others, simple past is marked by the addition of a tense marker to the perfective form of the verb. There is nothing new in the former type of languages, which needs discussion here. They can be explained in the same manner as the above-discussed languages (cf. the structures in (59) and (60)). The only difference between the two is somewhat descriptive. In the Tigrinya type languages, the aspectual head, which establishes a temporal ordering *after* between A-T and E-T, is the gerund whereas in the others, it is the perfective form as shown in (62). Compare the structures (60) with (62).

(62) Past Perfect

```
                    TP
                   /  \
                S-T    T'
                      /  \
                   T°     AspP
                   |      /  \
                 past  A-T    Asp'
                'after'      /    \
                        Asp°       VP
                         |        /  \
                  perfective form E-T  VP
                      'after'
```
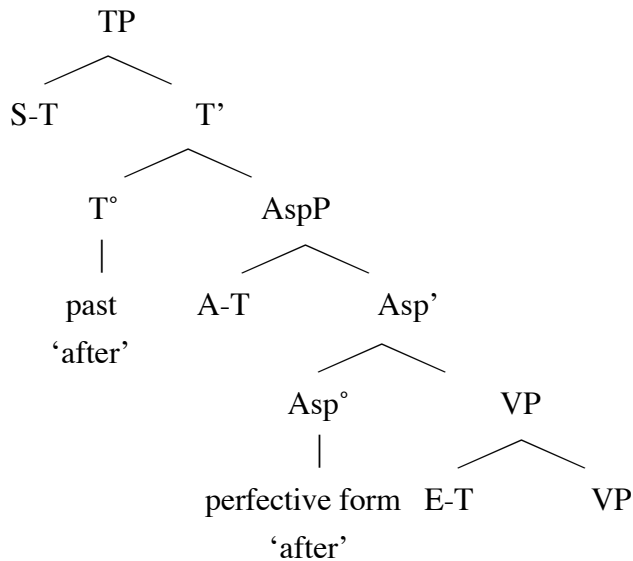
Now, let us turn to the other type. In some languages, we have a morphological structure of the simple past illustrated in (63). On the other hand, in the perfect constructions we have (64).

(63) Simple Past
    Perfective + tense

(64) Perfect Tenses
    Perfective + tense

Muher, Zay and all the 3T languages; except Endegeñ, belong to this type. The Zay, case is, in fact, a little bit different than the others in this group. I will discuss Zay later in this section.

If both the perfective form and past establish the same relation *after*, then the simple past of the type in (63) will have a reading of past perfect, which is undesired. Consider (65); where *after$_1$* is a relation denoted by past and *after$_2$* is by the perfective form.

(65) S-T after$_1$ A-T after$_2$ E-T

Recall that, in the above discussion, I have suggested that perfective form may order the assertion time after the culmination point of a situation as what perfect does. But that is not a particular behavior of perfective aspect. Perfective aspect denotes a situation from its beginning to its end as in (11), repeated here as (66).

(66) B-S   E-S
   //////////////

Because of this fact, I have suggested in the previous section that perfective has to be analyzed with a relational term *overlap* where the time of assertion is assumed to be overlapped with the source state as well as with the target state; i.e. the culmination of a situation. I called such reading of perfectivity PR and represented with simplified version of Klein (1995) as in the following.

(67) Perfective (PR)
  A-T overlap E-T

Hence, it is reasonable to assume that in (64) type of construction, the past tense will occupy the syntactic T position and the perfective will occupy the head of AspP having a reading of perfect (PRP) and establishing a relation, as mentioned above, somewhat similar to *after*. However, in structures that of (63) the aspectual form in question will have perfective reading (PR) and establish a relation *overlap,* not that of ordering. If this is the case, structure in (65) can have a past perfect reading when *after$_2$* reads as perfect and it can have a simple past reading when *after$_2$* reads as perfective. I will illustrate with tree diagram the facts mentioned in (63) and (64), in (68) and (69) respectively.[20]

(68)

```
              TP
           /      \
        S-T        T'
                 /     \
              T°         AspP
              |        /      \
            past    A-T        Asp'
                             /      \
                          Asp°        VP
                           |        /    \
                          PR     E-T      VP
```

(69)

```
              TP
           /      \
        S-T        T'
                 /     \
              T°         AspP
              |        /      \
            past    A-T        Asp'
                             /      \
                          Asp°        VP
                           |        /    \
                          PRP    E-T      VP
```
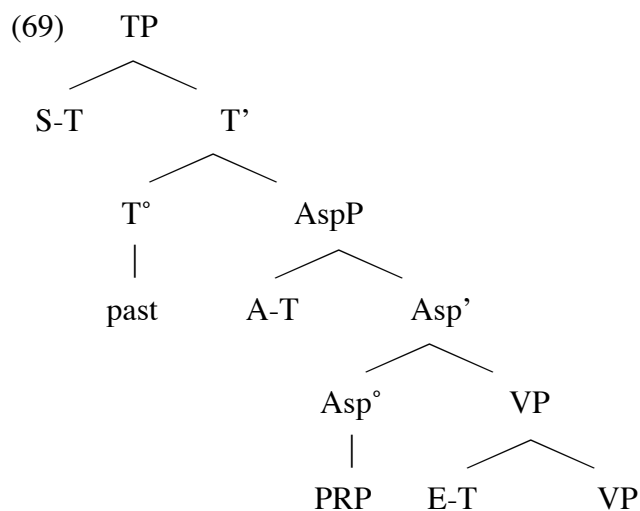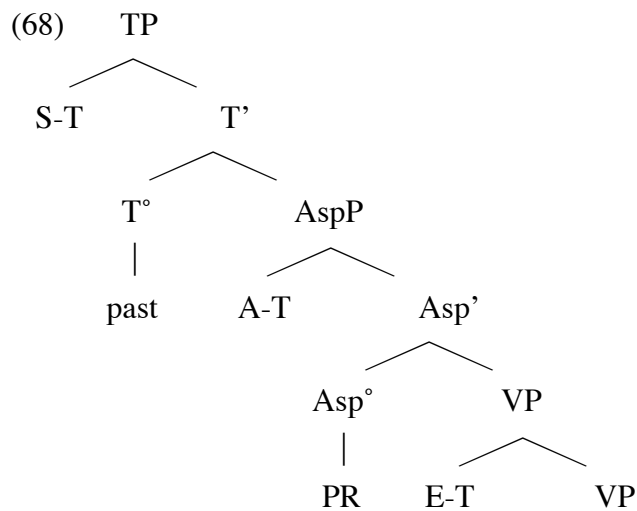
In Zay, unlike any other Ethio-Semitic languages simple past is marked by the perfective form of the verb and by the addition of past tense auxiliary (cf. chapter six). The difference between the past perfect and simple past is that both constructions select different types of past auxiliaries. In the past perfect, we find the auxiliary *naar* whereas in the simple past we find an enclitic auxiliary *nu*. Consider (70) and (71):

(70) mäta-a-nu (Zay)

come$_{perf}$-3ms$_s$-Aux$_{past}$

'He came'

(71) mäta-a naar

    come$_{perf}$-3ms$_s$ Aux$_{past}$

    'He had come'

It means that, the shifting of aspectual reading has also a morphological impact on the form of the tense markers. Hence, in Zay simple past and past perfect can be represented in the same way with the structure presented above in (68) and (69) respectively.

7.4.4 Summary

In this section, i.e. 7.4, based on a theory that considers tense and aspect as temporal relation I have tried to account the Ethio-Semitic aspect and tense constructions discussed in the preceding tow chapters. I will summarize the basic points discussed in this section below.

The perfective form of the verb is understood in this work as having two functions; PR and PRP. If that is not the case, structures that have the same type of morphology but different reading will remain unexplained. For example, in Soddo, Gogot and Mäsqan the perfective form of the verb plus the suffix morpheme *m* gives a reading of present perfect, whereas the same kind of construction gives a simple past reading in 3T languages. In both cases, the morpheme *m* can be considered as a tense marker; in the former present, whereas in the latter simple past. Since present perfect is analyzed as S-T within A-T after E-T, it seems that the former structure corresponds directly to the PR reading of the aspectual head. However, in the latter case the problem will arise if the aspectual head is considered as PR, since S-T after A-T after E-T is assumed to provide a reading of past perfect. In such case, the aspectual head does not establish such a relation. The question is, why does this aspectual head establishes the relation *after* in Soddo, Gogot and Mäsqan present perfect construction but not in 3TG simple past constructions? The answer is clear; in the former languages, the aspectual form is PRP whereas in the latter it is PR. Hence, the relation which can be established by the aspectual head in the two groups of languages is different — in Soddo, Gogot and Mäsqan *after* whereas in 3TG and Muher *overlap* as illustrated in (72) and (73).

(72) Soddo, Mäsqan and Gogot
    Present Perfect
    Perfective form of the verb + *m*
    S-T within A-T after E-T

(73) Muher and 3TG (except Endegeñ)
    Simple past
    Perfective form of the verb + *m*
    S-T after A-T overlap E-T

The other major point discussed above is that, imperfective + present auxiliary gives a reading of present progressive in Tigre and Ge'ez whereas in Amharic, Argobba, etc. it gives simple present/ future reading. Note that, such simple present/ future reading cannot be obtained from such construction in Ge'ez and Tigre. For this, I have argued that present progressive is not as such aspectually different than non-past. It differs from simple non-past only with its specific reference to the present time.

7.5 On Future Tense

I exclude here the discussion on 2T languages, since in 2TG the distinction between present and future (in most cases progressive as well) is contextual. Since, I have already suggested the analysis for such cases above, there is nothing new to add here. I will focus on the two future forms in 3TG.

As I discussed in chapter six, the two futures are known as definite and indefinite futures. The definite and indefinite alteration has something to do with mood (cf. chapter six). These future forms are different in two respects: (a) they have their own morphology; and (b), they are attached into different verb forms. Consider the following examples:

(74) Indefinite Future

    ɨ-sɨr-se   (Endegeñ)

    $1s_s$-break$_{juss}$-T$_{fut}$

   'I might break'

(75) Definite Future

    yɨ-säwɨr-de   (Endegeñ)

    $3ms_s$-break$_{impf}$-T$_{fut}$

   'he will break'

In (74) and (75), the morphological form of the verb is different. This is because in (74), the form in question is jussive, whereas in (75), it is imperfective, as it also clear from the morphological transcription line. We can suggest the structure for the definite future to be (76).

(76)
```
                TP
              /    \
           S-T      T'
                  /    \
                T°      AspP
                |      /    \
              before A-T    Asp'
                          /     \
                       Asp°      VP
                        |       /   \
                      within  E-T    VP
```
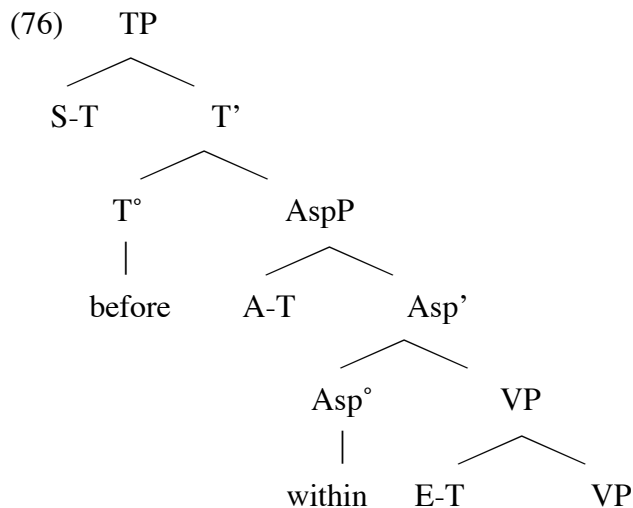
The problem is with the construction in the so-called indefinite future. Since the morphological form of the verb is jussive, it needs some explanation as to how we derive such structure and semantic interpretation here. Jussive is an indirect command in Ethio-Semitic. However, there is no semantic evidence for indirect command reading which can be obtained from such kind of construction; i.e. indefinite future. Because of this, it is hard to assume the main verb as heading a

modal projection in syntax. Note also that, the modal interpretation of uncertainty, has to do with the future marker affix itself.[21]

If the morphological form does not tell about its function, we have to examine if there exists any aspectual difference between the definite and indefinite futures. In this respect, we do not find anything reliable. The difference between the two forms is attributed only to modal interpretation, which, as mentioned above, has to do with the so-called future markers themselves. It is natural, thus, to suggest that both constructions have the same syntactic projection, which can be represented as (74) above.

Note that here, the syntactic projection TP in such construction has to be understood also as encoded with modal feature; i.e. ±definite feature. This is based on a strong minimalist assumption. What matters to the syntactic projection in minimalism is the bare lexical item; which is bundles of features. According to the Bare Phrase Structure theory of Minimalism (see chapter two for a discussion), it is not the case that there is a syntactic projection TP, or anything else to that matter, where the tense markers (features) are inserted. But, rather the features themselves project in syntax as in (77) and determine their label.

(77)   the

       the   book (Chomsky 1995)
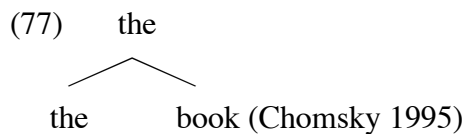
Hence, the future tense in these languages will project in syntax along with the modal feature; i.e. +future tense and ±certainty. As it heads one of temporal heads; i.e. TP (the other being AspP, as already discussed); it establishes an ordering to its two temporal arguments. Since it has also a modal feature, it checks such a feature against the same feature in V.[22] Note that here, as clearly put in Demirdache and Uribe-Etxebarria's (2000) and recall the arguments in chapter three of this work tense and aspect may have dual function in syntax. One, as a lexical head they take arguments and, two, as a functional heads they check features such as Case features against other arguments (see also chapter three of this work).

7.6 Conclusion

I have discussed in this chapter that, though perfective and perfect can be marked by the same morphology they are different grammatical categories. The perfective form of the verb can establish a relation *after* if it has a reading of perfect (PRP). On the other hand, such a form can establish a relation *overlap,* if it has a reading of perfectivity (PR). If such an assumption is correct, in a simple past construction, i.e. when there is no PRP, it is hard to suggest that the relation established by the aspectual head is *after*. The only relation left that can be established by the perfective form of the verb is *overlap*[23] the suggestion that languages which mark simple past by the bare perfective form and simple non-past by the bare imperfective have the same structural representation seems correct. In all the languages under consideration here, simple past has to be understood as (78) and simple non-past as (79), regardless of the morphological realization of tense markers.

(78) S-T Past A-T PR E-T

(79) S-T within A-T within E-T

(79) reads as in (80):

(80) S-T after A-T overlap E-T

In general, what is suggested in this structure is that the syntactic projection T, though phonologically zero, establish a relation *after* in the case of past, and *within* in the case of non-past.[24] The aspectual heads establish *overlap* and *within* for perfective and imperfective respectively. Recall that, in chapter two I have discussed that what matters to syntax is features not necessarily morphemes. And, recall also that in chapters five and six, I have argued that when the bare perfective form equals simple past it means that such aspectual (morphological) form encoded also with an abstract past tense feature.

In this chapter, in general, I have analyzed the tense and aspect system of Ethio-Semitic languages within a theory that treats such categories as temporal relations.

Such a theory, as we have seen above, handles interestingly the Ethio-Semitic data that seem morphologically too complex.

Notes to chapter 7

[1] The assumption that time arguments are represented in syntax as temporal DPs or Zeit Phrases, is that just like any DP they can be modified by temporal adverbs. According to such a theory, temporal adverbs can be considered as "semantic and syntactic modifiers of *Zeit-phrases* projected in the syntax as arguments of Asp°'" (Demirdache and Uribe-Etxebarria 2002: 5). I am not going to discuss this issue here. It is beyond the scope of this paper. However, for an interesting discussion and related references see Demirdache and Uribe-Etxebarria (ibid.).

[2] Klein (1995: 687) definition of tense is as follows: "Tense is a temporal relation between T-U [Time of Utterance] and T-AST [Time of Assertion]".

[3] According to Demirdache and Uribe-Etxebarria (2000), note that, the heads of the aspectual and tense projections in syntax are spatiotemporal predicates that establish a temporal ordering relation between their time-denoting arguments. Based on Hale (1985) the term spatiotemporal relation is defined in Demirdache and Uribe-Etxebarria (2000) as central versus noncentral coincidence.

[4] The general proposal of Demirdache and Uribe-Etxebarria is summarized below in (i).

(i) The Phrase Structure of Tense and Aspect
   Both Tense and Aspect are dyadic spatiotemporal ordering predicates taking time-denoting
   phrases as arguments. The external argument of Aspect (Asp°) is a reference time (the [A-T]);
   its internal argument is the time of the event denoted by the VP ([E-T]). The external
   argument of tense (T°) is a reference time ([S-T]); its internal argument is the [A-T]"
   (Demirdache and Uribe-Etxebarria 2000: 162).

[5] These read as follows:

(i) in the PERF aspect, the assertion extends over the source state and the target
    state;
(ii) in the IMPERF aspect, the assertion only affects the distinguished state, that is,
    the only state in 1-state expressions, and the source state in 2-state expressions"
    (Klein 1996: 690).

Note that, in Klein (1995) verbs are classified as having 1-state and 2-state verbs. The so-called 2-state verbs are identified as having source state (SS) and target state (TS). In Klein there is also a distinguished state which is abbreviated as DS where "in Russian, DS is (a) the only state for 1-state expressions and (b) the source state of 2-state expressions" (Klein 1995: 689). Thus, T-SS stands for time of source state, T-TS for time of target state, T-DS for time of distinguished state and OVL stands for a relation overlap; in a sense that when a OVL b means "a overlap b, i.e. they have a common subinterval" (Klein 1995: 688).

[6] Based on Travis (2000) and Pesetsky and Torerego (to appear) one can suggest that there is a temporal projection between the two subevents. Although I am not going to discuss this issue here, this is a possible operation and can be handled interestingly with the theory which I adopt in this work.

[7] "The head of AspP is a spatiotemporal ordering predicate with the meaning of AFTER for Perfect Aspect" (Demirdache and Uribe-Etxebarria 2000: 164). In Reichenbach's (1949) type theory the

past perfect is represented as E-T— R-T — S-T; meaning the time of situation, i.e. the event time, is before the reference time and the reference time itself is before the time of utterance.

[8] It is important to notice, the usage of perfective and imperfective versus perfective form and imperfective form in this work. The former two denote perfectivity and imperfectivity whereas the latter two denote the morphological form of perfective and imperfective; not necessary the semantic content of those aspects.

[9] See for sequence of converb construction and their semantic interpretation in Ethio-Semitic languages, Hetzron (1977), Leslau (1995), Salzman (2001) among others.

[10] In the following examples (13), (14) and (15), note that B-S stands for beginning state and E-S for end or final state. In Klein's terminology these equal to source state and target state respectively.

[11] This does not mean that every event type has all these components, as we know from semantics. Some event types, for instance verbs such as, *stop, began, finish* may not have such components but corresponds either to the source state or final state. See for a brief discussion of this sort Kamp and Reyle (1993) among many others.

[12] "When either T° or Asp° is not morphologically realized, its external argument binds its internal temporal argument" (Demirdache and Uribe-Etxebarria 2002: 4).

[13] But, see for another alternative analysis below.

[14] Italics is mine, for emphasis.

[15] These are the 3T languages, North Ethio-Semitic, Soddo, Gogot, Mäsqan and Gafat (see the next page).

[16] Note that, both examples can also be interpreted as present tense as in *lit.'he breaks'* and *lit.'Kebede comes'* respectively.

[17] There is a slightly different interpretation for these aspects in the literature, in fact. In some literature the imperfective/ progressive viewpoint is assumed to correspond neither to the beginning state nor to the endpoint (see, for example, Smith 1997).

[18] In fact, according to Demirdache and Uribe-Etxebarria's (2000) such temporal heads; i.e. Asp and T, have dual functions, as lexical head they take arguments and as functional head they check some features. However, this also does not mean they assign temporal feature rather than establishing a relation.

[19] This is not, in fact, a radical suggestion. As already mentioned, Demirdache and Uribe-Etxebarria (2000) suggest that perfect establishes a temporal ordering between its two time-denoting arguments as what past does; i.e. *after*.

[20] Recall that, PR equals *overlap* and PRP equals *after*.

[21] There is a strong sound correspondance between the verb 'to want' and the indefinite future marker. It might be the case that the indefinite future marker might be originated from the verb 'to want'.

22 One may interpret such fact in the other way round. For example, the fusion of the modal and the tense feature can be assumed as taking place in post-syntax, whereas in syntax both features head their own projection. I do not have anything to say about such alternative assumption here. However, one has to notice that, it is almost natural to find a feature tense as encoded with mood in many languages. From philosophical perspectve also the future tense cannot be considered as the mirror image of past. "The two tenses [i.e. past and future] should be used differently is hardly surprising, given that our attitude towards the future is so very different from our attitude towards the past. It is part of our conception of ourselves and of our role in the world in which we live that the future is 'open' while the past is 'closed'. What the future will be like is to a significant degree undetermined, and we ourselves are among those who can help shape it. As to the past, nothing we do can make any difference" (Kamp and Reyle 1993: 534). Kamp and Reyle further discuss that "symptomatic of this difference is the way in which the future tense is grammatically realized in English. The English future tense is formed with the help of the auxiliary will (or in the 1st and 2nd person, shall for certain dialects of British English). But will (and shall) belong to a larger class of 'modal auxiliaries', which also contains words like must, should, may, might all these particles have a meaning that is future -oriented; but they differ in their 'modal force'" (Ibid.).

23 Note that, it has a reading of PR.

24 This is, in fact, against Demirdache and Uribe-Etxebarria's (2002) suggestion. According to Demirdache and Uribe-Etxebarria, if there is no aspect or tense morpheme, then the external argument of the null temporal head binds its internal argument. This means that, there is no ordering relation established by morphologically empty temporal heads.

Chapter Nine: Clausal Negation

9.1 Introduction

In this chapter, I deal with negation in Ethio-Semitic languages. I examine the nature of negative markers that negate a clause in general; i.e. where the negation marker has scope over the whole sentence. The focus is, thus, on what is called sentential negation.

In some Ethio-Semitic languages, sentential negation is expressed by the pre-verbal element which is, in fact, found prefixed to the verb; and, in some others, it is realized as a combination of pre-verbal and post-verbal elements in which case both are realized as affixes. Other than these two varieties, we do not have a language that marks negation by a post-verbal negative marker in this language group.

There are some incompatibility between certain types of negative markers and affirmative functional categories such as AMCMs, and what I call functional tense markers in the preceding chapters. Such distributional restriction concerns on the behavior of the negation markers themselves. For example, when the negated clause is subordinate the post-verbal negative markers disappear but not the pre-verbal negative markers. The post-verbal negative markers are also incompatible with imperatives. Furthermore, functional tense markers and affirmative main verb markers are incompatible with post verbal negative markers and some sort of pre-verbal negative markers.

Before examining what really marks Clausal negation in the languages under consideration here, we will see some general points on the structure of a clause with respect to negation in the following section.

9.2 Negation and Clause Structure

Following a remarkable work by Pollock (1989), negation is assumed to head its own projection in syntax.[1] The head of the negative phrase is assumed also to show all the properties of other functional categories such as head movement constraint or showing other property of ECP and has to be bind by other principles of syntax. The Spec of such a phrase is also assumed to be filled by negative quantifiers and

some other negative elements. In fact, it is not the case that all negative markers in natural languages occupy the head position. It may be the case that in some languages the clausal negation markers may occupy only the Spec of NegP and the head position be empty unless and otherwise filled by some other elements which are moved from other lower positions.

For example, Zanuttini (1994) observes the following in Romance languages: "Negative markers in Romance are either X° elements which project a functional category NegP, or else XP elements which occur in the specifier of NegP, with an empty Neg°" (Zanuttini 1994: 446). Zanuttini, considers the negative marker *non* in Italian as the head of NegP whereas Piedmontese *nen* as a phrasal element which has to project in the Spec of NegP. The following tree diagrams are her representations.

(1)   NegP   (Italian)

              Neg'

           Neg   ...

            |

           non   VP (Zanuttini 1994: 446)
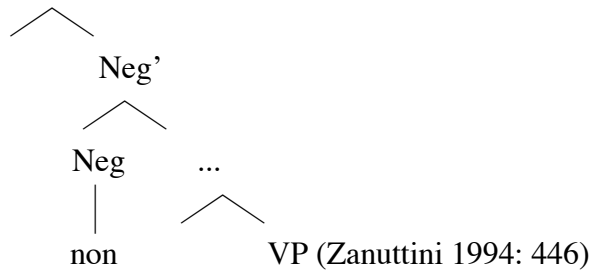
(2)   NegP   (Piedmontese)

         nen   Neg'

                 Neg   ...

                  |

                  Ø   VP (Ibid.)
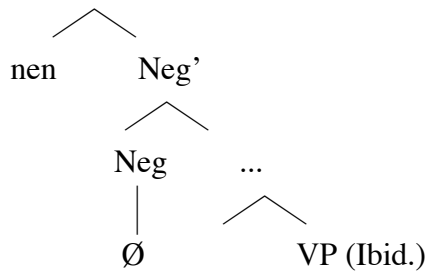
Zanuttini further points out that, in some Romance languages which have two negative markers in concord reading such as French, the pre-verbal negative marker occupies the Spec of NegP and expresses sentential negation while the post-verbal negative marker occupies the head position and cannot express sentential negation. According to Zanuttini (1994), the pre-verbal negative marker that expresses

negation by its own has to move to PloP; i.e. polarity phrase, to check the negative polarity feature.

What determines a certain negative marker in a certain language to head NegP or to occupy the specifier of such a projection is its syntactic property in general. If a certain negative marker has phrasal behavior, it will be treated as a maximal projection, if not as head of NegP. We will see such theoretical facts in relation to the data at hand.

9.3 The Nature of Negative Markers

Based on the morphology of the negative markers, it is possible to categorize the Ethio-Semitic languages into two; those which use only prefix to negate a clause in one group and those which use prefix-suffix combination in another group. I call the latter PS-Group and the former P-Group for ease of discussion. I first examine the behavior of negation in languages which use the prefix and the suffix negative elements in a single negative clause in concord reading; i.e. PS-Group. I examine the P-Group in section 9.3.2.

9.3.1 A Co-occurrence of Prefix and Suffix Negative Markers

9.3.1.1 General Facts in PS-Group

Amharic, Argobba, Gafat, Harari, Tigrinya, Ennemor, Endegeñ fall in this group. What is similar to all these languages is that, the pre-verbal negative marker can negate a clause by its own, but not the post-verbal negative marker. Furthermore, the presence of the post-verbal negative markers is dependent on the nature of the clause, i.e. embedded versus root clause and on the type of grammatical functions such as tense, aspect and mood. We will see these facts below.

As mentioned above clausal negation in Amharic, Endegeñ, Ennemor, Tigrinya and some other languages is a case of negative concord, where two negative morphemes appear in a single clause, as in the following:[2]

(3) yonas al-hed-ä-m   (Amharic)

     J.   neg- go$_{perf}$-3ms$_S$ -neg

    'Jonas didn't go'

(4) an-sappär-ä-dä   (Endegeñ)

    neg-break$_{perf}$-3ms$_S$-neg

    'He did not break'

(5) 'ay-mäs'-ä-n   (Tigrinya)

    neg-come$_{perf}$-3ms$_S$-neg

    'He did not come'

(6) an-käfät-ä-da   (Ennemor)

    neg-break$_{perf}$-3ms$_S$-neg

    'He did not open'

(7) al-säbbär-ä-m   (Harari)

    neg-break$_{perf}$-3ms$_S$-neg

    'He did not break'

(8) al-neggäd-a-w   (Argobba)

    neg-trade$_{perf}$-3ms$_S$-neg

    'He did not trade' (Leslau 1997: 47)

(9) al-aqäb-hu-m   (Gafat)

    neg-watch$_{perf}$-3ms$_S$-neg

    'He did not watch' (Leslau 1945: 66)

In the above examples, there are two negative markers in each clause having an interpretation of a single instance of negation. One is found prefixed to the verb and the other is found suffixed to the verb next to the Agr elements.

As noted by Shlonsky (1997), see also Benmamoun (2000), in modern colloquial dialects of Arabic and in French, like in the above discussed languages sentential

negation is expressed by two morphemes. Compare the above examples with French and Palestinian Arabic below.

(10) zayd ma kan-(ɨ)š bi l-beet   (Palestinian Arabic)

    Z. neg be$_{perf}$3ms-neg in the-house

    ‘Zayd was not at home’

(11) Jean ne fut pas à la maison   (French)

    J. neg be$_{past}$3s neg in the house

    ‘Jean was not in the house’ (Shlonsky 1997: 15)

The analysis proposed for French and Arabic in Shlonsky (1997) is that, the pre-verbal element is the head of NegP and the post-verbal negative morpheme is the specifier of it. Zanuttini (1994) also proposes similar analysis for French and some Romance languages. Shlonsky, quoting Benmamoun, points out that in Moroccan Arabic, the suffix (post-verbal) negative element is in complementary distribution with negative quantifiers.

 (12) a. ma rbeht walu   (Moroccan Arabic)

      neg earn$_{perf}$-1m nothing

    ‘I didn’t earn anything’ or ‘I earn nothing’

   b. *ma rbeht-š walu

     neg earn$_{perf}$-1m-neg nothing

    ‘I didn’t earn anything’ or ‘I earn nothing’ (Shlonsky 1997: 16):

As Shlonsky further points out it is also the same in French (see also Haegeman 1995, Zanuttini 1997 among others):

(13) a. Je ne gagnai rien   (French)

      I neg earn$_{past}$ nothing

    ‘I didn’t earn anything’ or ‘I earn nothing’

   b. *Je ne gagnai pas rien

     I neg earn$_{past}$ neg nothing

    ‘I didn’t earn anything’ or ‘I earn nothing’

According to Shlonsky (1997) and some others (see the reference cited in Shlonsky, for example), the ungrammaticality of (12-b) in Moroccan Arabic and (13-b) in French is because of the competition of the post-verbal negative markers and negative quantifiers for the same position, namely the Spec of NegP. It is true also in Ethio-Semitic, if a negative quantifier appears in a negative clause the post-verbal negative marker may not present, however the presence of it does not lead to ungrammaticality as (14-b) may show.

(14) a. mɨnɨm   al-agäññä-hu   (Amharic)

      nothing neg-earn$_{perf}$-1s$_S$

    'I did not earn anything' or 'I earn nothing'

  b. mɨnɨm   al-agäññä-hu-m

     nothing neg-earn$_{perf}$-1s$_S$-neg

     'I did not earn anything' or 'I earn nothing'

If it is true that only one Spec position is available and the illicit forms of (12-b) in Moroccan Arabic and of (13-b) in French are for competing for this single position (as it is advocated by many linguists among them Shlonsky 1997, Haegeman 1995, Ouhalla 1990, Haegeman & Zanuttini 1991, Rizzi 1990), the suffix negative marker of Amharic cannot be given the same status with the French and dialects of Arabic counterparts.

In fact, recently rejecting his previous analysis, Benmamoun (1999, 2000) suggests that the pre- and post-verbal negative elements in Arabic are two occurrences of a single negative morpheme. Thus, according to Benmamoun such elements have to be treated as occupying the head of NegP.[3] However, this cannot be taken straightforward to Ethio-Semitic languages. One of the reasons is that, the pre-verbal and post-verbal negative markers may not appear affixed to a single element in this language group. Consider (15):

(15) yi-kätbu-m al-naar   (Harari)

   3ms$_S$-take$_{impf}$-neg neg-Aux$_{past}$

  'he was not writing' (Leslau 1958b)

Furthermore, it is not the case that the suffix negative marker found in all types of clauses in Ethio-Semitic. In this language group, the presence and absence of the post-verbal negative element is closely related with tense markers and the type of clause such as imperatives, embedded and main clauses. I discuss such facts in the following sections.

9.3.1.2 The Post-verbal Negative Markers and Tense

The suffix negative markers and tense markers have some distributional restrictions. The post-verbal negative markers will not appear in the presence of functional tense markers, FTMs.[4] Consider the following examples:

(16) a. ʼɨ-mät'-all-ähu   (Amharic)

       $1s_S$-come$_{impf}$-Aux$_{pres}$-$1s_S$

     'I will come'

   b. al-ɨ-mät'a-m

     neg-$1s_S$-come$_{impf}$-neg

     'I will not come'

   c. *al-ɨ-mät'-all-ähu-m

     neg-$1s_S$-come$_{impf}$-Aux$_{pres}$-$1s_S$-neg

     'I will not come'

(17) a. säpär-ä-m   (Ennemor)

       break$_{perf}$-$3ms_S$-T$_{past}$

     'he broke'

   b. an-säpär-ä-da

     neg-break$_{perf}$-$3ms_S$-neg

     'he didn't break'

   c. * an-säpär-ä-m-da

     neg-break$_{perf}$-$3ms_S$-T$_{past}$-neg

     'he didn't break'

(18) Generalization on tense and negation (preliminary version)

The post-verbal negative markers are not compatible with functional tense markers.

There are a lot of questions that need explanation here. What is the reason for the incompatibility of the suffix negative markers with functional tense markers? What is the reason that all types of tense markers do not behave alike? Is really the incompatibility of tense with the suffix negative marker or with in general negation? If it is the latter, why tense markers delete in the face of the suffix negative markers? Is the post-verbal negative marker incompatible with other functional categories? I try to answer these questions in the remaining sections of this chapter.

9.3.1.3 The Post-Verbal Negative Markers and Complementizers

Beside tense markers, the post-verbal negative markers are incompatible with complementizers. Consider, for example, the following complex clauses:

(19) a. yonas s-a-y-hed n-a   (Amharic)

   J.   comp-neg- 3ms$_S$-go$_{impf}$ come$_{impr}$-2ms$_S$

   'You have/ need to come before Jonas left.'

   b. yonas ɨnd-al-hed-ä ɨwäq

   J.   comp-neg- go$_{perf}$-3ms$_S$ know$_{impr}$(2ms$_S$)

   'You have to know that Jonas doesn't left.'

   c. yonas s-a-y-hed 'ɨ-mat'-all-ähu

   J.   comp-neg-3ms$_S$-go$_{impf}$ 1s$_S$-come$_{impf}$-Aux$_{pres}$-1s$_S$

   'I will come before Jonas left.'

(20) b-a-nɨ-säwɨr   (Endegeñ)

   if-neg-1s$_S$-break$_{impf}$

   'If I do not break'

(21) b-a-yɨ-säßɨr   (Ennemor)

   if-neg-3ms$_S$-break$_{impf}$

   'If he does not break'

The examples in (19), (20) and (21) show that in embedded clauses, negation is expressed by the prefix negative element only. The presence of the suffix negative marker in such clauses leads to ungrammaticality.

(22) a. *yonas s-a-y-hed-m na   (Amharic)

   J.   comp-neg- 3ms$_S$-go$_{impf}$-neg come$_{impr}$(2ms$_S$)

   'You have to come before Jonas left.'

   b. *yonas ɨnd-al-hed-ä-m ɨwäq

   J.   comp-neg- go$_{perf}$-3ms$_S$-neg know$_{impr}$(2ms$_S$)

   'You have to know that Jonas doesn't left.'

   c. *yonas s-a-y-hed-m 'ɨ-mat'-all-ähu

   J.   comp-neg- 3ms$_S$-go$_{impf}$-neg 1s$_S$-come$_{impf}$-Aux$_{pres}$-1s$_S$

   'I will come before Jonas left.'

(23) a. *b-a-nɨ-säwɨr-kä   (Endegeñ)

    if-neg-1s$_S$-break$_{impf}$-neg

    'If I do not break'

   b. a-nɨ-säwɨr-kä

    neg-1s$_S$-break$_{impf}$-neg

    'I do not break'

(24) a. *b-a-yɨ-säßɨr-ka   (Ennemor)

    if-neg-3ms$_S$-break$_{impf}$-neg

    'If he does not break'

   b. an-yɨ- säßɨr-ka

    neg-3ms$_S$-break$_{impf}$-neg

    'he does not break'

Based on the above-discussed facts it is possible to forward the following descriptive generalization.

(25) Generalization on negative markers and complementizers (preliminary version)
The post-verbal negative markers are incompatible with complementizers.

9.3.1.4 The Post-verbal Negative Markers, Complementizers, and Tense

Recall that, in chapter six I pointed out that tense markers and complementizers are incompatible. In the presence of complementizers the affix and some of the clitic tense markers, which I called functional tense markers FTM, are absent (cf. 26-a & - b). Only the free and other few tense marker auxiliaries, i.e. lexical tense markers LTM, are compatible with the overt complementizer as in (26-c). (See for detailed discussion of this sort section 9.4.)

(26) . yonas s-i-hed   'i-mat'-all-ähu   (Amharic)

  J. comp-3ms$_S$-go$_{impf}$ 1s$_S$-come$_{impf}$-Aux$_{pres}$-1s$_S$

  'lit. I will come when Jonas leaves.'

 b. *yonas s-i-hed-all   'i-mat'-all-ähu

  J. comp-3ms$_S$-go$_{impf}$-Aux$_{pres}$ 1s$_S$-come$_{impf}$-Aux$_{pres}$-1s$_S$

  'lit. I will come when Jonas leaves.'

 c. yonas hed-o   indä-näbbär   Ø-awq-all-ähu

  J. go$_{gerund}$-3ms$_S$ comp-Aux$_{past}$ 1s$_S$-know$_{impf}$-Aux$_{pres}$-1s$_S$

  'I know that Jonas had gone'

As we expect the co-occurrence of tense, complementizer and negation is ungrammatical.

(27) *yonas s-a-y-hed-all-m   'i-mat'-all-ähu   (Amharic)

  J. comp-neg-3ms$_S$-go$_{impf}$-Aux$_{pres}$-neg 1s$_S$-come$_{impf}$-Aux$_{pres}$-1s$_S$

  'lit. I will come when Jonas leaves.'

The above discussed suffix negative markers show also the same behavior as what the functional tense markers FTMs do with respect to complementizers. Hence, I forward the following generalization.

(28) Generalization on negation, tense and complementizers (preliminary version)
     The post-verbal negative elements, and FTMs are incompatible with complementizers.

Let us assume as a priori that tense, complementizers and the post-verbal negative markers occupy the same position in syntax, possibly a head position in the CP layer, i.e. being as base generated in one of the operator heads or moved into it, in a way which will be clear later. The absence of one on the face of another therefore can be explained by the competition of such functional categories for the same position. In other words, all these categories namely, complementizers, post-verbal negative markers and tense have common feature.

I address the feature structure of complementizers, negative markers and FTMs in section 9.3.1.7, and I discuss the syntactic representation of negation in section 9.3.1.8. I now turn to examine the distributional properties of imperatives and post-verbal negative markers.

9.3.1.5 The Post-verbal Negative Markers and Imperatives[5]

The occurrence of the suffix negative element is illicit in imperative and jussive constructions.

(29) a. at-tɨ-hid   (Amharic)

     neg-2ms$_s$-go$_{impr}$

     'Don´t go'

   b. *at-tɨ-hid-m

      neg-2ms$_s$-go$_{impr}$-neg

       'Don´t go'

(30) a. a-nɨ-sɨr   (Endegeñ)

   neg-1s$_S$-break$_{juss}$

  'Let me not break'

  b. *a-nɨ-sɨr-se

   neg-1s$_S$-break$_{juss}$-T$_{fut}$

  c. *a-nɨ-sɨr-kä

   neg-1s$_S$-break$_{juss}$-neg

The following generalization can be made with regard to negation and imperatives:

(31) Generalization on negation and imperatives (preliminary version)
    The post-verbal negative marker is incompatible with imperative forms.

9.3.1.6 The Post-verbal Negative Markers, Complementizers, Tense and Imperatives

As is also the case to many natural languages, in Ethio-Semitic imperatives do not select tense. Consider the following examples:

(32) a. hid   (Amharic)

   go$_{impr}$.2ms$_S$

   'go!'

  b. *hid-all

   go$_{impr}$.2ms$_S$-Aux$_{pres}$

   'go!'

As we expect, it is also ungrammatical to have the co-occurrence of the suffix negative markers and tense in imperative clauses.

(33) a. at-tɨ-hid   (Amharic)

   neg-2ms$_S$-go$_{impr}$

   'Don´t go'

b. *at-ti-hid-all

   neg-2ms$_S$-go$_{impr}$-Aux$_{pres}$

   'Don´t go'

c. *at-ti-hid-all-m

   neg-2ms$_S$-go$_{impr}$-Aux$_{pres}$-neg

   'Don´t go'

In this language group, complementizers are also incompatible with imperatives. That means imperatives cannot be subordinate/ embedded under another clause with the overt realized complementizer.

(34) a. *indi-t-hid   biy-allä-hu   (Amharic)

   comp-2ms$_S$-go$_{impr}$ say$_{gerund}$.1s$_S$-Aux$_{pres}$-1s$_S$

   'I said that you have to go' (lit. 'I have said that you have to go')

b. hid   biy-allä-hu

   go$_{impr}$.2ms$_S$ say$_{gerund}$.1s$_S$-Aux$_{pres}$-1s$_S$

   'I said that you have to go' (lit. 'I have said that you have to go')

c. indi-t-hed   biy-allä-hu

   comp-2ms$_S$-go$_{impf}$ say$_{gerund}$.1s$_S$-Aux$_{pres}$-1s$_S$

   'I said that you have to go' (lit. 'I have said that you have to go')

The negative imperatives also cannot be embedded under another clause with the overt presence of complementizer. Such embedding of negative imperative clauses is possible either by omitting the overt complementizer (cf. 35-b) or by using the imperfective verb form for the same purpose as in (35-c).

(35) a. *ind-at-ti-hid biy-allä-hu   (Amharic)

   comp-neg-2ms$_S$-go$_{impr}$ say$_{gerund}$.1s$_S$-Aux$_{pres}$-1s$_S$

   'I said that you shouldn't go' (lit. 'I have said that you shouldn't go')

b. at-ti-hid biy-allä-hu

   neg-2ms$_S$-go$_{impr}$ say$_{gerund}$.1s$_S$-Aux$_{pres}$-1s$_S$

   'I said that you shouldn't go!' (lit. 'I have said you shouldn't go')

c. ɨnd-at-tɨ-hed bɨy-allä-hu

comp-2ms$_S$-go$_{impf}$ say$_{gerund}$.1s$_S$-Aux$_{pres}$-1s$_S$

'I said that you shouldn't go' (lit. 'I have said that you shouldn't go')

As we have seen above, there is no suffix negative marker in embedded clauses. In fact, since the suffix negative marker is incompatible with imperatives, we do not expect such element to appear in embedded clauses.

(36) *ɨnd-at-tɨ-hid-m bɨy-allä-hu   (Amharic)

comp-neg-2ms$_S$-go$_{impr}$-neg say$_{gerund}$.1s$_S$-Aux$_{pres}$-1s$_S$

'I said that you shouldn't go' (lit. 'I have said that you shouldn't go')

(37) Generalization on negation, tense, complementizers and imperatives
    (preliminary version)
    The post-verbal negative element, functional tense markers and
    complementizers are incompatible with imperatives.

In section 9.3.1.4, I suggested that tense, complementizers and the post-verbal negative markers share some feature and because of that shared feature/ features such syntactic elements will occupy the same position in syntax. If such target position is occupied by one of those elements the others cannot appear because of lack of landing (or could be base) space. Let us extend such an assumption to include imperatives. Meaning imperatives also have common feature with complementizers, functional tense markers and post-verbal negative markers in Ethio-Semitic languages. I examine this point in the following section.

9.3.1.7 The Feature Structure of the Post-verbal Negative Markers (and Others)

Recall that, in the preceding chapters I argued that functional tense markers, complementizers and affirmative main clause markers have some common features. The so-called AMCMs have two features— (positive) polarity and force features.[6] Since FTMs are also incompatible with negation and complementizer, I have suggested that they have the same features as what AMCMs have. These are (positive) polarity and force features. Because complementizers and imperatives can

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be found in both negative and positive clauses they can be considered as polarity neutral — meaning they cannot be taken as specified for polarity feature. What is left to be a common feature for complementizers and imperatives is, thus, force — assuming that force is a feature that determines a type of clause such as imperatives, indicatives, embedded and root clauses (cf. Poletto and Pollock 2000).

Since negation is sensitive to polarity, it is natural to suggest that the suffix negative markers are encoded with (negative) polarity feature. Unlike the pre-verbal negative markers, since the post-verbal negative markers do not appear in imperative clauses and also incompatible with complementizers, I suggest that the suffix negative markers have also plus force feature. However, the pre-verbal negative markers cannot be taken as having such force feature.

I summarize the feature structure of the above discussed functional elements in Ethio-Semitic languages below.[7]

(38) The feature structure of post-verbal negative markers
    +(negative) polarity feature
    +force feature

(39) The feature structure of functional tense markers
    ±past feature
    +(positive) polarity feature
    +force feature

(40) The feature structure of imperatives
    +force feature

(41) The feature structure of complementizers
    +force feature

If the incompatibility among functional categories is attributed to shared feature/features, what is common to all the above functional categories is force. However, one may reasonably raise the following question here: suppose, if there are other functional categories which have say polarity value, like tense and negative markers,

do we expect incompatibility between such functional categories? The answer is yes. We will see some empirical facts with regard to this point in the following sections.

9.3.1.8 The Syntax of Pre-verbal and Post-verbal Negative Markers

In the preceding sections, we have seen that in Ethio-Semitic languages the pre-verbal and post-verbal negative markers behave differently in many respects, and cannot be treated as occupying a single head position as what Benmamoun (1999, 2000) proposes for some dialects of Arabic. It is not also possible to treat the post-verbal element as projected in the specifier of NegP and the other element as a head of NegP or vise versa, since none of them either has a property of XPs or show incompatibility with XP elements.

First, since the post-verbal negative elements alternate, for example, with tense and complementizers the status of which are not controversial. This is also true to some type of the pre-verbal negative markers in P-Group; i.e. in languages, which express clausal negation with pre-verbal negative markers only; as we will see in a moment. Second, both negative markers have a morphological property of affixes and never found affixed other than the verb. Hence, I consider both the pre-verbal and post verbal negative markers to be X° elements.

Since the pre-verbal Neg element can negate a clause by its own, it is reasonable to suggest that it occupies the head of NegP. Let us assume that we are on the right track and examine the status of the post-verbal negative elements. Recall that, such elements alternate with various functional categories which have either +force feature or both +force and +affirmative features. If the previous suggestion, which considers affirmative feature as head of the functional projection PolP is correct, it is logical to suggest that the post-verbal negative elements are also projected heading PolP.

(42) PolP   (PS-Group)
```
                /\
               /  \
                  Plo'
                  /\
                 /  \
        post-verbal neg    NegP
                            /\
                           /  \
                              Neg'
                              /\
                             /  \
                        pre-verbal neg
```
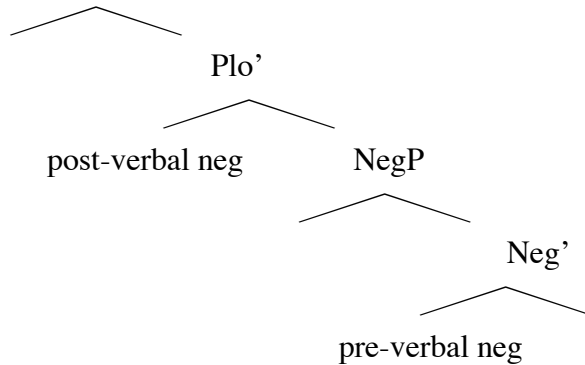
A similar analysis is proposed in Julien (2000: 445 ff.) for Moroccan Arabic and Aymara.[8],[9]

(43) ma-šber-t-š   le-flus   (Moroccan Arabic)
   neg-find$_{perf.}$1s$_S$-neg def-money
  'I did not find the money' (Julien 2000: 445)

(44) jani-w jisk^{h}i-^{c}t'a-^{c}ka-sma-ti   (Aymara)
   neg-EVID ask-NOM-Asp-1S/2O-neg
   'I did not ask you' (Julien 2000: 446)

For the Moroccan Arabic, Julien (2000) suggests that the post-verbal negative marker occupies the head of PolP. "The negation itself could be generated as the specifier of the polarity head, or as the specifier of a Neg° head which is located lower down in the structure" (Julien 2000: 446). For Aymara, Julien as one possibility suggests that one of the neg elements occupies the head Neg° while the other occupies a polarity head.

Julien suggestion for Moroccan Arabic is based on the following points: In Moroccan Arabic the post-verbal negative marker and negative quantifiers are incompatible (recall also the discussion above). The post-verbal negative marker is also incompatible with an indefinite object noun. Consider the following examples from Julien (2000: 445):

(45) ma-šef-na Hedd   (Moroccan Arabic)

   neg-see$_{perf}$-1pl$_s$ anyone

  'We didn't see anyone'

(46) ma-šber-t   flus   (Moroccan Arabic)

   neg-find$_{perf}$-1s$_s$ money

  'I didn't find (any) money' (Julien 2000: 445)

The justification of Julien is the following:

> The negation is an operator which needs to bind a polarity variable.
> Negative polarity items are polarity variables, which must be bound by
> an appropriate operator ... Further, indefinite nouns can also be bound
> by similar operators. Hence, in [(45) and (46)] the properties of the
> negation and of the object are all satisfied. But in [(43)], the object
> does not give the negation a variable to bind. Then a polarity variable is
> inserted, probably in the polarity head, and this variable is spelled out
> as -š (Julien 2000: 446).

This is not, in fact, the case in Ethio-Semitic languages. The insertion of the post-
verbal negative marker has nothing to do with negative polarity items as I have
already pointed out. Consider also the following examples:

(47) maninim al-ayä-ni-m   (Amharic)

   nobody neg-see$_{perf}$-1pl$_s$-neg

   'We did not see anyone'

(48) gänzäb al-agäññä-hu-m   (Amharic)

   money neg-find$_{perf}$-1s$_s$-neg

   'I did not find (any) money'

Hence, the presence of post-verbal negative markers in Ethio-Semitic languages
cannot be considered as a need to be bind by negation in the absence of negative
quantifiers or indefinite objects. Though, the appearance of the post-verbal negative
markers in Ethio-Semitic languages differs from Moroccan Arabic post-verbal

negative marker, there is a strong evidence that the post-verbal negative markers are polarity heads in Ethio-Semitic languages.

In Ethio-Semitic languages, the post-verbal negative markers are incompatible with any functional element that has positive polarity value, such as AMCMs, FTMs. Recall that, there is a difference in feature specification between the pre-verbal and post-verbal negative markers in this language group. The post-verbal negative markers are specified to force feature but not the pre-verbal negative markers. Hence, the post-verbal negative markers are also incompatible with any functional element that has +force feature, such as imperatives, complementizers, etc. Furthermore, in Amharic negative polarity items are formed mostly from *wh*-items by adding the post-verbal negative marker. Such cases can easily be explained if we consider the post-verbal negative element to be the realization of the negative polarity head rather than NegP. Consider the following examples:

(49) Amharic
    a. man 'who'
   b. manɨm 'no one, nobody'

(50) Amharic
    a. mɨn 'what'
   b. mɨnɨm 'nothing'

(51) Amharic
    a. and 'one, any'
   b. andɨm 'no one, nothing'

The proposal that there is a PolP along with NegP is not radical as it seems. Zanuttini (1994), see section 8.2 in this chapter, also forwards the same functional projection in her examination of the Romance languages. "The structure of negative clauses in Romance has two syntactic projections which play role in the expression of sentential negation: one is the projection NegP, in which the negative markers are generated, and the other is the projection PolP in which they are interpreted" (Zanuttini 1994: 429). According to Zanuttini's proposal, the projection PolP has to

do with polarity value whereas the projection NegP with the negative markers themselves: "PolP is the functional category carrying the grammatical feature which have to be checked and specified for a value (affirmative or negative) by LF, either before or after Spell-out. NegP is the position in which negative markers are generated; its structural position varies across languages" (Zanuttini 1994: 430).

Zanuttini further suggests that the cross-linguistic differences of the surface positions of the negative markers can be accounted in terms of the movement of such elements to a functional category namely PolP. According to Zanuttini the negative markers get their interpretation in the functional structure PolP. Such interpretation is possible by moving the negative markers to PolP. In line with Chomsky's (1993) checking-theory such a movement is assumed to take place either covertly or overtly depending on the strength of the feature in PolP.[10]

9.3.2 Negation in P-Group

In this group sentential negation is expressed by pre-verbal negative markers only. This group consists of Ge'ez, Tigre, Soddo, Selti, Wolane, Zay, Chaha, Muher, Gogot and Mäsqan. In this section, I examine the behavior of such negation markers with respect to other functional categories, such as tense, complementizers and imperatives. In section 9.3.2.1, we will see the behavior of negation with respect to tense. In section 9.3.2.2, negation and complementizers; in section 9.3.2.3 negation and imperatives; in 9.3.2.4 negation and AMCMs and in section 9.3.2.5 the feature composition and the syntax of the pre-verbal negative elements are discussed briefly.

9.3.2.1 Tense and Negation

In PS-Group, we have seen that the suffix negative markers are incompatible with functional tense markers. However, such incompatibility seems nothing to do with the suffix negative marker alone. In the languages which mark negation by the pre-verbal morpheme, we find the same incompatibility with tense. That is, in the presence of negation the functional tense markers will disappear. Consider the following examples:

(52) a. näqqär-ä-m   (Chaha)

         pull$_\text{perf}$-3ms$_\text{s}$-T$_\text{past}$

         'he pulled out'

     b. an-näqär-ä

        neg-pull$_\text{perf}$-3ms$_\text{s}$

        'he did not pull out'

     c. *an-näqär-ä-m

        neg-pull$_\text{perf}$-3ms$_\text{s}$-T$_\text{past}$

        'he did not pull out' (Leslau 1992: 133)

Furthermore, if we are correct in suggesting that tense has affirmative polarity value in Ethio-Semitic languages, and the incompatibility among various functional categories is because of (competing) shared feature, any tense marker which is specified for positive polarity cannot be compatible with negation. Meaning, the feature composition of any pre-verbal negative marker in Ethio-Semitic can be understood as specified for negative polarity feature. It is not surprising, in fact, to suggest that both the pre-verbal and the post verbal clausal negative markers have the same negative polarity value.

(53) a. The feature structure of post-verbal negative markers in PS-Group

        +(negative) polarity feature

        +force feature

     b. The feature structure of pre-verbal negative markers in both groups

        +(negative) polarity feature

If this is the case, the incompatibility of tense has to be considered in general with negative markers. Hence, the generalization made on tense and negation has to be revised as follows.

(54) Generalization on negation and tense (final version)

     Negative markers are incompatible with FTMs.

The incompatibility of functional tense markers FTMs with negation in general, is not surprising. As mentioned above, since such tense markers are encoded with affirmative feature; i.e. +positive polarity feature, we do not expect them to be compatible with negation.

9.3.2.2 Negation and Complementizers

As I discussed in the preceding chapter and in the above sections in this chapter, in embedded clauses complementizers and functional tense markers are incompatible. Consider also (55):

(55) a. yä-näqär-ä   (Chaha)

comp-pull$_{perf}$-3ms$_s$

'he who pulled out'

b. *yä-näqär-ä-m

comp-pull$_{perf}$-3ms$_s$-T$_{past}$

'he who pulled out' (Leslau 1992: 133)

Moreover, we have seen that in PS-group, the post-verbal negative marker is incompatible with complementizers. However, the pre-verbal negative markers do not show such incompatibility with the complementizers. With this regard there is an interesting fact in P-group.

In P-Group; i.e. languages which mark negation by a single pre-verbal element, it is not the case that every pre-verbal negative marker is compatible with complementizers. In this group, there are two different forms of the pre-verbal negative markers. Such forms are dependent with the type of clause, such as embedded versus root clauses (cf. section 9.4.2.2). For example, in Soddo when the negated imperfective verb heads a main clause, then the negation marker is the prefix *t-* when such verb form is subordinate it is the prefix *al-*, or its other phonological variant (cf. Leslau 1992, Goldenberg 1970 and see also the following section).[11]

If the discussion so far is correct, it means that those pre-verbal negative markers which cannot appear along with the complementizers have the same feature with the post verbal negative markers — +(negative) polarity and +force features. For ease

of discussion, I call such type of pre-verbal negative markers CP-negative markers (since they have a force feature, i.e. a feature in the operator layer/ CP layer) and abbreviate as CPNM, and the other pre-verbal negative markers which are not encoded to force feature, non-CP negative markers and abbreviate as NCNM. Just to include such type of pre-verbal negative markers, it is necessary to revise the above generalization forwarded with respect to tense and post-verbal negative markers as follows.

(56) Generalization on negative markers and complementizers (final version)
CPNM and post-verbal negative markers are incompatible with complementizers.

(56) reads as follows: all negative markers that have +force feature are incompatible with complementizers.

9.3.2.3 Negation and Imperatives

If the generalization in (56) is correct, we will expect CPNMs, i.e. the pre-verbal negative markers, which are encoded with force feature, to be incompatible not only with complementizers but also with imperatives and others which are specified for +force feature. In fact, this is the case in the languages under consideration here. For instance, as we can see from (57) below, the negative marker in Soddo which is found in subordinate clauses, is found in main imperative clauses (cf. 57-a and -b). However, in the non-imperative main clauses there is another form as the example in (58) may show.

(57) a. a-yɨ-sbär   (Soddo)

   neg-3ms$_S$-break$_{jussive}$

   'let he not break'

 b. b-a-y-säbɨr

   if-neg-3ms$_S$-break$_{impf}$

   'if he does not break'

(58) t-i-säbr   (Soddo)

neg-3ms$_S$-break$_{impf}$

'he does not break'

Hence, in Soddo the negative marker *t* (cf. 58) can be considered as CPNM and *a* (cf. 57) NCNM. Beside Soddo, such alternation is observed in other P-group languages such as Zay, Silte and Gafat (see section 9.4.2.2 below). Hence, the generalization forwarded in relation to negation and imperatives can be revised as follows.

(59) Generalization on negation and imperatives (final version)

   The negative markers that have +force feature are incompatible with imperatives.

9.3.2.4 Negation and AMCMs

As discussed in the preceding chapter, in Soddo and Gogot in the affirmative simple and matrix clauses there are morphemes called AMCMs. However, in the negative clauses such elements are deleted as the Soddo examples in (60) and (61) may show.[12]

(60) a. säffär-ä-u → säffär-o   (Soddo)

      measure$_{perf}$-3ms$_S$-AMCM

      'he measured'

   b. *al-säfär-ä-u

      neg-measure$_{perf}$-3ms$_S$-AMCM

    'he did not measure'

   c. al-säfär-ä

      neg-measure$_{perf}$-3ms$_S$

    'he did not measure' (Leslau 1968/ 1992: 165)

(61) a. yi-bädr-u   (Soddo)

      3ms$_S$-advance$_{impf}$-AMCM

      'he advances'

b. *t-i-bädr-u

   neg-3ms$_S$-advance$_{impf}$-AMCM

  'he does not advance'

(62) Generalization on negation and AMCM

 AMCMs are incompatible with negative markers.

9.3.2.5 The Syntax of Negation in P-Group

In PS-Group; i.e. languages which have a pre-verbal and a post-verbal negative markers in concord reading, I argued that the pre-verbal and the post-verbal negative markers head different projections in syntax; NegP and PolP respectively. The post-verbal element has to move also to ForceP because it is specified for force feature. In P-Group, we have seen that the only pre-verbal negative elements have two forms in most languages. I assume that, those negative elements, which show the same behavior like the post-verbal negative markers; i.e. CPNMs, have to have the same syntactic status with the post-verbal negative elements found in PS-Group. However, since unlike the post-verbal negative elements such pre-verbal negative markers negate a clause by themselves, I suggest that they have to project occupying the head of NegP and, then move to PolP and ForceP; for feature checking in the sense of Chomsky (1993, 1995).[13] The feature structure of those elements can be understood as follows:

(63) The feature structure of CPNM

    +polarity feature

    +force feature

The other forms that can appear in embedded and imperative clauses are not specified for force feature and, hence no incompatibility is observed among such functional elements. Based on this, it is natural to suggest that the force neutral negative elements; i.e. what I called non-CP negative markers NCNM, will project occupying the head of NegP and will move to the head of PolP, but no movement will take place to ForceP. I illustrate the structure of these two varieties of pre-verbal negative markers with the following tree diagrams. The tree diagrams in (64) and (65) only show what such morphemes are specified for; i.e. at the final derivation. The possible intermediate functional categories are also omitted.

(64) ForceP

    Force'

        Force°   PolP
        [CPNM]

                Pol'

                    Pol°   NegP
                    $[t_i]$

                            Neg'

                            Neg°
                            $[t_i]$

(65) PolP

    Pol'

        Pol°   NegP
        [NCNM]

                Neg'

                    Neg°
                    $[t_i]$
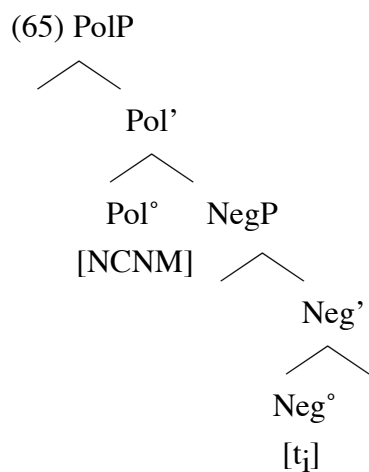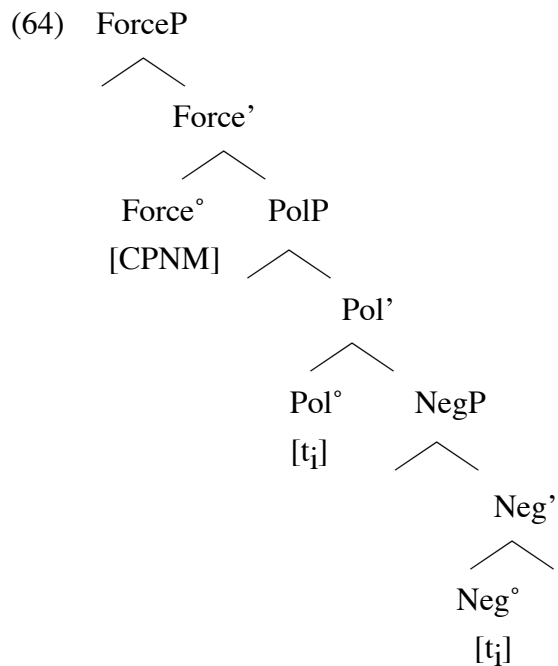
9.4 Conclusion

In this chapter I have shown that the negative markers can be encoded not only to negation but also to other features such as force. Such kind of occurrence is found in some other languages. For example, the negative marker *maa* in Standard Arabic is understood as combining the negative feature and focus feature (cf. Benmamoun 2000: 109).

In this chapter, I have also shown that in Ethio-Semitic languages the pre-verbal and post-verbal negatives markers belong to different functional categories. Such proposal exactly supports Zanuttini's suggestion. According to Zanuttini (1994), there are two functional projections, namely PolP and NegP in relation to negation. The former is where the negative markers are interpreted whereas the latter where such negative markers projected. However, I have shown that in Ethio-Semitic languages the post-verbal negative markers have to be considered as a head of PolP, like affirmative main clause markers. Such negative markers cannot negate a clause by themselves.

Note that here; the suggestion in this chapter and that of Zanuttini is in sharp contrast with Laka (1990). According to Laka "negation is not a syntactic category on its own; rather, it is one of the values of a more abstract syntactic category ... which includes other sentence operators, such as affirmation" (Laka 1990: 2). However, as the data in Ethio-Semitic languages show in a single negative clause, there can be morphological elements, which belong to two functional categories (PolP and NegP), which contribute for the negative interpretation of the clause in question. In such cases one of the negative element values the clause exactly as what affirmative markers do, and the other simply asserts negation. And, hence in Ethio-Semitic languages the pre-verbal clausal negative markers, which can negate a clause, can be taken as heading their own projection in syntax, namely NegP and the post-verbal negative markers, that have the same property with affirmative markers such as FTMs and AMCMs, head a projection that has polarity value namely PolP, following Zanuttini (1994).

The general proposal for the syntactic representation of post-verbal and pre-verbal negative markers is illustrated in (42), repeated also below in (66).

(66) PolP   (PS-Group)

                    Plo'

post-verbal neg   NegP

Neg'
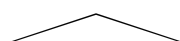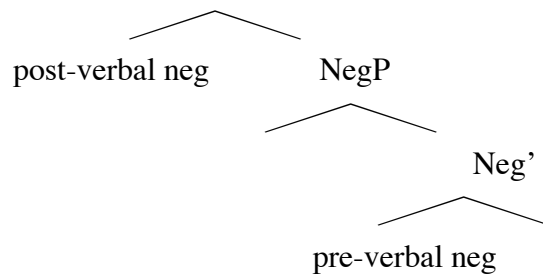
pre-verbal neg

One of the main reasons to consider both the pre-verbal and the post-verbal negative markers as head elements is that they are realized as affixes and incompatible with other head categories. I suggest following the lexcalist view that both elements are attached to the verb in the lexicon and, hence insert in the syntactic derivation along with the verb.

The syntactic derivation of simple clauses such as (67) and (68) can be illustrated as (69).

(67) yonas al-hed-ä-m   (Amharic)

    J.   neg- go$_{perf}$-3ms$_S$ -neg

    'Jonas didn't go'

(68) käbädä a-y-säbɨr   (Chaha)

    K.   neg-3ms$_S$-break$_{impf}$

    'Kebede does not break'

(69)   CP

            PolP

```
        NegP
        /  \
            VP
           /  \
  yonas/ käbädä   V'
                 /  \
          alhedäm/ aysäbɨr
```
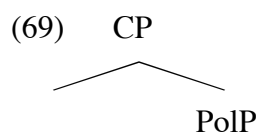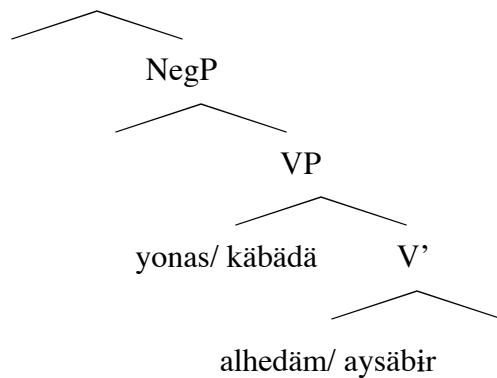
There are some interesting syntactic facts with regard to the realization of the negative markers in biclausal constructions, i.e. particularly clauses constructed with lexical auxiliaries. I will address this point in the following chapter. However, there is one point, especially with regard to the clause illustrated in (15) repeated below as (70) which I would like to discuss before passing to the next chapter.

(70) yi-kätbu-m   al-naar   (Harari)

   3ms$_\text{S}$-take$_\text{impf}$-neg neg-Aux$_\text{past}$

   'he was not writing' (Leslau 1958b)

In (70) the post-verbal negative marker, which I considered above as a head of PolP, is affixed to the main verb and the pre-verbal negative marker is affixed to the auxiliary *naar*. Given the fact that polarity projection values the clause the appearance of the negation marker c-commanding the polarity phrase in (70) is unexpected, (if the construction is interpreted as a monclause). However, as discussed in chapter (6) such type of clauses are biclausal. Ommitting other possible functional categories the clause in (70) can be understood as having the following structure.

(71)   CP
       / \
          PolP

```
      ／＼
   NegP
      ／＼
      AuxP
         ／＼
         CP
            ／＼
            PolP
               ／＼
               NegP
                  ／＼
                  VP
```
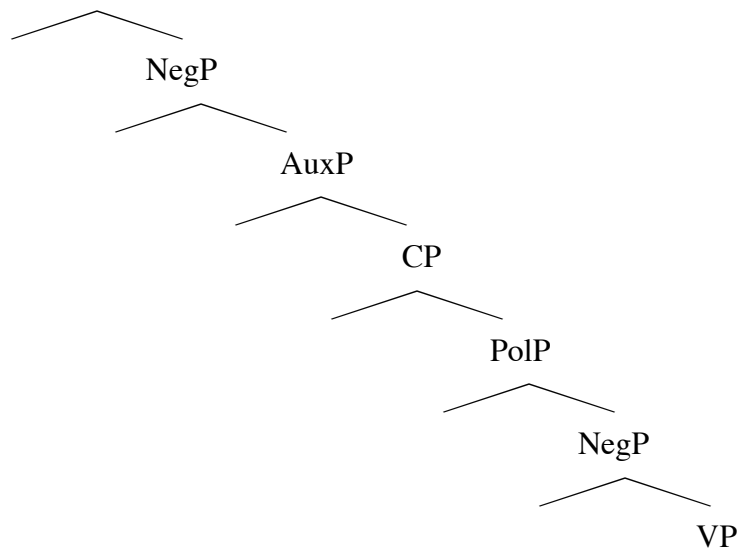
I assume following Zanuttini (1994) in any negative clause there is a functional category PolP along with NegP where the negation is interpreted. Hence although the polarity head morphologically spelled out in a structurally lower clause in (70), I assume that the structurally higher clause has also such functional projection, hence, (71). The surface structure of (70) can be derived by moving the whole CP to Spec of AuxP as in (72-b).

(72) a. base structure

CP
  PolP
    NegP
      AuxP
        alnaar
        CP
          PolP
            NegP
              VP
                yikätbum

b. CP
  PolP
    NegP
      AuxP
        CP$_i$
          yikätbum
        Aux'
          alnaar   t$_i$

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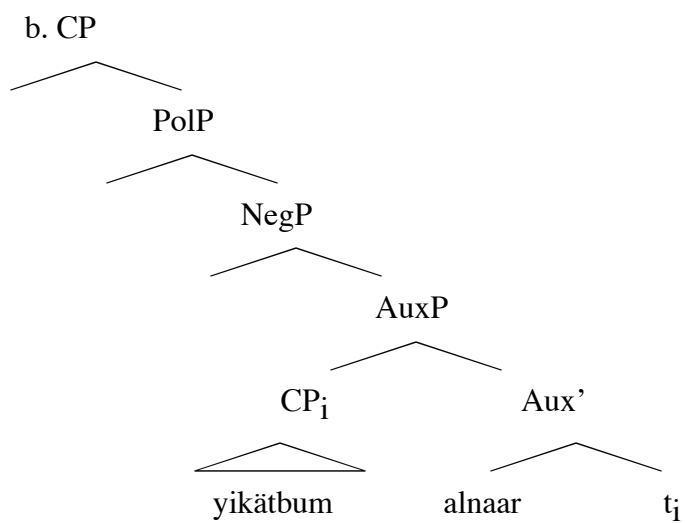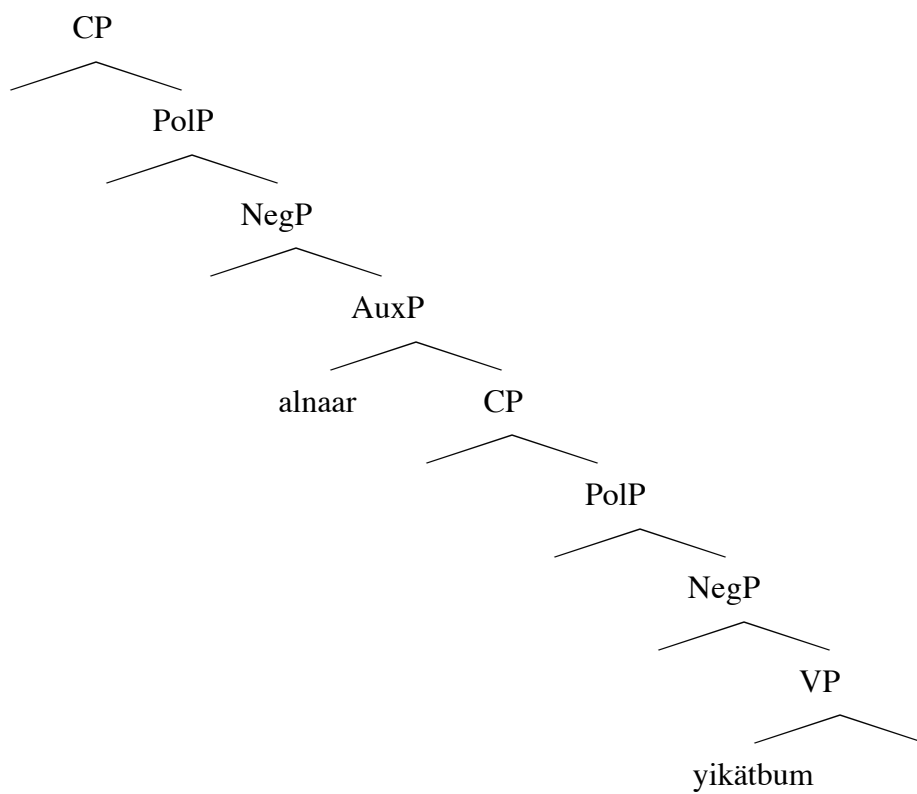
Notes on chapter 9

[1] Kitagawa (1986) also proposes that negation is a head in syntax (cf. Zanuttini 1994 and Laka 1990).

[2] Note that here, there is a difference between negative concord and double negation. In the former case two (or can be more) negative elements appear in a clause having a single instance of negation: "negative concord is a term typically used to refer to the co-occurrence of more than one negative element in the same clause with the interpretation of a single instance of negation" (Zanuttini 1997: 9). In the latter case; i.e. double negation, the two negation will contribute each negative force to the clause and, then results in the cancellation of the negation. The following example from English is a case of double negation: where in (i) "the first negation takes scope over, and cancels the second" (Haegeman 1995: 79).

(i) no one has done nothing.

[3] Julien (2000) has different proposal for Moroccan Arabic as we will see later.

[4] Recall that, what I call functional tense markers are those tense markers in a monoclausal construction.

[5] Note that imperatives and jussives have the same morphological shape in Ethio-Semitic languages (cf. Appendix III). In fact, what is called jussive is indirect command and imperative is direct command. Meaning, all the non-second persons command forms are called jussive whereas the second persons command forms are that of imperative. Hence, the difference between imperative and jussive can only be person not the verbal stem in question.

[7] Note that, the feature structure presented below only show what is relevant to the present discussion. Other possible features of the functional categories are omitted.

[8] Marit Julien (p.c.) attributes the original idea of her analysis to Anders Holmberg.

[9] Julien (2000) quotas for the Moroccan Arabic data Harrell (1962) and for the Aymara Adelaar (1998).

[10] "Following Chomsky (1993), we view syntactic movement as motivated by the need to check morphological or grammatical features, i.e. to combine these features within appropriate morpheme or lexical item. Our proposal will be that languages express sentential negation via certain negative features that are present in the projection PolP. For a clause to be negative, such features must be checked, i.e. licensed by an appropriate lexical element" (Zanuttini 1994: 428).

[11] We will see some additional data later.

[12] There are some interesting morphological facts in Soddo when it comes to negation. The negation marker in the perfective form and in many cases in this language is assumed to be the prefix *al-*. However, in the negative form of the perfective aspect it is not simply an addition of this prefix to the stem. Rather there are some basic changes in the internal structure of the stem in question. Consider the following:

(i) a. al-täkkäl-ä (as against tikkäl-ä 'he planted')
     neg-plant$_{\text{perf}}$-3ms$_\text{S}$
     'he did not measure'
  b. al-c'afär-ä (as against c'affär-ä 'he danced')
     neg-dance$_{\text{perf}}$-3ms$_\text{S}$
     'he didn't dance' (Leslau 1968/ 1992: 165)

Note that here, the example in (i-a) is from type A, the (i-b) is type B and the (i-c) is type C. In Type A and C, there is no gemination of the 2nd radical in the negative form. In type B, the vowel *i* found next to the first radical is changed to *ä* in the negation form. There is also another difference between the negative and affirmative forms of the main verb.

It is reasonable to ask what the reasons for these differences are. First of all, it is impossible to give phonological explanation for the change of the stems in the affirmative and negative cases. The reason probably be the negation marker is not only the prefix *al-* but also some other internal affixes.

[13] See also Zanuttini (1994).

PART FOUR:
POLARITY ELEMENTS

Chapter Eight:
Affirmative Main Clause Markers (AMCMs)

8.1 Introduction

In a number of African languages there are some particles where their distributions are restricted to some type of clauses. Such particles are treated and named in different works differently. For example, in Ethio-Semitic they are referred to as main verb markers (cf. Hetzron 1977), as indicative-affirmative-declarative marker (Goldenberg 1970), as affirmative main clause marker (cf. in this work), in other languages such elements are referred to as mysterious particles, as non-focus marker, as an assertive focus marker etc. (cf. Marchese 1983). In this chapter, I will examine these particles in the languages under consideration here.

8.2 The morphological facts

AMCMs are not common to all Ethio-Semitic languages as one can notice from the previous discussions on chapters five and six. They are found in some of the so-called Gurage languages. I examine such particles in the following section.

8.2.1 Affirmative Main Clause Markers (AMCM) in Muher, Soddo and Gogot

Hetzron (1977: 88) notes that "the main indicative affirmative forms of the Northern Gurage verb: both simple tenses in Soddo and Gogot, the non-past only in Muher ... are followed by a set of suffixes that indicates their being main verbs, the absence of which would make the forms subordinate". According to Hetzron (1968, 1977) the elements in question are main verb markers probably developed from copulas that dates back to the period of proto-Semitic.[1] However, for Rose (1996a), the particles labeled by Hetzron as main verb markers in Muher are, in fact, tense markers. Her arguments are as follows: First, they parallel other tense markers; in a sense that they cannot appear in different tenses. Second, their absence in relative,

embedded and negative clauses is common to other tense markers. Third, since their probable origin is suggested to be (cf. Hetzron 1968, 1977) an auxiliary such particles have to be considered as tense markers (cf. Rose 1996a: 219). I will explain and strengthen Rose's suggestion below.

First, in Muher, as mentioned above, we do not have similar elements in past and non-past. What can be labeled as AMCMs in Soddo and Gogot are only found in Muher along with the imperfective verb form in the simple non-past tense.[2] In this language, in the simple past tense, we find uniformly an element *-m,* which is added to the perfective verb form. Consider the following table:

Table I: Conjugation of the Perfective and Imperfective form in Muher (Hetzron 1968: 159)[3]

		Perfective (Simple Past)			Imperfective (Simple Non-past)	
			Past Marker			Present Marker
Sg	1	säbbärxum	m	äsäbru	u
	2m	säbbärxäm	m	tɨsäbru	u
	2f	säbbärhʸɨm	m	tɨsäbrɨn	n
	3m	säbbäräm	m	yɨsäbru	u
	3f	säbbäräccɨm	m	tɨsäbri	i
Pl	1	säbbärnäm	m	nɨsäbrɨno	u
	2m	säbbärxɨmum	m	tɨsäbrɨmun	n
	2f	säbbärxɨmam	m	tɨsäbrɨman	n
	3m	säbbärmum	m	yɨsäbrɨmun	n
	3f	säbbärmam	m	yɨsäbrɨman	n

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I continue to consider the morpheme -*m* as past tense marker[4] and the others which are found along with the imperfective verb form as non-past marker in Muher. However, considering the so-called main verb markers as tense markers in Gogot and Soddo is impossible. Consider the following tables, where table II is a perfective form and table III is its counterpart imperfective form.[5] The root is √*sbr* 'break'.

Table II: Conjugation of the perfective form (in simple past) in Soddo and Gogot (Hetzron 1968: 158)

		Soddo		Gogot	
			AMCM		AMCM
Sg.	1	säbbärki	i	säbbärk^{w}i	i
	2m	säbbärko	u	säbbärko	u
	2f	säbbärh^{y}ɨn	n	säbbär_ɨn	n
	3m	säbbäro	u	säbbäro	u
	3f	säbbärätti	i	säbbärätti	i
Pl.	1	säbbärno	u	säbbärno	u
	2m	säbbärkɨmun	n	säbbärkɨmun	n
	2f	säbbärkɨman	n	säbbärkɨman	n
	3m	säbbärmun	n	säbbärmun	n
	3f	säbbärman	n	säbbärman	n

Table III: Conjugation of the Imperfective form (in simple non-past) in Soddo and Gogot (Hetzron 1968: 159)

		Soddo		Gogot	
			AMCM		AMCM
Sg.	1	äsäbru	u	äsäbru	u
	2m	tɨsäbru	u	tɨsäbru	u
	2f	tɨsäbrin	n	tɨsäbrɨn	n
	3m	yɨsäbru	u	yɨsäbru	u
	3f	tɨsäbri	i	tɨsäbri	i
Pl.	1	nɨsäbru	u	nɨsäbrino	u
	2m	tɨsäbrɨmun	n	tɨsäbrɨmun	n
	2f	tɨsäbrɨman	n	tɨsäbrɨman	n
	3m	yɨsäbrɨmun	n	yɨsäbrɨmun	n
	3f	yɨsäbrɨman	n	yɨsäbrɨman	n

As we can see from the above tables, the so-called main verb markers in Gogot and Soddo are almost the same in the imperfective form as well as in the perfective form. Furthermore, with one exception, the elements found with the perfective form and imperfective form are the same. However, in the simple and matrix clauses, the time which table II refers is past whereas table III is non-past. This clearly implies that the labeling of those elements by Hetzron as non-tense marker is correct in Soddo and Gogot, but not in Muher.

8.2.2 The Function of *m*

Recall that, in Western and Northern Gurage languages, we find a morpheme *m* in simple and matrix clauses. This element sometimes is referred to as affirmative main clause marker. As we have seen in the preceding chapters, this morpheme does not have a uniform function across the languages. In Muher and 3T languages,[6] we find this morpheme in simple past construction suffixed in the perfective form of the verb. Since it contrasts with other tense markers, such as future and the unmarked present, I take it as past tense marker. Consider the following:

(1) a. säbbär-ä-m   (Muher)

    break$_{perf}$-3ms$_S$-T$_{past}$

    'He broke'

  b. yɨ-säbr-u

    3ms$_S$-break$_{impf}$-T$_{pre}$

    'He breaks'

(2) a. käbbädä wärr-ä-m   (Ezha)

    K. go$_{perf}$-3ms$_S$-T$_{past}$

    'Kebbede went'

  b. käbbädä yɨ-c'än

    K. 1s$_S$-come$_{impf}$

    'Kebbede comes'

  c. käbbädä yɨ-sbɨr-_e

    K. 3ms$_S$-break$_{juss}$-T$_{fut}$

    'Kebbede will break'

(3) a. näqär-ä-m   (Chaha)

    pull$_{perf}$-3ms$_S$-T$_{past}$

    'he pulled out' (Leslau 1950/ 1992: 135)

  b. yɨ-räxɨb

    3ms$_S$-find$_{impf}$

    'He finds' (Leslau 1950/ 1992: 135)

  c. yɨ-nxäb-_ä

    3ms$_S$-find$_{juss}$-T$_{fut}$

    'He will find' (Leslau 1983/ 1992: 138)

On the other hand, in Mäsqan, Soddo and Gogot, we find the element *m* in what is called present perfect construction, not in simple past tense as the following examples may show. Because of this, in Soddo, Gogot and Mäsqan, I have considered this morpheme as present tense marker.

(4) a. qät' t'är-ä   (Mäsqan)
       kill$_{perf}$-3ms$_s$
       'He killed'

   b. qät' t'är-ä-m
       kill$_{perf}$-3ms$_s$-T$_{pres}$
       'He has killed'

(5) a. säbbär-ätt-i   (Gogot)
       break$_{perf}$-3fs$_s$-AMCM
       'She broke'

   b. säbbär-ätt-m
       break$_{perf}$-3fs$_s$-T$_{pres}$
       'She has broken'

(6) a. räta mät'af wässäd-o-Ø[7]   (Soddo)
       R. book take$_{perf}$-3ms$_s$-AMCM
       'Reta took a book'

   b. räta mät'af wässäd-ä-m
       R. book take$_{perf}$-3ms$_s$-T$_{pres}$
       'Reta has taken a book'

However, in all the languages mentioned above, the morpheme *m* is incompatible with negative markers and complementizers. That is why this element is considered in some works as an affirmative main clause marker.

(7) a. qät'är-ä-m   (Mäsqan)

     kill$_{perf}$-3ms$_S$-T$_{pres}$

    'He has killed'

  b. an-qät'är-ä[8]

    neg-kill$_{perf}$-3ms$_S$

    'He hasn't killed', 'he didn't kill'

  c. *an-qät'är-ä-m

    neg-kill$_{perf}$-3ms$_S$-T$_{pres}$

    'He hasn't killed'

(8) a. näqqär-ä-m   (Chaha)

     pull$_{perf}$-3ms$_S$-T$_{past}$

    'he pulled out'

  b. an-näqär-ä

     neg-pull$_{perf}$-3ms$_S$

    'he didn't pull out'

  c. *an-näqär-ä-m

    neg-pull$_{perf}$-3ms$_S$-T$_{past}$

    'he didn't pull out' (Leslau 1992: 133)

Although the element *m* may have the same feature as what other AMCMs have, considering it as an affirmative main clause marker is not appropriate. This is basically because it contrasts with other tense markers and have also a clear function of marking tense. For example, we do not find such element in other tenses; i.e. other than past in 3TG and Muher, and present perfect in Mäsqan, Soddo and Gogot constructions.

(9) a. ä-käfit   (Mäsqan)

     1s$_S$-open$_{impf}$

    'I open/ will open'

  b. * ä-käfit-m

(10) a. i. yɨ-nxäb-šä (Chaha)

$\quad$ 3ms$_S$-find$_{juss}$-T$_{fut}$

$\quad$ 'He will find' (Leslau 1983/ 1992: 138)

$\quad$ ii. *yɨ-nxäb-šä-m

$\quad$ b. i. yɨ-räxɨb

$\quad\quad$ 3ms$_S$-find$_{impf}$

$\quad\quad$ 'He finds' (Leslau 1950/ 1992: 135)

$\quad\quad$ ii. *yɨ-räxɨb-m

(11) a. ɨ-säwɨr (Endegeñ)

$\quad$ 1s$_S$ -break$_{impf}$

$\quad$ 'I break'

$\quad$ b. *ɨ-säwɨr-m

(12) a. käbbädä yɨ-c'än (Ezha)

$\quad$ K. 1s$_S$-come$_{impf}$

$\quad$ 'Kebbede comes'

$\quad$ b. käbbädä yɨ-c'än

Furthermore, the inability of the co-occurrence of *m* and the negative marker is not unique to this morpheme. What I called in the preceding chapters functional tense markers in Ethio-Semitic languages are not compatible with negation (cf. 13 and 14).[9]

(13) a. gädl-o-all (Amharic)

$\quad$ kill$_{gerund}$-3ms$_S$-Aux$_{pres}$

$\quad$ 'he has killed'

b. *al-gädl-o-all-m

   neg-kill$_{gerund}$-3ms$_S$-Aux$_{pres}$-neg

   'he has not killed'

c. *al-gädl-o-m

   neg-kill$_{gerund}$-3ms$_S$-neg

   'he has not killed'

d. al-gäddäl-ä- m

   neg-kill$_{perf}$-3ms$_S$-neg

   'he did not kill'

(14) a. nɨ-sɨr-se   (Endegeñ)

     1s$_S$-break$_{jus}$-T$_{fut}$

   'I might break'

b. a-nɨ-sɨr

   neg-1s$_S$-break$_{jus}$

   'I might not break'

c. *a-nɨ-sɨr-se

   neg-1s$_S$-break$_{jus}$-T$_{fut}$

   'I might not break'

8.2.3 Re-examining the plural marker in Endegeñ

In Endegeñ, we find the element *m* in affirmative matrix clauses along the plural Agr markers of the perfective form. However, it will be deleted if the form is negated.[10] Consider the following examples:

(15) a. sappär-hum

   break$_{perf}$-2mpl$_S$

   'you(m.pl.) broke'

b. sappär-hum-ba

break$_{perf}$-2mpl$_S$-Aux$_{past}$

'you(m.pl.) had broken'

c. an-sappär-hu-tä

neg-break$_{perf}$-2mpl$_S$-neg

'you(m.pl.) didn't break'

(16) a. sappär-haam

break$_{perf}$-2fpl$_S$

'you(f.pl.) broke'

b. sappär-haam-ba

break$_{perf}$-3fpl$_S$-Aux$_{past}$

'you(f.pl.) had broken'

c. an-sappär-haa-tä

neg-break$_{perf}$-2fpl$_S$-neg

'you(f.pl.) didn't break'

(17) a. sappär-um

break$_{perf}$-3mpl$_S$

'they(m.) broke'

b. sappär-um-ba

break$_{perf}$-3mpl$_S$-Aux$_{past}$

'they(m.) had broken'

c. an-sappär-u-tä

neg- break$_{perf}$-3mpl$_S$-neg

'they(m.) did not break'

(18) a. sappär-aam

break$_{perf}$-3fpl$_S$

'they(f.) broke'

b. sappär-aam-ba

   break$_{perf}$-3fpl$_s$-Aux$_{past}$

   'they(f.) had broken'

c. an-sappär-aa-tä

   neg-break$_{perf}$-3fpl$_s$-neg

   'they(f.) did not break'

The reason for the incompatibility of the element *m*, I think, is predictable given the above discussed facts. I suggest that the element *m* found in the plural affirmative matrix clauses in this language is not part of the plural agreement morpheme, but rather it is an affirmative main clause marker — hence, the incompatibility in subordinate and negative clauses. If I am on the right track, the morphological analysis for the above examples has to be as follows:

(19) sappär-hu-m

     break$_{perf}$-2mpl$_s$-AMCM

     'you(m.pl.) broke'

(20) sappär-haa-m

     break$_{perf}$-2fpl$_s$-AMCM

     'you(f.pl.) broke'

(21) sappär-u-m

     break$_{perf}$-3mpl$_s$-AMCM

     'they(m.) broke'

(22) sappär-aa-m

     break$_{perf}$-3fpl$_s$-AMCM

     'they(f.) broke'

8.3 The nature of AMCMs

In the above sections, we have seen that, in Ethio-Semitic there are elements called AMCMs which are distinct from tense and agreement markers. Such particles are incompatible with negation, hence the term affirmative; complementizers, hence main clause markers.

The question is what are these elements after all. For Goldenberg (1970) such elements are mood markers, what he calls independent-affirmative-indicative marker.[11] The same type of suggestion is forwarded for this type of elements found in other African languages.[12] By independent-affirmative-indicative mood it means that it is distinct from imperatives, interrogative,[13] subordinate and negative clauses.[14]

For Marchese (1983), in fact, there is something, other than mood that such particles denote; i.e. focus. According to Marchese negation can be considered as the main assertion and imperatives can also be considered as having their own focus; hence the non-imperative, non-negative main indicative clauses, according to Marchese, must be considered as marked for assertive focus.[15] In other words, negation itself is the main assertion in negative statements and, hence negatives must be analyzed as inherently "in focus" and "Imperatives must also be analyzed as having their own assertive focus" (Marchese 1983: 115). The logic is as follows;

> As to why negative statements do not normally contain the assertive focus marker, … in most negative statements, everything except the negative element is known information. For example, if I say 'She didn't go to the store.' I presuppose that the speaker knows who 'she' is, and I also assume that the hearer thinks this person went to the store. In normal statements, the predicate phrase or verb alone contains the new information, thus the presence of the verb-focus or assertive particle (Marchese: 1983: 122 & 123).

With regard to the incompatibility of AMCMs with subordinate clauses Marchese suggests that since subordinate clauses furnish background material, they do not normaly contain new information and thus, are not being asserted (Marchese 1983:

121). The explanation that she gives with regard to the absence of such particles in interrogatives is as follows: "Information-seeking (or WH) questions behave much like contrastive focus constructions. This is not surprising, of course. As Dik (1978:151) notes '…the questioned constituent will necessary have FOCUS function since it is the only piece of information not shared by Speaker and Addressee in the given setting'" (Ibid.).

In fact, according to Marchese in the languages that she is dealing, there is also a semantic difference in constructions with and without such particles. According to Marchese an affirmative-indicative main clause can or cannot appear with such particles. The appearance of such particles is associated in such languages with what she called assertive focus, similar with what is known in some other literature as emphatic focus. That is they indicate focus on the VP.

Although Marchese's analysis is interesting, I'm reluctant to take such particles as focus markers in the languages under consideration here. First in Ethio-Semitic there is no optionallity to their appearance in affirmative main clauses and there is no semantic evidence, which show they mark focus either on the VP, or other constitutes. Second, although the incompatibility between such elements with subordinate, "interrogative", imperative, negative clauses can be explained taking Marchese suggestion, it is unclear to me why such incompatibility does not exist between other clauses.[16] As is clear, negative clauses can be subordinate, interrogative, or imperative. Interrogative clauses can also be subordinate, negative, or imperative. Imperative can be negative as well as affirmative. A subordinate clause can be affirmative, negative, interrogative, or indicative.

Since such elements alternate with modal and other features that belong to the CP-layer and themselves are sorts of mood, as discussed by Goldenberg (1970), Leslau (1992), Hetzron (1968, 1972, 1977), a straightforward suggestion is that they are mood markers. Such kind of mood can be considered as containing a clause type feature, known in the literature as force. However, taking an AMCM as an agglutinating affix is not appropriate. This is for the following basic reason.

Recall that, there is one major contrast with regard to affirmation versus negation. AMCMs occur only in affirmative clauses. That is they are incompatibile with negative clauses. Negation and affirmation are values (cf. Laka 1990) independent from clause type feature and, hence AMCMs are better be understood as portmanteau affixes that have, at least, two distinct features; i.e. polarity and force.

(23) The feature structure of AMCMs
    + polarity feature
    + force

8.4 The syntactic representation of AMCMs

In recent literature it is assumed that there is a polarity projection along with the functional projections whose head can also be filled with either affirmative or negative head categories (cf. Laka 1990, Zanuttini 1994).

Based on Chomsky (1957), Laka (1990) suggests that in a certain clause there can be a functional category that has a polarity value, what she calls it ΣP. Following Zanuttini (1994) I call such projection PolP. Since clausal negative markers and affirmative affixes naturally alternate, according to Laka, such elements have to project heading a single functional projection that has polarity values. I assume along with Laka that those functional elements that have polarity value have to be in PolP. However, as it will be clear in the following chapter clausal negative markers, that can negate a clause by themselves, and other elements that have polarity value cannot be considered as "base generated" in PolP in Ethio-Semitic languages. However, such elements may move to check the polarity feature to PolP overtly or covertly as in the sense of Zanuttini (1994).[17]

The polarity projection can be understood as having polarity feature that can enter in a checking relation against a lexical/ functional head that has such matching feature and also host XP polarity items. As we will see in more detail in the following chapter, not only AMCMs but also tense markers are specified for positive polarity features in Ethio-Semitic languages.

Regarding the position of PolP, I assume along with Zanuttini (1994) and Laka (1990) that, it is in the functional layer below CP. Note that, since AMCMs have also a clause type feature I assume that they can be considered as a realization of two functional categories— PolP and ForcP.

(24) ForcP

```
          ForcP
         /    \
            Forc'
           /    \
      AMCM      PolP
               /    \
                  Pol'
                 /    \
               t_i
```
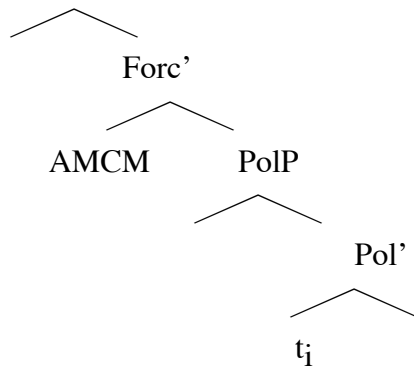
Note that, I am neither suggesting here AMCMs to be inserted in the head of PolP nor there is an overt movement of AMCM to C. I assume that like other inflectional elements AMCMs have to be attached to their host in the lexicon. The movement of AMCM suggested above in (24) has to be understood as the movement of the complex verb. I suggest such movement also to be covert. I will show the actual derivation considering the clause in (6-a) repeated here as (25).

(25) räta mät'af wässäd-(ä-u) →o   (Soddo)

    R. book take$_{perf}$-3ms$_s$-AMCM

    'Reta took a book'

b. CP
    PolP
        TP
           AspP
              *v*P
             räta   *v*P
                mät'af$_i$ *v*'
                      VP
                   t$_i$ V'
                      wässädo   t$_i$
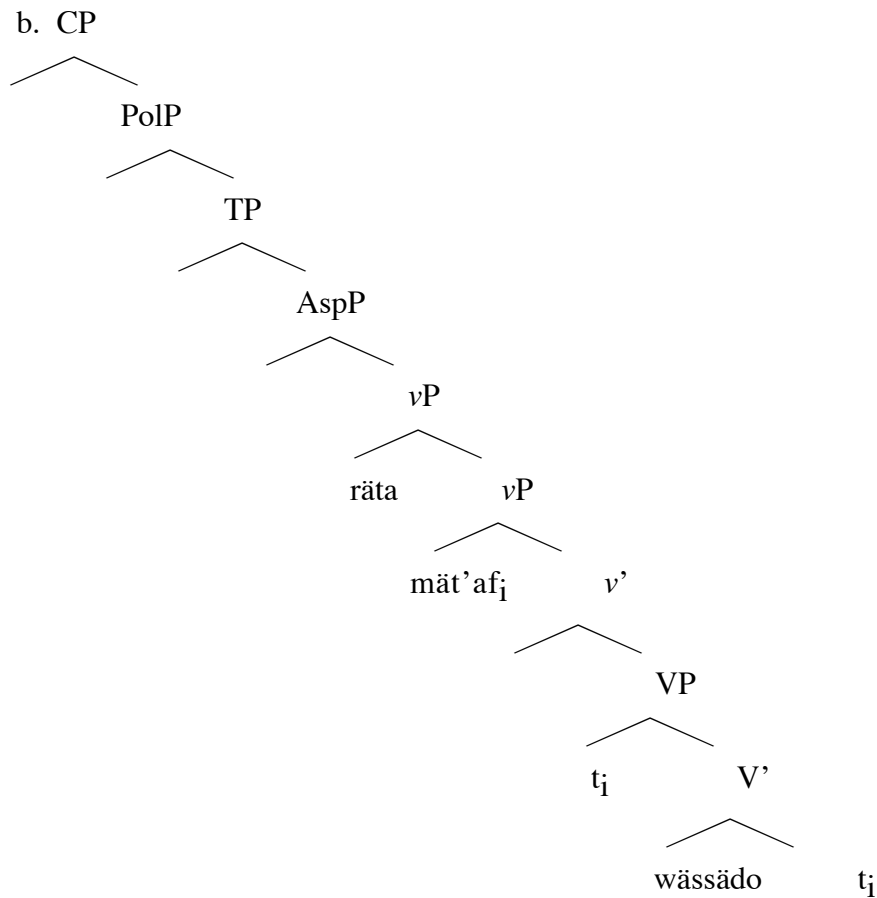
I assume here that the verb has to move up to C covertly to check its features—to Asp to check the aspectual feature, to T to check the tense feature, to Pol to check the positive polarity feature and to C to check its force feature as evidenced by the AMC element *u*.

8.5 Conclusion

In this chapter, I have addressed what I called AMCMs in Ethio-Semitic languages. Hetzron (1968) claims that such elements are found in Muher, Soddo and Gogot. In this chapter, I have shown that what is labeled as main verb markers in Muher are, in fact, tense markers. I have also examined the element *m* which is found affixed to the perfective form of the verb in this so-called Gurage languages and showed that such

an element cannot be considered as affirmative main clause markers. I have also examined the element *m* which is found along with the plural markers in Endegeñ and argued that it is, in fact, an AMCM. I have also examined such facts in relation to Marchese (1983) suggestion for similar cases found in African languages. [18]

Recall that, according to Marchese there is pragmatic evidence that such particles are focus markers in Kru languages. This is not attested in Ethio-Semitic languages, however. In these languages there is no such semantic evidence. With this regard Ethio-Semitic languages are different to the languages that Marchese deals. The elements in question are, in fact, similar with Kru in the sense that they are incompatible with imperatives and negative clauses, and cannot also appear in subordinate and sequential clauses. Since such elements are "mood" markers, what is called affirmative-indicative and are not compatible with other modal categories particularly jussives and imperatives, I have considered them as encoded to force feature, in addition to polarity feature.

Notes to Chapter 8

[1] In fact, Hetzron refers to such elements as main verb marker and abbreviates as MVM. Because such forms are found in affirmative matrix clauses I continue to refer such particles as affirmative main clause marker (AMCM).

[2] As we will see in a moment, in Soddo and Gogot, unlike Muher, the AMCMs are not phonologically different in different tenses. In thses languages, we have identical elements in both simple past and non-past.

[3] Leslau (1981) and Rose (1996) gave the ungeminated form for all what Hetzron considers as geminated. I do not have such data to compare those claims. However, for my analysis here since none of them has effect, I follow simply Hetzron.

[4] See also the following section.

[5] Recall that, the bare perfective form in Soddo and Gogot denotes past and bare imperfective non-past in matrix clauses.

[6] That is, except Endegeñ. Recall that, Endegeñ does not have such element at all.

[7] The $3ms_S$ marker is the vowel $\ddot{a}$ and the main verb marker is u. The vowel o is a result of the well known phonological process known as fusion in the literature that fuses two separate sounds into a single sound, in this case, $\ddot{a} + u \rightarrow o$. This phonological process, in fact, can be assumed as existed, in proto-South Ethiopic period. For example, in Amharic, though this phonological process is not active anymore, we find the trace of it in the so-called gerund form. In the gerund of Amharic, the $3ms_S$ marker is realized on the surface form as o, however, this vowel can be considered as a result of the phonological process $\ddot{a}$ plus u. In which $\ddot{a}$ is part of the gerund stem whereas u is a marker of $3ms_S$ as is also the case to many other South Ethio-Semitic.

[8] Note that here, Mäsqan is a language that have gemination in the perfective. Such gemination, however, will be affected if the verb is negated (cf. Shikur 1989: 25).

[9] See the following chapter for more discussion.

[10] The following table is list of the plural agreement suffixes which is found in the perfective form of the verb.

TABLE IV: The plural agreement morphemes in the affirmative perfective form of the verb in Endegeñ

The Agreement Form	Person and Gender
-hum	2m
-haam	2f
-um	3m
-aam	3f

[11] "In Kestane [Soodo] as in other South Ethiopian Semitic languages, indepenedent affirmative indicative is a morpho-syntactical category, distinct from all subordinate, negative and (non-indicative) modal sets of classes. Independent-affirmative-indicative function may formally be determined by either (1) a copula-form or (2) a perfect-form of the verb näbbär(ä), or (3) –*m* preceded by a perfect-form, or (4) an independent-affirmative-indicative- marker suffixed to a perfect or to an imperfect. A syntactical unit where none of these is present is either not independent, or not affirmative, or not indicative. For interrogative sentence näbbär(ä), is the only verb whose perfect is by itself an independent statement form" (Goldenberg 1970: 86-87).

[12] See Marchese (1983) for relevant references.

[13] "Interrogative forms can be considered as relative, hence the lack of MVM. (Hetzron 1968: 158).

[14] According to Marchese (1983) this is the same in Kru languages. In these languages "it occurs obligatorily in affirmative declarative clauses, but it usually absent in negatives, imperatives, subordinate and sequential clauses" (Marchese 1983: 117)

[15] "As to why negative statements do not normally contain the assertive focus marker, … in most negative statements, everything except the negative element is known information. For example, if I say 'She didn't go to the store.' I presuppose that the speaker knows who 'she' is, and I also assume that the hearer thinks this person went to the store. In normal statements , the predicate phrase or verb alone contains the new information, thus the presence of the verb-focus or assertive particle" (ibid. 122 & 123).

[16] Hetzron (1968) reports that interrogative clauses at least in Soddo do not select AMCMs. However, he does not provide examples for that. I do not have enough data to prove this fact.

[17] As discussed in the following chapter, the post-verbal negative markers in Ethio-Semitic languages can be understood as also realization of the head of a polarity projection.

[18] Recall that, Marchese (1983) discusses similar cases of what I call AMCM in Ethio-Semitic languages from Kru, and other African language family. However, Marchese takes such similar morphemes as focus marker, what she calls assertive focus. The usage of the term assertive focus in Marchese (1983: 119), as mentioned above, is almost similar with what is known as emphatic focus, which is quite distinct from contrastive focus which serves to correct false information.

PART FIVE:
WORD ORDER

Chapter Ten: Word Order

10.1 Introduction

In this chapter, I discuss the basic word order of the languages under consideration. In 10.2, I discuss the word order of declarative clauses, in 10.3 negative clauses, in 10.4 interrogative clauses, and in 10.5 nominal/ infinitival clauses. In 10.6 I discuss a different type of word order which is found in impersonal, "must" and verb "to have" constructions. Since my major concern in this work is the structure of clauses at the level of IP, I discuss only the word order of simple sentences. Neither the word order of complex clauses nor noun phrases, prepositional phrases etc. are discussed here.

10.2 Word Order in Declarative Clauses

Except Ge'ez, all Modern Ethio-Semitic MES are considered to be head final languages. In 10.2.1 I discuss the word order of declarative clauses in Ge'ez and, then in 10.2.2 MES.

10.2.1 Word Order in Ge'ez Declarative Clauses

10.2.1.1 Basic Facts

Although, Ge'ez is assumed to have free word order the unmarked order in a declarative clause is VSO (cf. Weninger 1993, Dillman 1886 among others). Regarding to this Dillman (1886: 502) notes the following: "As regards the arrangement of the sentence, Ethiopic [i.e. Ge'ez] exhibits greater freedom than any other Semitic language". But he further mentioned that "in ordinary, unimpassioned discourse, the Predicate stands at the beginning of the sentence: the Subject follows, and then the Object" (Ibid. 503). Consider the following examples:[1]

(1) wä-räkäb-ä   yosef mogäs bä-qɨdmä 'ɨgzi'- u

   and-get$_{perf}$-3ms$_S$ J.   honor prep-front lord-his

   'And Joseph found grace in his sight' (Gen 39, 4)

(2) wä-'aws'ɨ'-at   mɨdr h'amälmal-ä

   and-bring.forth$_{perf}$-3fs$_S$ earth vegitation-Acc

   'And the earth brought forth vegetation.' (Gen1, 12)

In (1) the order is Complementizer-Verb-Subject-Object-Prepositional Phrase, in (2) Complementizer-Verb-Subject-Object. Note that here any simple sentence in this language can be preceded by *wä* 'and'. For example, consider the following:[2]

(3) wä-hor-ä   yonas habä ɨŋglt'ar

   and-go$_{perf}$-3ms$_S$ J.   to   England

   'Jonas went to England'

As mentioned above, although Ge'ez is assumed to be free in terms of word order, closer examination reveals that this is not the case. Any change from the unmarked order, i.e. VSO, brings a semantic difference: "The superior importance assigned to the word concerned is generally indicated by its position" (cf. Dillman 1886: 504). As Dillman further states any part of a clause may be focused or topicalized upon by a position at the beginning of the sentence (Ibid.). For example in (4) the subject and in (5), (6) and (7) the objects are topicalized respectively.

(4) 'ɨgzi'abɨh'er wä-hab-ä-kɨmu   z-ä-'ɨlät-ä   sänbät

   God   and-give$_{perf}$-3ms$_S$-2mpl$_{Io}$ this-Acc-day-Acc Sabbath

   'God has given you this Sabbath-day.' (EX 16, 29)

(5) wä-lä-näday-anɨ-ssä zälfä   tɨ-räkkɨbɨ-womu   Häbe-kɨmmu

and-to-poor-pl-but   constantly 2mpl$_S$-find$_{impf}$-2mpl$_O$ with-2mpl

'You always have a poor with you.' (MK 14, 7)

(6) qal-ä   ziʻahu nɨ-sämɨʻ[3]

word-CST his   1pl$_S$-hear$_{jussive}$

'his word will we obey (Josh. 24, 24)

(7) laʻl-eyä yɨ-kun   märgäm-kä

top-1s   3ms$_S$-be$_{jussive}$ curse-2ms

'upon me be thy curse!' (Gen. 27, 13)

(8) mot-ä   nɨ-mäwɨt

death-Acc1pl$_S$-die$_{jussive}$

'die we must' (Judges 13, 22; Hen. 98, 15

The general assumption for the derivation of VSO order is that the verb moves (preceding the subject and the object) to a higher functional category where its Spec position cannot be filled by any overt phonological material. There are differing views with regard to which functional category that the verb moves, however. I will examine such views in the following section in relation to the data at hand.

10.2.1.2 Theoretical Considerations

There are two differing views with regard to the movement of the verb in VSO languages. One of the view is that the order VSO is derived by moving the verb to C whereas the other to a functional category in the IP-domain. The former analysis is known in the literature as V2-analysis. This is because in V2 languages

such as German and Dutch, the V2 phenomenon is generally understood as a movement of V2 to C, i.e. to a position where complementizers are base generated.

Within the latter approach; i.e. the verb-in-IP approach, there are differing views with regard to the movement of the arguments and with regard to also the landing site of the verb; i.e. the target functional category which host the moved verb. What is generally taken as a primitive is that VSO is derived from the basic order SVO and there is a movement of a verb to a head of a functional category whose Spec is empty. I examine the various approaches in relation to the derivation of VSO order in Ge'ez in the following sections.

10.2.1.2.1 V-to-C Movement/ Raising

In V-to-C approach to VSO, the surface position of the argument XPs of the verb are not a priori problem; they can be in IP as in (9-a) or in situ as in (9-b). (The structure in (9-a) is based on Chomsky (1993) phrase structure.)

(9) a. CP

```
CP
├── (spec)
└── C'
    ├── Verb_i
    └── Agr_sP
        ├── Subject_k
        └── Agr_s'
            ├── t_i
            └── TP
                ├── t_k
                └── T'
                    ├── t_i
                    └── Agr_oP
                        ├── Object_j
                        └── Agr_o'
                            ├── t_i
                            └── VP
                                ├── t_k
                                └── V'
                                    ├── t_i
                                    └── t_j
```

b.   CP

C'

Verb$_i$ IP

I'

t$_i$ VP

Subject   V'

t$_i$ Object
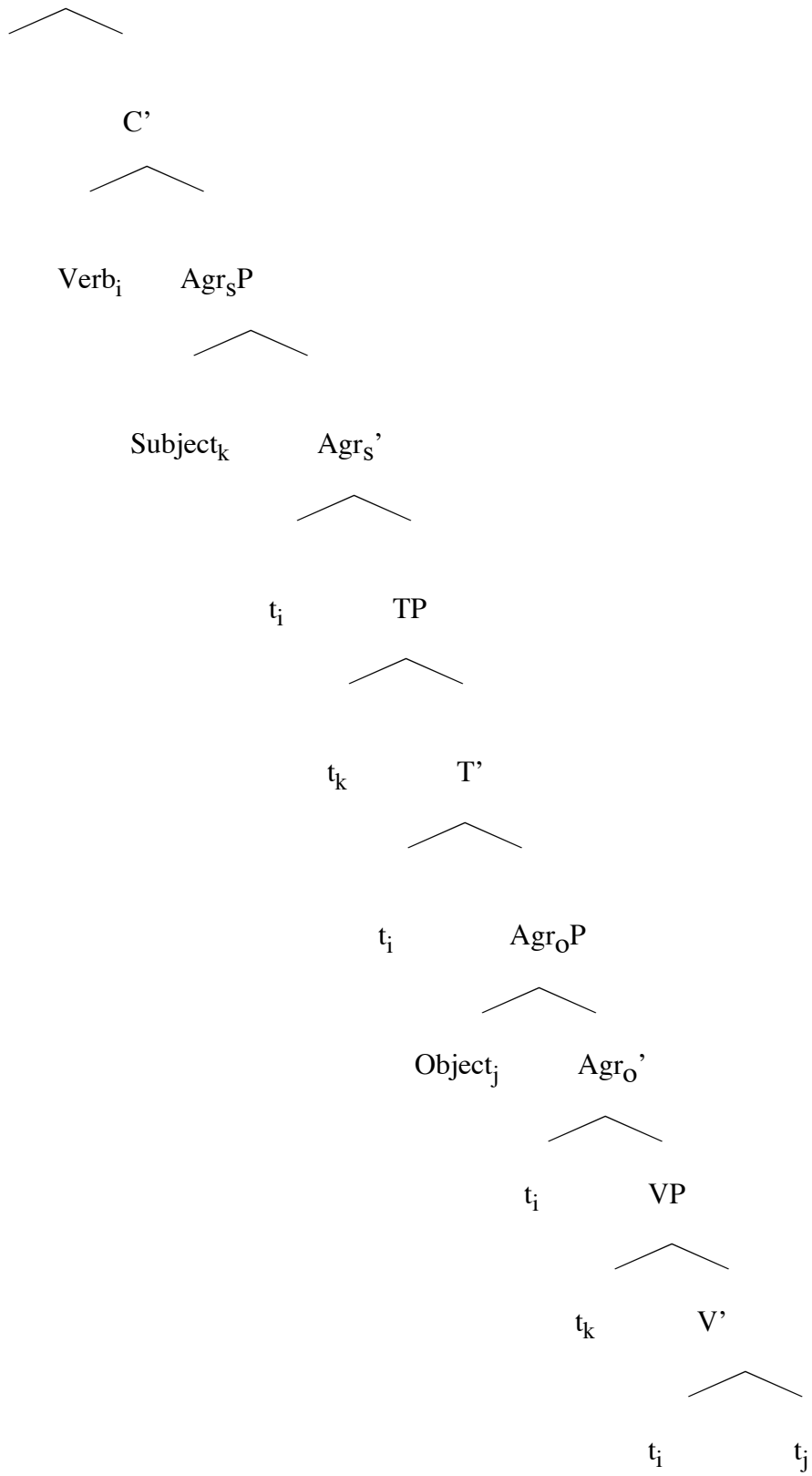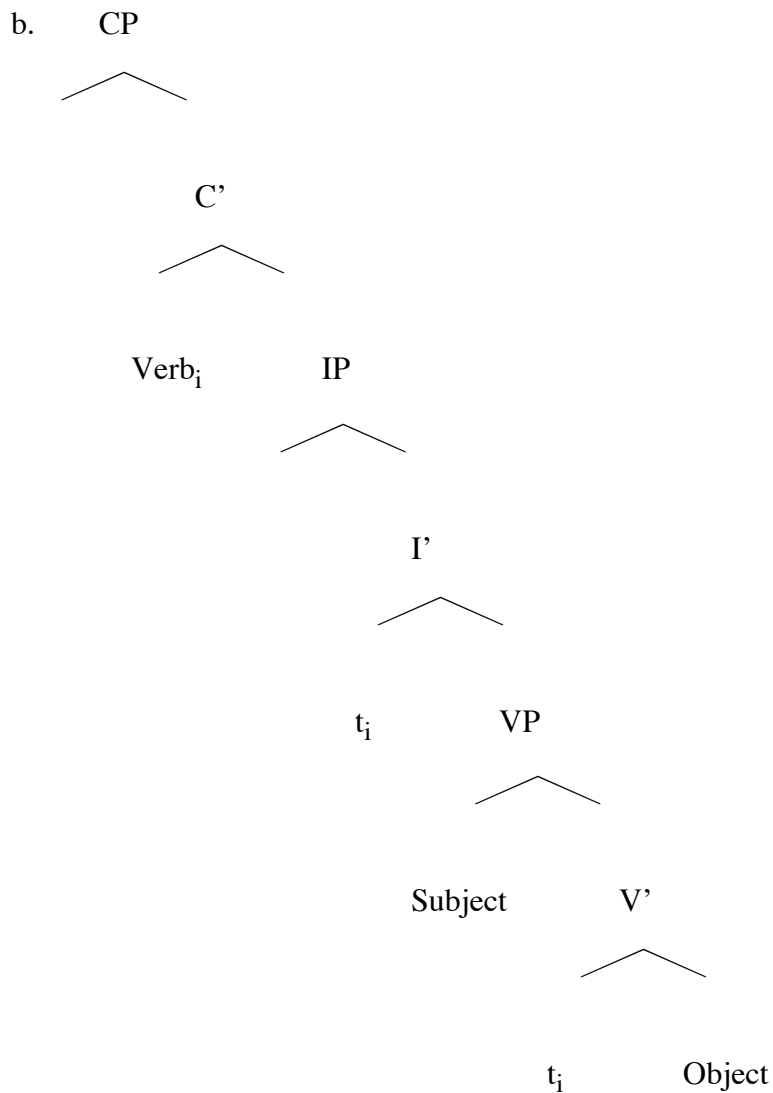
The approach that considers the verb (with its complex feature) has fronted because it moves to C while the arguments and other XP staff are in lower position has suggested, for example for Irish, by Stowell (1989); for Modern Hebrew, by Doron (2000) (see also Shlonsky 1997). This type of approach, however, has some challenges in the literature. See, for example, Bobaljik and Carnie (1996), and McClosky (1994).

Bobaljik and Carnie argument against this approach is that: if the verb moves to C and the order VSO is a result of such movement when C is occupied it has to be

the case that the verb is somewhere in a lower position. According to Bobaljik and Carnie (1996), for example, if the verb is in T then, one expects to get an order C-SVO (assuming the subject is in Spec of T). If it is in its base position we may have C-SOV (assuming the object moves out of its base position).

(10) Ceapaim   [go bhfaca   sé   an madara]   (Irish)
    think.PRES.1SG [that see.PAST.DET he.NOM the dog]
    'I think that he saw the dog'(Bobaljik and Carnie 1996: 227)

As we can see from (10), when C is filled by complementizer, the order remains the same VSO not SOV or SVO.

Furthermore, referring to another work Bobaljik and Carnie suggest that "since IP adjoined adverbs appear to the left of verbs, verbs cannot be higher than the left edge of the inflectional complex" (1996: 227). The other reason for Bobaljik and Carnie rejection of the V-to-C analysis to Irish is what they call conceptual motivation. I will examine their points and whether such V-to-C movement in general holds true to Ge'ez in section 10.2.1.3.

10.2.1.2.2 V-to-I Movement

Within the V-to-I approach, there are differing views with regard to the exact functional category in which the Verb lands at the final derivation, and with respect to the position of arguments. We will see below three proposals within this approach.

10.2.1.2.2.1 Chomsky (1993)

Chmosky (1993) proposes that the derivation of VSO order can be assumed as a result of the overt movement of the Verb to I whereas its arguments remain in

situ. In other words, the movements of the subject and object to their respective functional categories are covert that take place at LF.

For Chomsky (1993), note that, nominative and accusative Cases are checked in agreement projections Agr_sP and Agr_oP respectively. The general structure of Chomsky's proposal for the derivation of VSO can be understood as illustrated in (11).

(11) Agr$_S$P
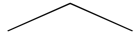
　　　　Agr$_S$'
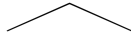
　　Verb$_i$　　　TP
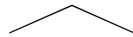
　　　　　　　　T'
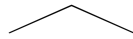
　　　　　　　t$_i$　　　Agr$_O$P
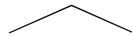
　　　　　　　　　　　Agr$_O$'
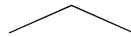
　　　　　　　　　　t$_i$　　　VP
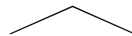
　　　　　　　　　　　Subject　　　V'
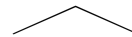
　　　　　　　　　　　　　　　　t$_i$　　　Object

10.2.1.2.2.2 Bobaljik and Carnie (1996)

Bobaljik and Carnie (1996) proposal for Irish is somewhat similar with the above Chomsky's proposal. The difference between the two is that in Bobaljik and Carnie approach it is assumed that there are overt movements of the arguments of the verb. However, the subject will not move to Spec Agr_SP, but rather it remains in Spec TP. Bobaljik and Carnie's suggestion is based on two assumptions. First, they assume that the verb does not move to C in Irish, and second, there is an obligatorily movement of an object in this language. Since in VSO, the subject precedes the object, if the object moves out of VP and the subject is in Spec VP then, the subject has to move in a position higher than the object checking projection.

Based on Chomsky's (1993) phrase structure, Bobaljik and Carnie suggest that the object has to move to Spec Agr_OP and the subject to Spec TP while the verb spelled out at the head of Agr_SP. According to Bobaljik and Carnie the subject, in fact, has to move at LF to Spec Agr_SP to check ϕ-features. This gives the VSO order. Their proposal is illustrated in (12) below.

(12) Agr$_S$P
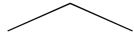
    Agr$_S$'
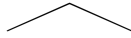
        Verb$_i$ TP
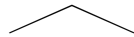
            Subject$_j$ T'
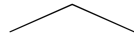
                t$_i$ Agr$_O$P
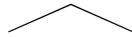
                    Object$_k$ Agr$_O$'
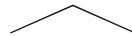
                        t$_i$ VP
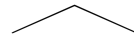
                            t$_j$ V'
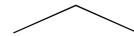
                                t$_i$ t$_k$

10.2.1.2.2.3 Benmamoun (2000)

Benmamoun (2000), in his book on comparative syntax of the three Arabic dialects, explains the ordering difference between VSO and SOV orders in terms of the feature composition of tense. According to Benmamoun the features in T may vary across languages and even within a language in various tenses; i.e. in present, future and past. For him, in the three dialects of Arabic; Moroccan Arabic, Egyptian Arabic and Standard Arabic the past tense can be understood as specified for +D and +V features whereas the present tense only for +D feature. In those three dialects of Arabic, though in the past tense VSO is the unmarked and the only grammatical order, in the present tense construction SVO is more preferable.

As mentioned above, Benmamoun explains such facts of word order in relation to movement triggered by checking categorial features.

> In the past, the T head is specified for both [+V] and [+D] features. On the other hand, there is only one candidate to check the [+V] feature — namely, the verb. The [+D] feature, on the other hand, can be checked primarily by the subject. But it can also be checked by the verb, thanks to the agreement features it carries, assuming Borer's 1986 i-subject theory. According to Borer, in null languages the agreement inflection acts as the subject. Updated to the minimalist terms, the inflection on the verb can check the [+D] feature of tense (see also Alexiadou and Anagnostopoulou 1999). Turning to the past tense in Arabic, since the verb must move to tense to check the [+V] feature, it can also check the [+D] feature for free, thus obviating the movement of the subject to the Spec of TP. This results in the VSO order with the verb in tense and the subject in a lower projection (either VP or AspP) (Benmamoun 2000: 62 and 63).

In general, for Benmamoun the order VSO found in Arabic, is a result of verb movement to T where its arguments stays in their base positions.

10.2.1.3 The Proposal

One of the arguments for the non-movement of V-to-C in Irish presented by Bobaljik and Carnie (1996) is that, C can be filled with overt complementizer whereas the order remains the same; i.e. C-VSO. This is also the case in Ge'ez. However, this does not tell us that the verb does not move to C. As suggested in Rizzi (1995/ 1997) and some others (cf. chapter 2), the CP-layer may have more than one functional projection. It can be the case that V moves to one of the lower C-projections and the complementizer occupies one of the higher C-projections. In fact, this is evident in Ge'ez.

In Ge'ez we find the complementizer *wä* or the interrogative marker *nu* cliticized to the verb as we have seen above. Consider also the examples in (13) and (14):

(13) wä-fänäw-ä   (Ge'ez)

    and-send$_{perf}$-3ms$_s$

 '(and) he sent'

 (14) akko-nu   (Ge'ez)

    Coup.neg-intro

   'isn't it?'

Furthermore, in this language we find the complementizer, the interrogative marker and the verb forming a single prosodic word where the interrogative marker realized as a post-verbal clitic whereas the complementizer as a pre-verbal clitic as one can see from (15).

 (15) wä-akko-nu ahaw-kä   (Ge'ez)

    and-neg-intro brother-your

   '(and) isn't he your brother?'

As we will see later in this chapter, I consider here the interrogative marker to head a projection of FocP and the complementizer ForceP as in (16).

(16) [$_{ForceP}$ wä [$_{FocP}$ nu

I assume that, we get the verb in between the complementizer and the interrogative marker because the verb moves to Foc° and adjoins to the left of the interrogative head consistent to Kayne's (1994) adjunction claim. Then, the cliticization of the complementizer to the verb, I suggest, will take place without any movement; i.e. in PF. I will illustrate such derivation in (17). The position of the subject and object is irrelevant for the present discussion.

(17) [$_{ForceP}$ wä- [$_{FocP}$ akko$_i$-nu [t$_i$

In the absence of interrogative marker, in fact, it is hard to present evidence for the movement of V to the CP-layer. However, it may be the case that there is always V-to-C raising in Ge'ez VSO order. For example, in this language unlike the Arabic dialects studied by Benmamoun (2000) there is no word order difference between simple past tense and simple non-past tense constructions.

In recent minimalist syntax, particularly Chomsky (1999, 2001b), syntactic derivation proceeds phase by phase. While *v*- and C-phases are strong and can be sent to spell out T-phase is weak and cannot be sent to spell out.[4] Since V in VSO cannot be in the argument structure, it has to be the case that it is either in T or C. Suppose it is in T; and let's continue our discussion based on Chomsky (1999, 2001b). If T and *v* are phi-complete, according to Chomsky, Agree establishes a relation between *v* and OB; and between T and SU. Then, the uninterpretable phi-features of T and *v* can be valued by the matching interpretable phi-features of SU and OB and deleted. Assume that this is done without movement by the operation Agree. Agree also will delete the uninterpretable Case features of OB and SU by matching with the complete phi-features of *v* and T respectively (without

movement). Hence, SU and OB frozen in place, namely in the argument structure. Though, this operation results with the right word order that is V in T and SU and OB in the argument structure; the derivation cannot be sent at this level to spell out since T is not a phase (Chomsky 2001b). Though, a simple addition of C as required for convergence at C-I interface can handle the case, and this operation can be sent to spell out (because C is a complete phase) there is a strong empirical evidence in favor of the raising of V further to C (cf. 22, for example). Meaning the C is not only required for convergence at C-I but also by the phonological component PC. Based on the above discussed points, I suggest that the Ge'ez VSO is derived by V-to-C raising.

The counter argument against V-to-C raising that Bobaljik and Carnie (1996) present is what they call it conceptual:

> The conceptual point that these papers (and earlier work along those lines) raise is the following: if movement is motivated solely by morphological properties, then V-to-C raising can be motivated for topicalization or question formation (cf. English 'Aux to Comp Inversion'), but cannot be motivated for non-topicalized declarative clauses. In Irish, there is no property such as topicalization or interrogation which would force overt raising of the verb to C. An analysis involving obligatory V-to-C in simple declaratives is conceptually untenable (Bobaljik and Carnie 1996: 227).

However, for the case of Ge'ez, I do not consider such case as conceptually untenable. Recall that in a number of Ethio-Semitic languages in any simple clause there can be a V-feature; for example force feature, which belong to the CP-layer. Therefore, what triggers the movement of V-to-C cannot be only topicalization, question formation or focus. Question formation of the English type can be understood as a movement of Vaux to a higher C-projection — most likely to ForceP.

It is almost a standard knowledge that, what can be topicalized and focused are mostly XPs not heads. In other words, topicalization and focus cannot be

considered as properties of heads in most cases. On the other hand, whether the verb lands in any of the lower c-projection, such as FocP, TopP or FinP, it does not bring change in the informational interpretation of the clause in question. In fact, see, for example, Cinque (1999), Chomsky (1999), where head movement, especially in the latter is argued to be a PF phenomena. I will quote Chomsky (1999) in brief for this point.

> There are some reasons to suspect that a substantial core of head-raising processes, excluding incorporation in the sense of Baker (1988), fall within the phonological component. One reason is the exception of (near-)uniformity of LF-interface representations, a particularly compelling instance of the methodological principle....The interpretive burden is reduced if, say, verbs are interpreted the same way whether they remain in situ or raise to T or C, the distinction that have received much attention since Pollock (1989). That appears to be the case: verbs are not interpreted differently in English-French-German or MSc-Icelandic, or in embedded and root structures. More generally, semantic effects of head -raising in the core system are slight or non-existent, as contrasted with XP-movement, where the effects are substantial and systematic, including the intermediate position of successive-cyclic movement. That would follow insofar as head-raising is not part of narrow syntax.

> A second reason has to do with what raises. Using the term "strength" for expositor purposes, suppose that T has a strong V feature and a strong NOMINAL feature ([person], we have assumed; D or N in categorial system). It has always been taken for granted that the strong T feature is satisfied by V-raising to T (French vs. English), not VP-raising to SPEC-T; and the strong NOMINAL feature by raising of the nominal to SPEC-T (EPP), not raising of its head to T. But the theoretical apparatus provides no obvious basis for this choice. The same is true of raising to C and D: in standard cases, T-V adjoins to C and an XP (say a wh-phrase) raises to SPEC-C, instead of the wh-head adjoining to C and TP raising to SPEC-C; and N raises to D rather than NP raising to SPEC-D. These conclusions too follow naturally if overt V-to-T raising, [T-V]-to-C raising, and N-to-D raising are phonological properties, conditioned by the phonetically affixal character of the inflectional categories (Chomsky 1999: 22).

In Ethio-Semitic, as we have seen in the preceding chapters, force feature can be V-feature and must be checked by the verb which strengthen Chomsky's suggestion that V-to-C is a PF property.[5] In general, as I have suggested already, I assume that the order VSO in Ge'ez is a result of V-raising to one of the C-heads. Let's see now the derivation of the various clauses presented in section 10.2.1.1 above.

In (1), (2) and (3), I suggest that, the verb moves to one of the lower C-projection, either TopP or FocP. The cliticization of *wä* to the verb must be taken place in the phonological component, as already suggested.[6] I will illustrate the structure of these type of clauses considering the example in (2).

(18) ForceP

　　　　　　　Forc'

　　　wä-　　　　TopP/FocP

　　　　　　　　　　Top/Foc'

　　　　　　　'aws'ɨ'at$_i$　　　IP

　　　　　　　　　　mɨdr　t$_i$　h'amälmalä
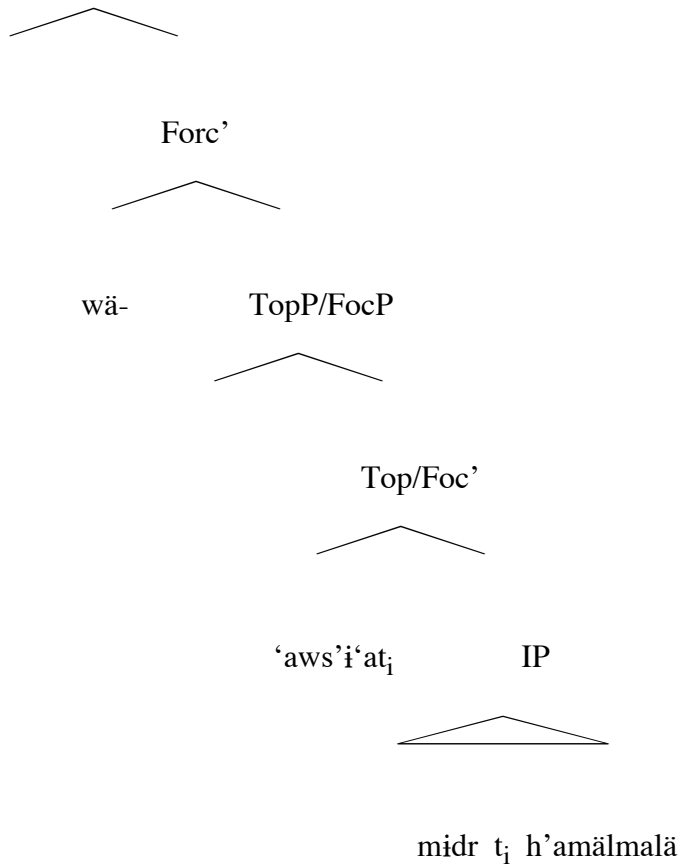
As I pointed out above, according to Dillman (1886) the fronted subject in (4) and the fronted objects in (5), (6) and (7) are topicalized. In (4) the verb is a complex element forming a single prosodic word with the complementizer *wä*. If the above suggestion *wä* heads force projection is correct, and the topicalized subject in (4) is in Spec of TopP, we will have the following structure:

(19) ForceP

                  Forc'

         wä-   TopP

              'ɨgzi'abɨh'er$_j$ Top'

                  habäkɨmu$_i$ IP

                        t$_j$ t$_i$ zä'ɨlät-ä sänbät
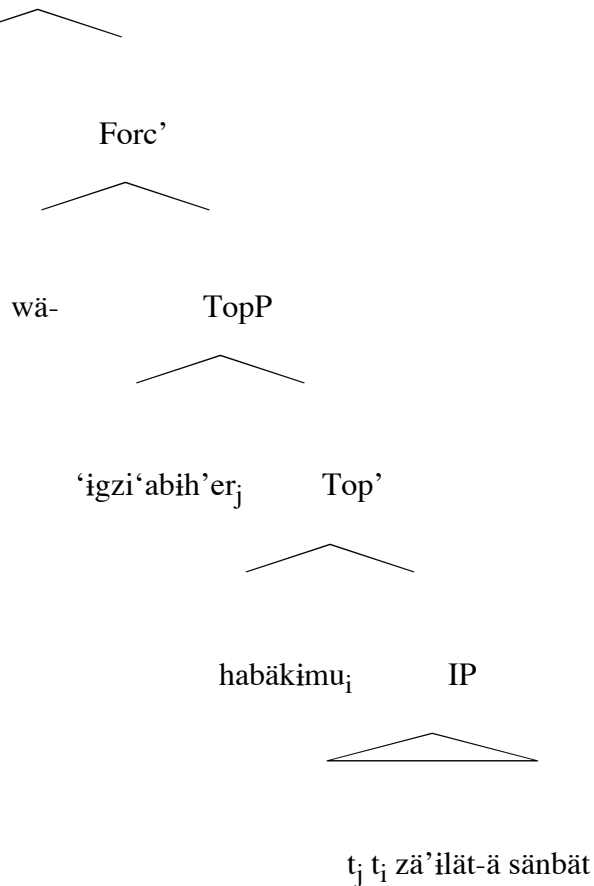
The structure in (19) in general, the cliticization of *wä* to the verb *habäkɨmu* in particular need some explanation. If the structure in (19) is the final derivation, we need to know, particularly how *wä* cliticized to the verb not to the subject. If it is not, we need to examine whether there is further movement of the subject *'ɨgzi'abɨh'er* to Spec ForcP.

According to Halle and Marantz (1993) two adjacent heads in syntax may merge without head movement taking place as in (20).[7]

(20) a. ... TP

                T'

        T°   VP

                  V°   ....

b.   .... TP

            T'

          |

          VP

       V°   ....

V°   T°
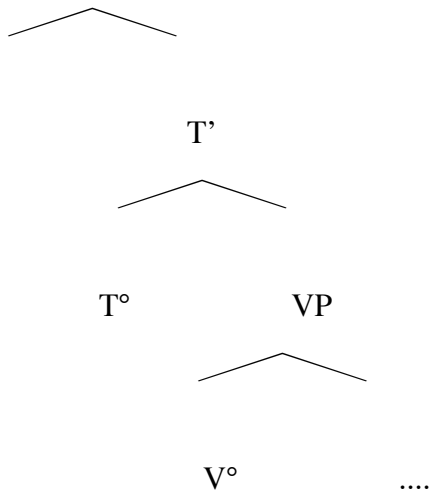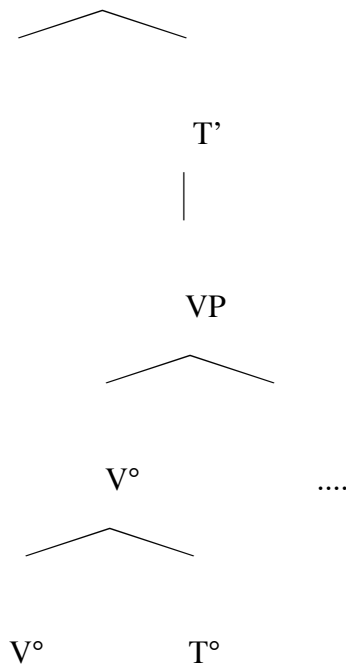
This kind of analysis is assumed to provide an alternative analysis, for example, to the past tense inflections of English verbs (cf. Halle and Marantz 1993).

Bobaljik (1995) further extends Halle and Marantz's (1993) merger theory. According to Bobaljik (1995) a merger of two syntactic heads can take place even if there is a phonologically visible adverb. However, overt DPs and the negation *not*, for example, may block this merger in English. If this kind of proposal is on the right track, we may suggest that in Ge'ez (but not in English) DP may not block such merger. However, this does not seem the case. This is for the following basic reason. First of all, *wä* does not seem to care about the syntactic nature of its following constituent. For example, in (5) it is attached with a following phrasal constituent not to the head verb. If the subject *'ɨgzi'abɨh'er* in (4) were situated as in (19), *wä* should be found prefixed to it. The adjunction of *wä*, thus, seems a phonological matter and has nothing to do with syntax. Because of this, I suggest that the topicalized subject in (4) is further moved to Spec ForceP, as in (21). Such movement can be attributed to the EPP feature of force.

(21)   ForceP

'ɨgzi'abɨh'er$_j$ Force'

          wä-   FocP/ TopP

               t$_j$ Foc'/ Top'

                     habäkɨmu$_i$ IP

                          t$_j$ t$_i$ zä'ɨlät-ä sänbät
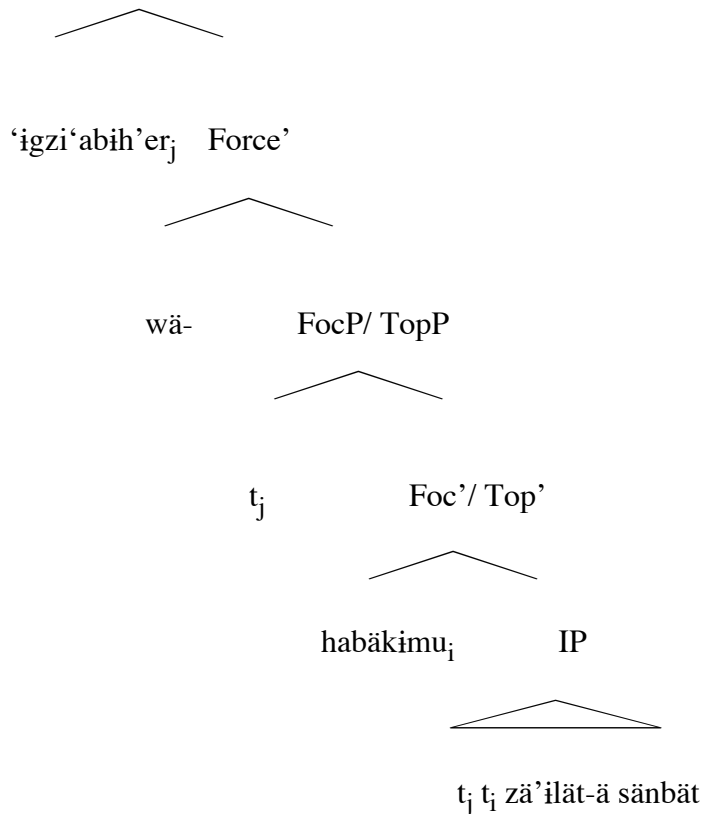
In the derivation of (5), it seems that there is no movement of the verb. But the fronted constituent seems moved to the Spec of TopP. In (7) also the fronted constituent, i.e. *up on me,* is a topicalized element. However, (7) is different from (5) with regard to the position of the verb. In (5) it seems that, the verb is in its base position, whereas in (7) it is out of its base position. Note that, in (7) *märgäm-kä* 'thy curse' is the subject of the clause. For this clause, I suggest the following structure:

(22)   TopP

la'leyä_j   Top'

      yɨkuni   IP

           märgämkä t_i t_j
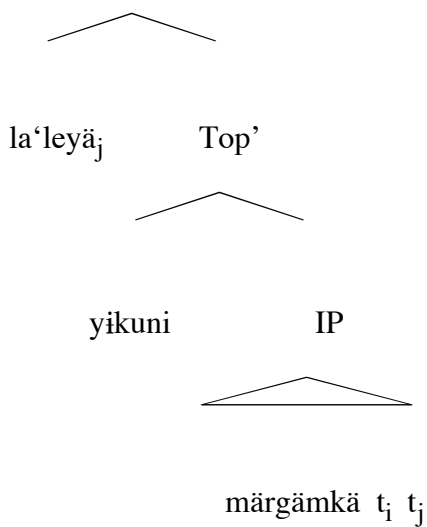
It may be the case that in (6) also the verb moves out of its base position in the same way as in (7) and (5).

(23)   TopP

qalä ziʻahu$_j$ Top'

        nɨsämɨʻ$_i$ IP

                    t$_i$ t$_j$
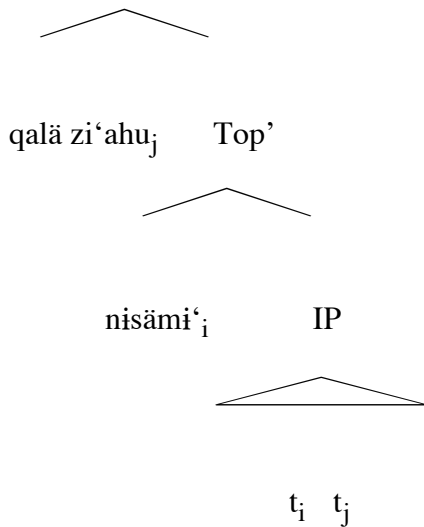
Although the movement of the verb in (23) is hard to proof, the one in (22) seems correct. In (18) I argue that the verb moves to one of the lower C-projections whereas the complementizer *wä* occupies the highest functional projection in the CP-layer. This means that although the verb forms a single prosodic word with *wä*, it does not move to it. If it does, it has to adjoin to the right of the complementizer violating Kayne's (1994) adjunction theory. If my analysis in (22) is on the right track, there cannot be such violation. As the data in (5) also shows, the verb does not move preceding the topicalized constituent.

10.2.2 Word Order in MES Declarative Clauses

10.2.2.1 Basic Facts

In modern Ethio-Semitic languages, the unmarked word order in a simple clause is SOV, i.e. Subject-Object-Verb. The following are sample examples of clauses in various languages:

(24) yonas säw gäddäl-ä   (Amharic)

    J.   man kill$_{\text{perf}}$-3ms$_{\text{s}}$

    'Jonas killed a man'

(25) rabbi 'astar   wa-mɨdɨr fat'r-a   (Tigre)

    God heaven and-earth create$_{\text{perf}}$-3ms$_{\text{s}}$

    'God created heaven and earth' (Raz 1983: 94).

(26) ambäs hudä ä-aster näkäs-ä-na   (Endegeñ)

    lion   he Acc-A.   bite$_{\text{perf}}$-3ms$_{\text{s}}$-3fs$_{\text{o}}$

    'The lion bit Aster' (Nega 1999: 19)

(27) käbädä   ɨc'ä säbbor-ä-m ^{8} (Ezha)

    K. wood break$_{\text{perf}}$-3ms$_{\text{s}}$-T$_{\text{past}}$

    Kébede broke a wood' or 'Kebede collected woods (mostly woods which

can be used for the purpose of cooking)'

(28) mohammed lä-anbäs-äy qätäl-ä-y   (Wolane)

    M.   Acc-lion-def kill$_{\text{perf}}$-3ms$_{\text{s}}$-3ms$_{\text{o}}$

    'Mohammed killed the lion'

The word order depicted from (24) to (28), is DPs—DPo—V. However, this ordering is not rigid. Any of the constituents in a clause can be focused or topicalized.

(29) a. yonas anbäsa-w-ɨn gäddäl-ä-w   (Amharic)

    J.   lion-def-Acc kill$_{\text{perf}}$-3ms$_{\text{s}}$-3ms$_{\text{o}}$

    'Jonas killed the lion'

b. anbäsa-w-ɨn gäddäl-ä-w   yonas

   lion-def-Acc kill$_{perf}$-3ms$_S$-3ms$_O$ J.

c. yonas gäddäl-ä-w   anbäsa-w-ɨn

   J.   kill$_{perf}$-3ms$_S$-3ms$_O$ lion-def-Acc

d. anbäsa-w-ɨn yonas gäddäl-ä-w

   lion-def-Acc J.   kill$_{perf}$-3ms$_S$-3ms$_O$

e. ?gäddäl-ä-w   yonas anbäsa-w-•n

   kill$_{perf}$-3ms$_S$-3ms$_O$ J.   lion-def-Acc

f. ?gäddäl-ä-w   anbäsa-w-ɨn   yonas

   kill$_{perf}$-3ms$_S$-3ms$_O$ lion-def-Acc   J.

As the examples in (29) may show, all the possible word orders seem grammatical in Amharic. The case is almost the same in other Modern Ethio-Semitic languages. However, this freedom of movement is dependent on definiteness. If one of the arguments or both of them are definite then movement for topicalization or focus is a possible operation. If both arguments of the verb are indefinite DPs, however, the only possible order is SOV in this language group. Consider the following examples:

(30) kälbi zɨbbi qätil-u   (Tigrinya)

   dog hyena kill$_{geru}$-3ms$_S$

   'A dog killed a hyena'

If the order of the object and the subject shifted, as in (31) the meaning also changed, i.e. *hyena*, the object, will be the agent and the subject which is the agent in the above examples will be patient.

(31) zɨbbi kälbi qätil-u   (Tigrinya)

    hyena dog kill$_{geru}$-3ms$_S$

    'A hyena killed a dog'

All the possible constructions in (29), i.e. the order OVS, SVO, VSO, VOS, are not possible with constructions that have indefinite arguments like (30) and (31). These orders can only be grammatical if the subject or the object are definite. It is also grammatical if both the subject and the object are definite. This is for the simple reason that, if the object is definite it will be marked morphologically for accusative Case.[9] This in turn will create no ambiguity in meaning whatever kind of ordering will take place (for topicalization or focus). This is also true to other Semitic languages such as Arabic (cf. Mohammed 2000) and to many other non-Semitic languages. This is to show that SOV is the unmarked word order in modern Ethio-Semitic languages. The change from this basic structure for focus, topicalization etc. will not be ungrammatical if and only if one of the two arguments or both are definite, since definite nominative DPs and definite accusative DPs are morphologically distinct from each other; the former by bearing null morpheme while the latter by the accusative marker. In the following section, I will show the derivation of SOV order.

10.2.2.2 The Derivation of OV

Assuming S-H-C as the basic word order, the simplest way of deriving OV structure, along with Kayne's (1994) suggestion, is to shift the object to the left of the verb as in (32-b).

(32) a. yonas anbäsa-w-n gäddäl -ä

    J.   lion-def-Acc kill$_{perf}$-3ms$_S$

    'Jonas killed the lion'

  b. yonas [anbäsa-w-n]$_i$ gäddäl -ä t$_i$

The simplest assumption for the derivation like that of (32-b) is that the subject and the verb remain in situ while the object moves overtly. Following Chomsky (1995, 1999) let us suppose that the landing site of the object is Spec of vP and adjunction of the object will take place as in (33).[10]

(33) vP

```
        vP
       /  \
   yonas    vP
           /  \
    anbasawn_i   v'
                /  \
               v     VP
                    /  \
                  V°     t_i
                  |
               gäddälä
```
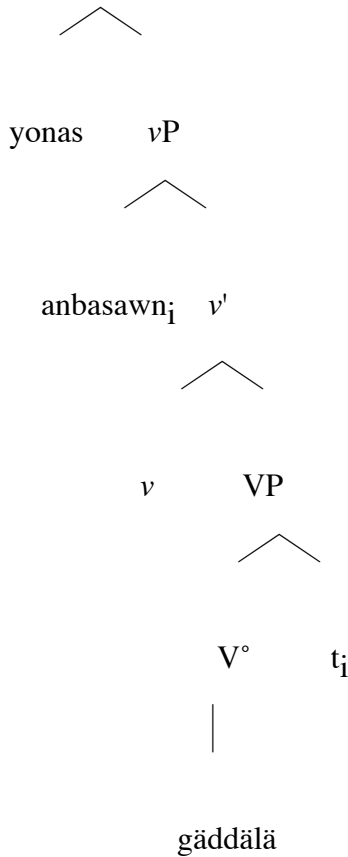
The structure in (33) can be explained as follows: Agree establishes a relation between the subject *Jonas* and Asp (recall that that Asp is always φ-complete in Ethio-Semitic), hence the structural Case of *Jonas* and the Case and φ-feature of Asp deleted. Therefore, following Chomsky (1998, 1999, 2001) and the discussion presented in chapter three since *Jonas* does not have any unvalued feature, and has no other feature that it can value it must be frozen in place. Let us suppose also that the accusative Case of the object OB is checked by the

matching feature of *v* and OB moves to Spec of *v*P because of EPP. Hence, the derivation sent to spell-out as a complete phase. Note that, if we assume that the object merged below the subject "there will be an ultimate theta theory violation" (Chomsky 2001b: 21).

In order to avoid such violation, Chomsky (2001b) forwards the following suggestion: "Proper positioning might be automatic under various assumptions: e.g., if the simultaneous satisfaction of properties of *v* involves an internal cyclic order, with raising of OB first, then 'tucking in' of externally Merged SU" (2001b: 21).

Recall that, although SOV is the unmarked order in this language group, the order between especially direct and indirect objects seems almost free. Consider also the following:

(34) a. yonas   laster   mas'haf sät't'-Ø-at   (Amharic)

        J.   [E.Dat]$_i$ book give$_{pref}$-3ms$_S$-3ms$_{IOi}$

        'Jonas gave a book to Esther'

      b. yonas mas'haf laster sät't'-Ø-at

I have attributed such type of "free" word order to the optional movement of the direct object to Spec *v*; i.e. for reason of Case (+EPP). If the direct object moves overtly to check Case and, in fact to satisfy the EPP feature of *v* then DO precedes IO as in (34-b). If DO's and *v*'s *u*Case features (recall the discussion in chapter 3) are checked without any overt movement of DO, then we will get a structure as in (34-a) (cf. chapter 4).

In general, as we have seen above and the preceding chapters in SOV Ethio-Semitic languages it seems that there is no verb movement. This is also the proposal suggested in Kayne (1994) and Chomsky (1995) for the derivation of

SOV languages in general. In the following section I will discuss word order in negative clauses.

10.3 Word Order in Negative Clauses

10.3.1 Word Order in Ge'ez Negative Clauses

In Ge'ez, Dillman (1886) identifies three negative markers. These are *'i-*, *'akko* and *'albo*. *'i-* is realized being prefixed to any word which is supposed to be negated. "It may turn an individual word into its contradictory, and, then it corresponds frequently to [the] prefix *un* or *in*" (Dillman 1886: 508).

(35) 'i- tɨwlɨd   'i-'amanit

   neg-generation neg-believing

   'O unbelieving generation!'   (Matt. 17, 17)

(36) 'i-'amino-tomu

   neg-belief-poss(3mpl)

  'their unbelief'   (Matt. 13, 58)

(37) bä-'i-ya'mɨro mäs'ahɨft

   by-neg-know books

  'by reason of not knowing the Scriptures'   (Matt. 22, 29)

(38) bä-'i-ya'mɨro

   by-neg-know

  'in ignorance'   (Gen. 26, 10)

(39) wä-wäyn-ä wä-mes-ä 'i-y-stäy

  and-wine-acc and-mead-acc neg-3ms$_S$-drink$_{jussive}$

  'and of wine or mead he may not drink'   (Matt. 22, 29) ('lit. let he not drink wine or mead')

(40) nɨh'nä 'i-n-kɨl h'awirä

  we Neg-1pl$_S$-can go(noun)

  'we cannot go' (Gen. 44, 26)

The negative marker '*i* whether realized as clausal negation marker or not, has a fixed position. It is prefixed with the negated constituent. If the negated constituent is the whole clause, it is realized prefixed to the matrix verb.

Although the unmarked order is the negative marker '*i* +Verb — Subject — Object, the subject and the object can be fronted in the same way we saw with the affirmative counterparts. The other negative marker, '*akko,* is different in this respect.

The negative marker '*akko* is always placed at the initial position of the sentence and will not allow any constituent to be fronted preceding it, either for focus or topicalization. If there is any complementizer, as in (41), the complementizer naturally precedes the negative marker '*akko.*

(41) 'ɨsmä 'akko nɨh'nä zä-as-qorär-na-ko

  for   neg we   comp/RM-caus-touch$_{perf}$-1pl$_S$-2ms$_O$

  'as we have not touched thee' (Gen 26, 29)

However, if there is an interrogative marker the interrogative marker will cliticize to the negative marker as in '*akko-nu/'akko-hu* 'neg-intro'.[11] If we assume the interrogative marker as occupying a head position in CP-layer it is natural to

suggest that the negation copula moves to one of C-projections in a split C-system and may land to the lower head position. This is, in fact, supported by the clauses such as (15), repeated below as (42).

(42) wä-akko-nu haw-kä

    and-neg-intro brother-your

    '(and) isn't he your brother?'

As already discussed, I suggest that the complementizer *wä* heads ForceP and the interrogative marker *nu* heads FocP. In (42), I further assume that the negative copula moves to *nu* while *hawkä* remains either in VP or somewhere in IP as in (43).

(43) ForceP

          Force'

     wä-   FocP

                    Foc'

                Foc°   IP

          V°   -nu t_i hawkä

         |

       'akko$_i$
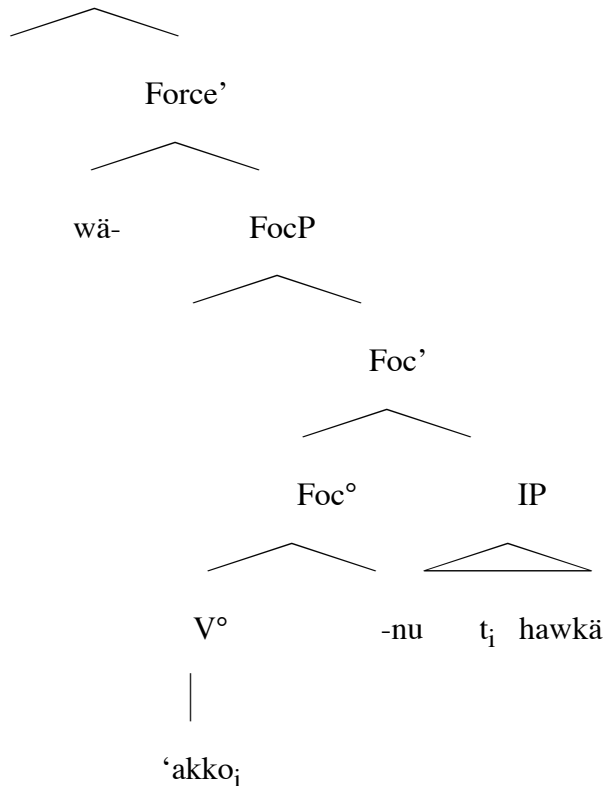
The third type of negative marker, according to Dillman (1886) is *'albo*. In fact, *'albo* can be analyzed as a morphological complex element; as *al-bo* where *'al* stands for negative marker and *bo* is a sort of copula having the unmarked reading 'there is, there exists'. For some grammarians, *bo* is a kind of preposition which denotes the presence of something or somebody inside something. However, since *bo* acts as a head of a clause in most cases, I consider it as a (verbal) copula. The negative marker, *'al* is the well-known negative marker in Ethio-Semitic which can be considered as one of the features of proto-Ethio-Semitic. Regarding the usage of *al-bo* Dillman states that it "signifies properly 'there is not', 'there does not exist' and can only be used when this turn of thought and expression is possible and thinkable. It stands quite independently for 'no' — in opposition to *'iwä* 'yes' — in the sense of 'it is not the case'" (Dillman 1886: 511).

(44) 'al-bo zä-tärf-ä

    neg-Cop comp-left$_{perf}$-3mss

    'no one was left' (Josh. 8, 17) (lit. There was no one who was left.)

There is nothing special regarding to the word order of such type of constructions. *bo,* the lexical head of the clause, by virtue of being a verbal copula, occupies the clause initial position as other verbs do in this language. The negation marker *al* is an affix and I assume along with Chomsky (1993) that it attaches with its host in the lexicon.

10.3.2 Word Order in MES Negative Clauses

Negation in modern Ethio-Semitic is expressed in some languages by a pre-verbal negative marker and in others by pre-verbal and post-verbal negative markers (cf. the preceding chapter).

(45) yonas al-hed-ä-m   (Amharic)

    J.   neg- go$_{perf}$-3ms$_S$ -neg

  'Jonas didn't go'

(46) käbädä a-y-säbɨr   (Chaha)

    K.   neg-3ms$_S$-break$_{impf}$

  'Kebede does not break'

The word order of such clauses, as we can see from (45) and (46), is the same with the affirmative clauses. Recall that in the preceding chapter I have suggested the derivation of the above two clauses to be as illustrated in (47) below, assuming that the verb inserts in the derivation fully inflected in the lexicon; i.e. having the negative and other functional categories.

(47)   CP
            PolP
                NegP
                    VP
                        yonas/ käbädä   V'
                                                alhedäm/ aysäbɨr
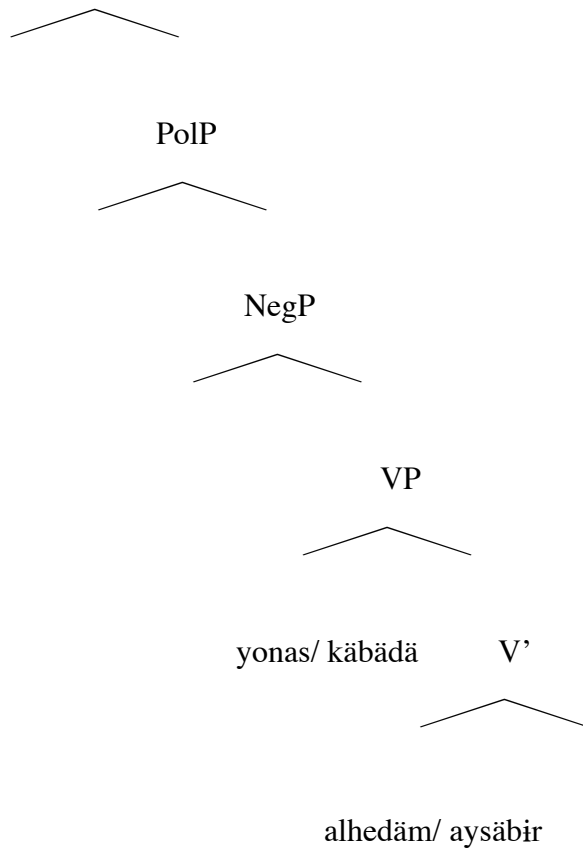
In clauses where tense is expressed by a (Lexical) auxiliary LA the negative marker/ markers can be found in three ways: affixed to the main verb as in (48), or affixed to the auxiliary (cf. 49) or affixed to both (cf. 50).

(48) yonas al-hed-ä-m   näbbär   (Amharic)

    J. neg-go$_{perf}$-3ms$_S$-neg Aux$_{past}$

   'Jonas had not gone'

(49) ɨnda-goy-ä 'ayi-näbär-ä-n   (Tigrinya)

     prog-run$_{perf}$-3ms$_S$ neg-Aux$_{past}$-3ms$_S$-neg

    'he was not running'

(50) a. 'iññä wut-n giizee al-jiijii-nä-bi-m al-naar-o   (Zay)

     we that-Acc time neg-reach$_{perf}$-1pl$_s$-Agrpp.3ms$_s$-foc neg-Aux$_{past}$-3ms$_s$

     'we did not reach to it on that time' (Ronny Meyer p.c.)

  b. yi-säc'u-m al-naar   (Harari)

     3ms$_s$-drink$_{impf}$-neg neg-Aux$_{past}$

     'he was not drinking' (Leslau 1958b)

I have suggested in the previous chapters, particularly in chapter 6 that LAs head a lexical projection. Meaning, the above type of clauses are biclausal. I also suggest that such biclausal constructions must be understood as in (51).[12]

(51) The clausal structure of past perfect in Ethio-Semitic

```
              CP
             /  \
            IP
           /  \
        V_AuxP
        /    \
      LA       CP
              /  \
              IP
             /  \
                VP
               /  \
              V
```
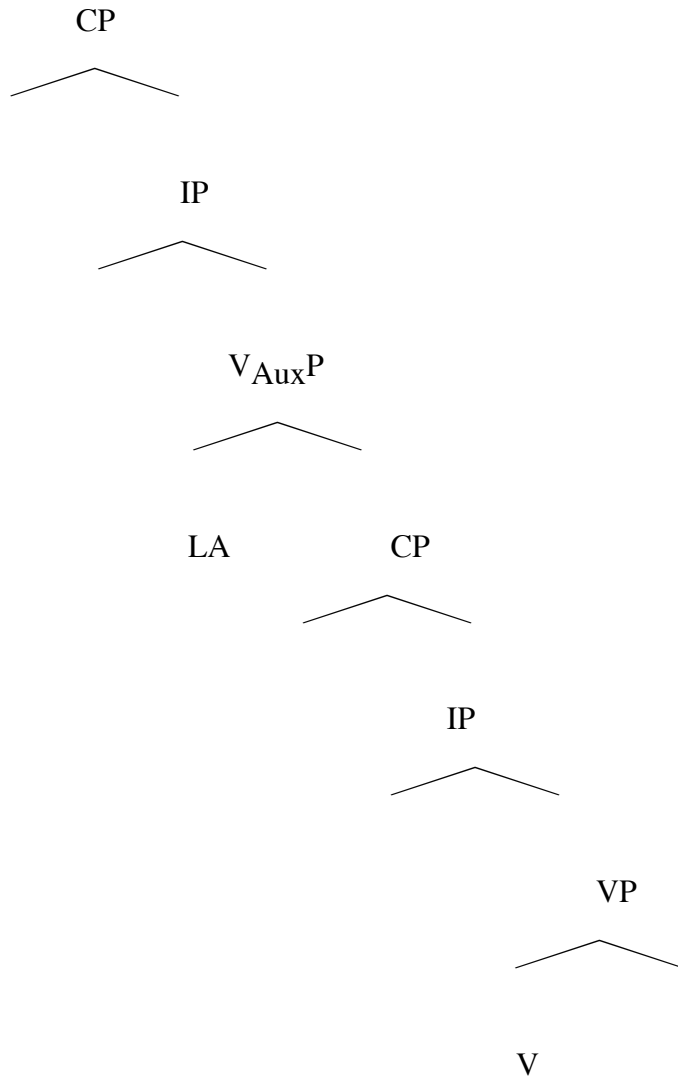
Since both the projection of the auxiliary and the matrix verb can have a full extended CP, the appearance of negative markers in both the auxiliary and the matrix verb as in (50) is not surprising, I guess. Omitting the possible intermediate functional projections the structure of negation in (50-a) and (50-b) can be understood as (52-a) and (52-b) respectively: [13]

(52) a. [CP [PolP [NegP [V_AuxP [CP [PolP [NegP [VP

    b. [CP [PolP [NegP [V_AuxP [CP [PolP [VP

Those constructions that have negation only on the main verb (cf. 48), can be understood as in (53) and those that have negation on the auxiliary exemplified by clauses such as (49) can be understood as in (54).

(53) [CP [IP(-NegP) [V$_{Aux}$P [CP [NegP [VP

(54) [CP [PolP [NegP [V$_{Aux}$P [CP [IP(-NegP) [VP

The surface structure of the clause presented in (50) can be, thus derived by moving the complement of AuxP to the Spec of it as in (55). The movement of CP to Spec of Aux can be attributed to EPP.

(55) [$_{AuxP}$ [$_{CP}$ al-kätäb-ä-m-in]$_i$ [$_{Aux}$' [$_{Aux}$° när] [t$_i$]]]

10.4 Word Order in Interrogative Clauses

10.4.1 Word Order in Geʻez Interrogative Clauses

In most Geʻez interrogative clauses there are interrogative words. "The interrogative marker which is most in use is the enclitic [nu], through which, however, the interrogative clauses no definite coloring, seeing that it may be followed equally by an affirmative and by a negative answer" (Dillman 1886: 513).

(56) daʜn-nu ʻab-ukɨmu zɨku ʻarägawi
     well-intro father-3mpl that(ms) old.man
      ʻis your father, the old man, well?' (Gen. 43, 27, 28)

(57) zäntä-nu gäbär-ki

   this-intro do$_{perf}$-2fs$_s$

  'hast thou done this? (Gen. 3, 13)

As we can see from (56) and (57), the interrogative enclitic *nu* is attached to the first word in the sentence, at PF. However, "it needs not be attached always to the first word" (Dillman 1886: 513). Consider the following example:

(58) 'ɨmnä säb'a zi'anä-nu 'antä   'aw 'ɨmnä s'är-nä

    from men our-intro you(m.s) or from enemy-our

  'dost thou belong to our people or to our enemies?' (Josh. 5, 13)

The interrogative marker *nu* can be used in most cases to interrogate individual members of a clause. However, Dillman observes that "if the force of the interrogation is meant to bear not upon a single word but upon the entire sentence, then [bo], combined with [nu], or [bonu], (= 'is it the case?') frequently appears at the head of the sentence" (Dillman 1886: 514). Consider the following examples:

(59) bo-nu   'ɨbn-ä   yɨ-hub-o

   copula-intro stone-Acc 3ms$_s$-give$_{impf}$-3ms$_o$

  'will he give a stone?' (Matt. 7, 9)

(60) bo-nu   'aqabi-hu 'anä lä-'ɨHu-yä

   copula-intro keeper-his I   to-brother-my

  'Am I my brother's keeper?' (Gen. 4, 9)

In this language, it is also possible to make interrogative clauses without using the interrogative marker *nu*. In such cases, a clause may start with the copula *bo* followed by the relative clause marker *zä*.[14] Consider the following example:

(61) bo zä-haläw-ä zɨyä bɨ'ɨsi

    there.is comp/RM-there.is$_{perf}$-3ms$_s$ here man

    'is there one here? (Judges 4, 20) (lit. Is there any person who is here?)

It is also common to find *bo* followed by the interrogative marker along with *zä*, to mean 'is it the case that'. Consider (62) below:

(62) bo-nu zä-b-kɨmu 'ɨHo

    copula-intro comp/RM-have$_{perf}$-2mpl$_s$ brother

    'have ye a brother?' (Gen. 43, 7) (lit. 'Is it the case that ye have a brother?')

As mentioned above, *zä* introduces a relative clause. *bo* is a copula and *nu* is an interrogative marker. Hence the order of Ge'ez even in interrogative clauses can be considered as verb initial. As Dillman points out, when there is any constituent which is especially affected by the question, then it immediately follows the interrogative word. In the following example, Dillman states that, "[kal'a] is put before the verb, because it is specially affected by the question" (Dillman 1886: 514).

(63) bo-nu kal'a zä-nɨ-sefo

    copula-intro another pp-1pls-look$_{impf}$

   'must we look for another?' (Matt. 11, 3)

In a negative interrogative clause, the sentential negative marker, i.e. *'akko*, is immediately followed by the interrogative marker enclitic *nu* or *hu* as we have discussed above. See also (64) and (65), below. However, the sentential word order is the same, i.e. the negative word precedes every constituent at PF.

(64) ʿakko-nu bäʿɨntä rahʾel täqänäy-ku

    neg-intro for.the.sake.of R. serve$_{perf}$-1s$_s$

    'have I not served for Rachel' (Gen. 29, 25)

(65) ʿakko-hu sänay zärʿa zäraʿɨ-kä

    neg-intro good seed sow$_{perf}$-1s$_s$

    'didst not thou sow good seed?' (Matt. 13, 27)

If the negative marker is a sort of affix, that is, which does not stand by itself as a prosodic word, and if the question marker is also the same class, i.e. if it is not prosodic word as the one which we have seen above, then the negative marker alone cannot move to C, since both lack stress and cannot form a prosodic word. In such case we get the negative marker prefixed and the question marker suffixed to the verb as in (66).

(66) ʿi-yanäbäb-kɨmu-nu

    neg-read$_{perf}$-2pls-int

    'have ye not read?' (Mark 2, 25)

In the above section, I have argued that the affix negative markers, such as *al-* and *ʿi* are not inserted in the syntactic head Neg°. What is inserted in that is simply features. Meaning, the verb inserts in the syntactic derivation already inflected to negation. If this is the case, the verb movement to Neg° is for feature checking (and nothing violates Kayne's adjunction theory).

Note that, we have seen that there is strong evidence for the negative marker element *ʿi-* in Tigre to be considered as prefixed in the lexicon. The Tigre and Geʿez negative markers are identical and always realized as an affix of the verb hence, there is no need to assume such affixes to be inserted in separate syntactic heads. However, in the case of the interrogative markers such as *hu* and *nu* in

Ge'ez, I suggest that they are clitics. This is because, first they can adjoin to any element (head or phrasal) that precedes them. For example, in (66) *nu-* is cliticized to the verb, in (57) to a DP, in (58) to a PP in (56) to AdvP/ AP. Hence, I suggest that the interrogative markers in Ge'ez have to be inserted in the functional projection which they head.

In the derivation of (59), (60), (62), (63), (64) (65) and (66) we can assume a head movement of the lexical head V to the head *nu* as per our suggestion in the previous section. In the case of (56), (57) and (58) there is no verb movement to such position. What moves to *nu* is phrasal constituent that targets its Spec position.

10.4.2 Word Order in MES Interrogative Clauses

In Modern Ethio-Semitic languages, there are two ways to mark yes/ no questions. One is intonation, and the other is by specific interrogative markers at the end of a sentence.[15]

(67) a. yonas mas'haf-u-n   a-mat't'a-ø-w?   (Amharic)

     J.   book-def-Acc tran-come$_{pref}$-3ms$_s$-3ms$_o$

  'Did Jonas bring the book'

 b. yonas mas'haf-u-n   a-mat't'a-ø-w   wäy?

     J.   book-def-Acc tran-come$_{pref}$-3ms$_s$-3ms$_o$ intro

  'Did Jonas bring the book'

(68) a. yonas mäs'i'-u?   (Tigrinya)

     J. come$_{gerund}$-3ms$_s$

   'Did Jonas come?'

b. yonas mäs'i'-u do?

    J. come$_{gerund}$-3ms$_S$ intro

   'Did Jonas come?'

The two forms in most cases are not strictly different. However, those sentences that have interrogative markers mostly, add some information to the clause. These type of clauses show either the speaker's emotion towards the hearer or his attitude towards the expected answer. These two informational interpretations, in fact, are expressed with different interrogative markers in Amharic.[16] For example, a sentence formed with the question mark *ɨnde* in Amharic may show that the speaker is certainly sure that the answer will be positive.[17]

(69) a. yonas hed-ä   ɨnde?   (Amharic)

    J.   go$_{pref}$-3ms$_S$ intro

   'Did Jonas leave?'

  b. yonas hed-ä wäy?

The example in (69-a) may mean that *Oh, Jonas has already left!? (as a form of interrogation)*. This question can be raised for example, when the speaker saw no trace of *Jonas*. The answer for such question most likely be positive; *yes, he has left*.[18] When it comes to the example in (69-b), it may imply that *I'm asking you: did Jonas left?*. What is common to these both clauses in (69) and like structures, in general is that the entire clause is interpreted as focused constituent.

Assume that the interrogative markers such as *ɨnde*, *wäy* in Amharic, *do* in Tigrinya are projected in the operator layer occupying the head of C as suggested for Ge'ez interrogative markers. If this suggestion is on the right track, in the derivation of clauses of the sort in (60), there has to be a movement of the entire IP to the Spec of C. What triggers the movement of the entire IP to such

projection is clear, given the above discussed facts. It is focus. I will illustrate this considering the examples in (69).

(70) [CP [yonas hed-ä]$_i$ [C ɨnde/ wäy t$_i$

On the other hand, as we can see from the following examples Ethio-Semitic languages are languages, which have wh-in-situ type interrogation.

(71) a. man mas'haf gäzza- ø?   (Amharic)

    who book buy$_{perf}$-3ms$_s$

    'who bought a book?'

  b. yonas mɨn gäzza- ø?

    J.   what buy$_{perf}$-3ms$_s$

    'what did Jonas buy?'

  c. man mɨn gäzza- ø?

    who what buy$_{pref}$-3ms$_s$

    'lit who bought what?'

  d. man mɨn adärräg-ä?

    who what do$_{perf}$-3ms$_s$

    'lit who did what?'

As we can see also from the examples in (71), the Ethio-Semitic languages seems to be *wh*-in-situ. However, multiple *wh*-fronting as in Slavic languages seems also possible. Consider (72);

(72) mäce mɨn man adärräg-ä?   (Amharic)

   when what who do$_{perf}$-3ms$_s$

  'lit. who did what and when?'

Whether the in-situ constructions are similar to that of well-studied languages such as Japanese or the *wh*-fronting can be analyzed in a similar fashion with Slavic languages has to be investigated in detail. Although there are interesting theoretical works on this matter, see for example for wh-in-situ analysis Pesetsky (2000), for multiple *wh*-fronting Boškovič (2002), Grewendorf (2001) among many others, I'm not aware of any valuable work (either descriptive or theoretical) on the languages under investigation here and do not have either enough data to pursue here. It is, in fact, out of the scope of this thesis and, hence, I will leave this matter for future research.

10.5 Word Order in Nominal Clauses

Word order in nominal sentences is almost the same as in the corresponding verbal clauses, i.e. Specifier-Complement-Head. However, in nominal clauses the order is more fixed than verbal clauses.[19]

(73) a. yonas mäs'haf mägzat   (Amharic)

      J.   book buy.inf

    b.?? mäs'haf yonas mägzat

    c.* mägzat mäs'haf yonas

    d.* mägzat yonas mäs'haf

As we can see from the above examples it seems that the only order available for such clauses is SOV. This might has to do with their categorial status. Recall that, infinitival constructions in these languages are categorically DPs, hence the term nominal clauses (cf. Manyahlot 1977). I have also suggested that infinitival clauses are nominalized IPs (cf. chapter 3). This assumption effectively excludes the ungrammatical clauses we saw in (73-b, -c & -d), since such structures involve a movement of arguments to the CP layer. If the nominalization of infinitival clauses were taking place after such clauses are constructed as full CPs,

movement for topicalization and focus would have been a possible operation and all the above ungrammatical structures would have been grammatical.

On the other hand, recall that, in double object construction we have seen that DO and IO orders freely. For this, I have suggested in chapter 4 that such "freedom" of ordering is, in fact, because of an optional movement of DO to Spec *v*P. If this is the case, and if the above suggestion that infinitival clauses are nominalized IPs are correct such "freedom" of ordering has to be possible in such nominal clauses. This prediction, in fact, born out to be true. Consider the following:[20]

(74) a. kassa   mäs'haf laster   mäst'ät   (Amharic)
        Kassa book   Eshter.Dat   to.give
     b. kassa laster mäs'haf mäsät'ät

10.6 The OSV Order

We have seen that except Ge'ez the other Ethio-Semitic languages have SOV unmarked word order. However, there are cases where OSV is understood as the unmarked word order. Such order are found in what we call impersonal verbs, verb 'to have' and 'must' constructions. We will see, first the basic facts and, then the derivation of such structures.

10.6.1 Basic Facts

In section 10.6.1.1, I discuss the general facts and the word order of Impersonal constructions; in section 10.6.1.2, "must" constructions; and in section 10.6.1.3, verb "to have" constructions.

10.6.1.1 On Impersonal Verb Constructions

10.6.1.1.1 Background Notes

In Ethio-Semitic languages there are constructions which are referred to as impersonal (see Leslau 1992, 1997; Hetzron 1972, 1977 among many others). The impersonals are of two forms. One is lexical and the other is grammatical.[21] Grouping of these forms together as "impersonal" is because in both ceases the logical subject is a grammatical object, usually identified by object agreement affixes. The second type is not too productive outside the so-called Gurage languages. However, in most Gurage languages, the impersonal can be used for all verb forms, for the expression of the passive, though there is an independent passive form.

Although, the impersonal forms are like the passive taking the semantic subject as an object, unlike passives they act as true transitive constructions where the grammatical subject is mostly realized by an expletive pro.

> Basically the impersonal fulfils the function of an agentless passive. It corresponds to French *on*, German *man*... e.g. *bʷar-ya* 'one told her'/ 'she was told'. It is used when the agent is not to be specified either because it is unknown or because it is irrelevant... and often for stylistic purposes... The impersonal acts as an agentless passive, but unlike in real passives, the grammatical relations are not reversed, an object remains an object, only the subject loses its semantic content (Hetzron 1977: 82).

The grammatical subject of these verbs in most cases is the third person masculine singular expletive pro, and the semantic subject is expressed by the object agreement affixes as in the following.

(75) gärräm-ä-ññ   (Amharic)

amaze$_{perf}$-3ms$_s$-1s$_o$

'I am amazed' (lit. 'It amazed me')

However, in most Gurage languages; the third person masculine plural form can be used as an impersonal 'one' as in the following:

(76) gɨfit'-e yä-moot'-u mäsäl-ä-ñ   (Zay)

    door-the comp-knock$_{perf.imps}$-3pl$_S$ seem-3ms$_S$-1s$_S$

  'It seemed to me that someone knocked at the door'

  (lit. 'the-door that-they-knocked it-seemed-to-me') (Leslau 1999: 69).

Although the perfective aspect generally denotes past in many languages, as discussed in chapter five, six and seven, in the case of most impersonal verbs, it express the present, especially if the action is occurred at the moment of speech (Leslau 1995: 290).

(77) t'ämma-ø-ññ   (Amharic)

    be thirsty$_{perf}$-3ms$_S$-1s$_O$

    'I am thirsty'

As Teferra (1979) also notes in Tigrinya, the perfective form of the impersonal verbs usually expresses the present meaning. In this language, as it is discussed in chapter five, six and seven, past in most cases is expressed by the so-called gerundive form of the verb but not in the case of impersonals. The gerundive form of the impersonal verbs expresses present and is used more commonly than the perfective forms (cf. Teferra 1979: 113).

(78) t'ämi'-u-ni   (Tigrinya)

    hunger$_{gerund}$-3ms$_S$-1s$_O$

    'I am hungry' (lit. It hungered me)

The impersonals are also different in the selection of object agreement in most Gurage languages. In the case of impersonal, the object agreement affixes have the same phonological forms in the imperfective and perfective verb forms. On the other hand, they have different phonological shapes in these two aspectual forms in the non-impersonal forms of the verb. Furthermore, the impersonal object suffixes do not correspond to either the personal perfective or imperfective. (See for further discussion and examples Hetzron 1977, Leslau 1992, 1997, Teferra 1979 among many others.)

10.6.1.1.2 OSV as the Unmarked Word Order

As discussed above, the so-called impersonal verbs in Ethio-Semitic languages are verbs in which the logical subject becomes the surface object. As the name also indicates the surface subject is always impersonal; i.e. inanimate. Those type of constructions are also different with the "regular" verb construction in terms of word order. In impersonal verb construction we find OSV as the unmarked word order in what is generally known as SOV languages. Consider the following examples:

(79) a. saba-n wɨha t'äma-Ø-t   (Amharic)

 S.-Acc water thrist$_{perf}$-3ms$_S$-3fs$_O$

 'Saba is thirsty (of water)'

 b. ? wɨha saba-n t'äma-Ø-t

The construction in (80-b) is acceptable if there is a pose after the preposed subject and the structural subjects interpreted as topics. (The coma in the following example presents such marked pose.)

(81) wɨha, saba-n t'äma-Ø-t

 water, S.-Acc to.be.thirsty

10.6.1.2 On 'must' Constructions

'Must' constructions in Ethio-Semitic languages are similar with impersonal verb constructions with two respects. First, like impersonal constructions the surface subject is always inanimate and preceded by the semantic subject as the examples in (82) may show.[22]

(82) a. saba mähed all-ä-[b-at]   (Amharic)

      S.   to.go(n) there.is/exists-3ms$_S$-[Appl-3fs$_O$]

    'Saba has to go'

  b. käbbädä mämt'at all-ä-[b-ät]

    K. to.come(n) there.is/exists-3ms$_S$-[Appl-3ms$_O$]

    'Kebbede has to come'

10.6.1.3 On Verb 'to have' Constructions

Verb 'to have' constructions are similar with the above discussed two types of constructions in having an OSV word order. It is also similar with those constructions in other points. Like must and impersonal constructions the semantic subject is the surface object. Consider (83), for example:

(83) a. saba gänzäb all-Ø-at   (Amharic)

    S. money there.is/exists-3ms$_S$-3fs$_O$

    'Saba has money'

  b. käbbädä gänzäb all-ä-w

    K. money there.is/exists-3ms$_S$-3ms$_O$

    'Kebbede has money'

There is further similarity between verb 'to have' and 'must' constructions. In both cases the verb is the same which can be translated into English as 'there is'

or 'there exists'. For example, *gänzäb allä* means 'there is/ exists money', *säw allä* means 'there is a man'. What brings possessive reading and obligation is the object agreement and the applicative element respectively. As we can see from the above examples, in the case of verb 'to have' construction what we get along with the verb is the bare object agreement; i.e. phi-features. However, in the case of must construction in addition to the object agreement we have the applicative element. Such applicative element is the one which we find in malefactive reading. Compare the above must-construction with malefactive construction in (84).

(84) yonas gänzäb wässäd-ä-[bb-at]   (Malefactive)

     J.   money take-3ms$_S$-[Appl-3fs$_O$]

     'Jonas took money from her (with out her willing)'

Note that, in possessive construction we can add benefactive element in order to get a beneficiary reading. But, that is not part of the possessive reading (cf. chapter 4). I now turn to the derivation of such clauses.

10.6.2 The Derivation of OSV

In this section, I examine the derivation of OSV constructions which we have seen above. There are two theoretically interesting proposals when we think of the derivation of OSV structure. The first relates with checking ±animacy feature (cf. Ormazabal 2000); and the second one is topicalization. In 10.6.2.1, I examine whether Ormazabal's (2000) proposal of checking ±animacy feature can capture the OSV order which seems very interesting with regard to the above discussed constructions. Then, in section 10.6.2.2, I investigate whether OSV order is a result of topicalizing the object.

10.6.2.1 ± Animacy

Ormazabal (2000) suggests that the driving force for movement of argument XPs can be considered as ±animate feature checking rather than Case. Following such line of reasoning, let us examine the above OSV order. Recall that, in must construction and impersonal construction the semantic subject which is the surface object is always animate whereas the surface subject is inanimate. Hence, one may suggest, based on Chomsky (1995) feature checking theory, that +animate feature is checked higher than the +inanimate feature checking projection and OB raises overtly to Spec of such projection, hence, resulted with OS order in the above discussed type constructions. I will explain this point below.

Assume that the +animate checking FP attracts the closest XP argument which is always be a subject. However, if a subject lacks such a feature it enters in a checking relation with the most embedded argument XP which has such feature, hence attracts overtly to land in its Spec. This is similar with somewhat Ormazabal (2000) proposal. However, this seems not the case.

In verb 'to have' construction, the surface subject can be +animate argument and the semantic subject inanimate. However, we do not see the expected SO order. The examples in (85) may illustrate this point.

(85) a. saba lɨj all-Ø-at   (Amharic)

      S. child there.is/exists-3ms$_S$-3fs$_O$

      'Saba has a child'

   b. bet-u säw all-ä-w

      house-the man there.is/exists-3ms$_S$-3ms$_O$

      'the house has people'

In (85-a) the surface subject 'a child' is +animate but is found following the surface object *Saba*. In (85-b) the surface subject is +animate and the surface object is inanimate and the order is OS like other verb 'to have' constructions. With all such facts, it is possible to conclude that the fronting of an object in the above type of constructions is not a result of checking ±animacy feature. In the following section, I argue that what derives such order is topicalization.

10.6.2.2 Topicalization

Though, a topic of a sentence is mostly associated with the subject, non-subject arguments can be topicalized. As we have seen above, in all OSV cases, the semantic subject is always the surface object. The semantic subject of such clauses can be understood as the thing which the proposition expressed by the sentence is about. This is generally understood what topic is to be. See for a brief discussion Lambrecht (1995), for example. Hence, it is logical to suggest that the reason for the existence of OSV in surface word order is because of the fact that the object in question is moved overtly to a position of TopP. This is also what Baye Yimam (p.c.) suggests for such construction.

As I discussed above, in those constructions that have OSV as the unmarked order, it is also possible to have SOV if there is (considerable) pose after the subject. In such cases, in fact, the subject is interpreted as a topicalized element.

(86) wɨ_a, färäsun addänaqqäfäw   (Amharic)
     a dog, the horse made stumble

(87) gänzäb, saba allat
     money, Saba has

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(86) and (87) types of constructions can be considered as double topic construction; i.e. both the subject and the object are topicalized. See Lambrecht (1995) for a brief discussion on multiple topicalization.

(88) [$_{TopP}$ wɨ_a [$_{TopP}$ färäsun [$_{IP}$ addänaqqäfäw]]]

(89) [$_{TopP}$ gänzäb [$_{TopP}$ saba [$_{IP}$ allat]]]

10.7 Summary

In this chapter, we have seen that SOV, VSO and OSV word orders in Ethio-Semitic languages. SOV is found in most types of clauses in MES, VSO is found, in Ge'ez and OSV in very limited types of clauses, such as verb "to have", "must" and impersonal constructions. I have suggested that the order OSV is a result of a movement of OB to Spec C. The movement is triggered by topicalization. I have also suggested that the order VSO is a result of the movement of V to C and SOV is the movement of OB preceding the verb. In SOV I suggest that the verb remains in situ, along with Kayne's (1994) and Chomsky's (1995) suggestions.

Notes to chapter 10

[1] The biblical examples of Ge'ez here and throughout in this work are taken from Dillman (1886) and Weninger (1993). In fact, most, if not all of the examples of Weninger's are found also in Dillman (1886) though in Weninger proper acknowledgment is lucking.

[2] In fact, the deletion of *wä* does not cause ungrammaticality if it is not used as a conjunction of two phrases or clauses. The usage of 'and' at the beginning of simple sentences is common in Tigre and in other non-Ethio-Semitic languages.

[3] In this language, the head of the construct state as in other Semitic languages is went some phonological changes. However, for example unlike Hebrew, the change is not internal to the word. For example, in Hebrew we find in the absolute state *bayit* whereas in the construct state *beyt* 'house'. In Ge'ez if the head noun ends with a closed syllable then the mid central vowel inserted as a suffix to the head noun of the construct state; for example, *bet* — absolute state, *betä* — construct state. If it is open syllable and ends with *i* then the vowel *i* will be changed to *e* in construct state; if it ends by the vowel *o,* it will be changed to *u* (see Haile n.d. among others). I refer all final vowels of this construct state *construct state marker* and abbreviate as CST and the construct state is abbreviated as CS, following Weninger (1993).

[4] Following Chomsky (2001b), we can state this notion in other terms: C and *v* are phases whereas T is not.

[5] Recall that in Ethio-Semitic, V-affixes such as AMCMs, FTMs are encoded with +force feature.

[6] This also seems to be the case to (5). In (5) *wä* is attached to a phrasal element, not to a head category.

[7] See also Marantz (1988, 1989) for similar suggestion.

[8] The perfective form in this language is *säbbär-*, the vowel *o* in the above example is found only in the third person singular masculine case. It can be considered along with the final *-ä* as the third person masculine singular agreement marker.

[9] Accusative marker and definiteness are closely linked in Ethio-Semitic languages as is also the case in Turkish and many other languages (cf. Lyons 1968).

[10] This kind of adjunction is proposed in Chomsky (1995) as an alternative to the notion of equidistant. Note that the notion of equidistant is proposed first in Chomsky (1993) to avoid Relativized Minimality Violation.

[11] Regarding to the function of *'akko*, Dillman states that, although *'akko* is used as a sentential negative marker, specially in simple copulative clauses, it "serves chiefly to deny individual members of a sentence, in which latter case ['alla] 'but' generally stands over against it ('not - but-')" (Dillman 1886: 509).

(i) 'akko lä-z tïwlïd 'alla
   neg to-this generation but
 'not for this generation but' (Hen. 1, 2)

(ii) 'akko zä-mänfäs 'alla zä-sɨga
　　neg pp-sprit but pp-flesh
　　'not spiritual, but sensual' (Hen. 106, 17)

(iii) 'akko bä-säyfɨ-kä wä-'ako bä-qästɨ-kä
　　neg by- and-neg by-sward-2ms$_{poss}$
　　'but not with thysword, nor with thy bow' (Josh. 24, 12)

(iv) wä-'akko rɨh'uq
　　and-neg far.away
　　'but not far away' (Hen. 30, 1)

[12] The syntactic structure proposed in (39) is supported by empirical facts presented above. For example, the auxiliary verb can have CP as evidenced by the examples such as (35) and (36). The root verb can extend up to CP as evidenced by the example in (36), for instance. Both can extend up to CP as evidenced by the Zay example in (37). Note that here also, the above examples clearly supports Rizzi (1995) type of split-CP. For example in the examples (35), (36) and (37) there are elements which belong to the functional projections ForceP and FocP in the CP-layer.

[13] In fact, in Harari it is not the case that both the prefix and suffix negative markers are found in the main verb as well as with the auxiliary. It is the prefix negative element alone which is found with the auxiliary whereas the suffix negative marker is placed with the main verb. Recall the discussion in the preceding chapter.

[14] "The question is very often introduced by [bo]: [zä] 'is it the case, that?'" (Dillman 1886: 513).

[15] I put question mark in the phonological transcription line as in (67-a) and (68-a) to show the clause in question is interrogative.

[16] I do not have good data in the other languages.

[17] Such interpretation is, however also dependent on the intonation. If the intonation has a kind of exclamation, it shows the speaker certainty towards the answer. Such intonation can appear either without an interrogative marker or with the interrogative marker *inde* in Amharic as in (69-a). It cannot appear with the other interrogative marker *wäy* in Amharic. For example, (69-b) cannot bring similar reading with (69-a).

[18] However, it is also possible to have a negative answer. For example, a reply for (73- b) could be *no, he didn't, he is outside, plying*.

[19] The clause in (73) can be put in the following context:

(i)　yonas mäs'haf mägzat-u-n　sämicceyallhu　　　　　　　　　(Amharic)
　　J.　　book buy.inf-def-Acc heard.1ss
　　'I heard that Jonas has bought a book'

[20] The infinitival clause in (74) can be put in the following context:

(i)　kassa　mäs'haf laster　mäsät'ät-u-n　　awqallähu　　　　　　(Amharic)
　　K.　　book　E.Dat　to.give-def-Acc　know.1ss
　　'I know that Kassa gave a book to Esther'

---

[21] By lexical I mean that there are verbs which are lexically specified as impersonals, where the logical subject always becomes a grammatical object. The other one is a grammatical transformation of a regular verb into impersonal.

[22] Note that, the verb *alläbbat* can be considered as an expletive. It does not bear any lexical meaning. Consider, for example where this verb is used in different context:

(i) gänzäb   all-ä-[bb-at]   (Amharic)
     money.m. there.is/exists-3ms$_S$-[Appl-3fs$_O$]
     'Saba has debt'

Chapter Eleven: Conclusion

In this work, I have examined the clausal syntax of Ethio-Semitic languages. In this chapter I will summarize and conclude the thesis. In chapter two, we have seen that the CP-layer in recent works is understood as containing functional categories such as FocP, TopP, ForceP etc. The following is Rizzi's (1997) proposal:

(1) [ForceP [TopP [FocP [TopP [FinP [IP]]]]]]

TopP is related to topic and FocP to focus. ForceP is assumed to license clause type features, such as imperatives, declaratives, interrogatives (cf. Poletto and Pollock 2000). In other words, force is considered to be a clause type feature; i.e. a feature that shows whether a certain clause is declarative, imperative or else. In Ethio-Semitic languages with this regard not only declarative and negative clauses that differ morphologically but also main and subordinate clauses. Subordinate clauses are marked mostly by complementizers whereas matrix clauses are marked with morphemes that are encoded with main clause marking feature. Those morphemes in Ethio-Semitic are FTMs, AMCMs and post-verbal negative markers and some type of pre-verbal negative markers as well; i.e. what I call in chapter nine CPNMs. Based on such facts I have argued that complementizers, FTMs, AMCMs, Imperatives (including Jussives), post-verbal negative markers and CPNMs have to be considered as different force types in Ethio-Semitic languages. In other words, they can be considered as containing force feature.[1] As we have seen in this work, however, in these languages it is questionable whether interrogative markers have the same projection with declaratives and imperatives.

Recall that, in these languages there is no word order difference between interrogative and declarative clauses. *Wh*-question are in situ types and yes-no questions are expressed not by inverting word order, i.e. for example, fronting an auxiliary as in English, but by intonation. Any declarative sentence as in (2) and (3) can be interrogative if there is an interrogative intonation.

(2) yonas mäs'haf amät't'a?   (Amharic)
    J.   book   brought
    'Did Jonas bring a book?'

(3) yonas mäs'haf ams'ɨyu?   (Tigrinya)

   J.   book   brought

   'Did Jonas bring a book'

Recall also that in addition to intonation, it is possible to have an interrogative marker to yes-no type interrogative clauses.[2]

(4) yonas mäs'haf amät't'a-nɨ/ wäy / ɨnde   (Amharic)

   J.   book   brought-intro

   'Did Jonas bring a book?'

(5) yonas mäs'haf ams'ɨyu-do   (Tigrinya)

   J.   book   brought-intro

   'Did Jonas bring a book?'

Although the translation given to the interrogative clauses in (4) and (5) is the same with (2) and (3) respectively, there is a difference in the informational interpretation of those that have an interrogative marker and those that do not. As I discussed in the preceding chapter, the former adds focus interpretation (to the whole VP) while the latter not.

As we have seen in chapter nine, various force types are incompatible to each other. However, all those force "markers" are compatible with interrogative markers as the following examples may also illustrate.

(6) a. yonas mäs'haf al-amät't'a-m-nɨ/ wäy/ ɨnde?   (Amharic)

    J.   book   neg-brought-neg.(+force)-intro.(+focus)

   'Did not Jonas bring a book?'

  b. yonas mäs'haf yamät'a-llɨ-nɨ/ wäy/ ɨnde?

    J.   book neg-brought-T.+force-intro.(+focus)

   'will Jonas bring a book?'

Based on such facts, I have suggested that interrogative markers are not type of force elements; rather they are focus elements and have to head focus projection in syntax.

According to Rizzi (1997) the dominance relation among such functional categories in the CP-layer are fixed and suggested to be as in (1), repeated here as (7):

(7) [ForceP [TopP [FocP [TopP [FinP [IP]]]]]]

One of the major assumptions for forwarding force as the structurally higher projection in the clausal hierarchy is that it is the one that determines the type of a clause. Because of this, it has to have scope over the whole phrase. In Ge'ez, for example, it is possible to suggest that ForceP dominates FocP, along with Rizzi's proposal. However, the data in the other Ethio-Semitic languages do not support such an assumption straightforwardly. Consider for example, the clauses illustrated in (6) above where the final morphological element in the right periphery of the complex verb is focus marker. Note that also the interrogative-focus marker *wäy* and *inde* are free morphemes, hence Foc head will block any head movement for feature checking across it. This means that in MES ForceP cannot be structurally higher than FocP.

In part two, I have identified two functional categories in relation to the temporal interpretations of a clause, namely TP and AspP. In chapter eight, I have identified a functional category which has a polarity value, namely PolP, and in chapter nine I have identified the existence of a functional category namely NegP in a negative clause. These functional categories can be found together in a single clause as in (8).

(8) yonas anbäsa-w-n al-gäddäl-ä-w-m   (Amharic)
    J. lion-def-Acc yesterday neg-kill$_{perf}$-3ms$_S$-3ms$_O$-neg
    'Jonas did not kill the lion'

In this work, I have suggested that the polarity projection is the highest c-commanding projection in the IP-domain; and the aspectual projection occupies the position that immediately c-commands the argument structure. Meaning, PolP is selected by CP and AspP immediately c-commands VP/ *v*P as illustrated in (9).

(9) [CP [PolP [AspP [*v*P/ VP

Such dominance relation can be justified by the following facts. In Ethio-Semitic, Asp is the one that marks category; i.e. verb is root plus aspect.[3] Second, aspect is the one that shows the internal temporal constituency of a situation. Third, Asp relates the assertion time to the time of situation (cf. Klein 1996, Demirdache and Uribe-Etxebarria 2000, and chapter seven of this thesis) and theta-marks E-T. Therefore, aspect projection has to have a position that immediately c-commands *v*P/ VP.

With regard to the polarity phrase; since polarity is a value which has to be checked by those elements (which have such value), such as negation and affirmative markers, it has to be, at least, in a position which c-commands NegP and TP in Ethio-Semitic languages. (Recall that tense markers have positive polarity value in Ethio-Semitic languages; cf. part four).

(10) [PolP [TP [NegP [AspP [*v*P/ VP

Although the ordering between Asp and other functional categories is based on the syntactic facts, it can be supported from the morphological side. The negation and tense markers are outside the Asp marker. However, the problem is with the ordering between the projection of tense and negation. Since the elements are incompatible to each other, we do not have morphological evidence for the dominance relation between them.[4] Furthermore, the morphological fact also does tell us nothing about the ordering between negation and polarity since negation is realized as a prefix while polarity as a suffix. In fact, Baker (1985) predicts that prefixes have to c-command suffixes. If that were the case, in Ethio-Semitic NegP has to dominate hierarchically PolP which cannot be true.[5]

The dominance relation suggested above does not seem to vary either from clause to clause or from language to language in Ethio-Semitic. However, this does not mean that there are always the same inventory of functional categories in every clause.

In part two, I have discussed agreement elements —subject agreement in chapter 3 and so-called object agreement in chapter 4. My focus in chapter three was the role of agreement in Case checking. In particular, my focus was what checks Case and

how it is checked in the languages under consideration. I argued in that chapter that although Agrs has a relation with nominative subjects, it is not the one that checks Case. I have suggested that Case is checked not by phi-features but by the matching Case feature of a functional category.

In chapter four, I have examined the behavior of the so-called object agreement and presented a novel analysis to such elements. What had been treated as object agreement elements (and as a realization of Agr_oP, that checks accusative Case,) are two types, what I call Agro and Agrpp. Agro are simply a realization of phi-features whereas Agrpp are of two types — Case-agreement plus phi-features and applicative plus phi-features. Since such agreement elements are not restricted only with DO and there is also restrictions on their appearance, I have argued that they do not check accusative Case. Furthermore, in the same chapter I have examined how the structure of applicative in these languages looks like.

Since applicatives introduce arguments like causatives, following Pylkkänen (2002), I have argued that they have to project in the argument structure. I have also identified two positions where such elements project. One is structurally lower than the projection of the lexical Verb and the other is higher than it.

In part three, I addressed the issue of tense and aspect giving a somewhat extensive and comprehensive descriptive analysis. The great morphological variation in Ethio-Semitic languages is found with regard to tense-aspect morphology. For example, a perfective verb plus an element *m* gives a reading of simple past in 3TG and Muher whereas a present perfect in north Gurage languages. Although there is a significant variation among Ethio-Semitic languages with this regard, I have argued in this work that the traditional distinction of verbs in Semitic in general as perfective versus imperfective still holds true in Ethio-Semitic. I have shown that the non-concatenative morphology with this regard cannot be considered as tense marker. I have further accounted the various tense and aspect constructions with the theory that considers tense and aspect as temporal relations.

The issue of negation, to the best of my knowledge was not addressed in its own right, in any literature. The incompatibility of particularly the post-verbal "negative" marker with various functional categories makes it similar with the affirmative

markers. Because of this I have suggested that the post-verbal "negative" marker is, in fact, a polarity element that heads PolP whereas the pre-verbal element, that negates a clause on its own right, is a head of NegP.

In chapter 10, I have discussed the word order of the languages under consideration. Except Ge'ez all Ethio-Semitic languages are SOV languages. I have suggested that the order VSO in Ge'ez can be considered as a result of a movement of V-to-C, and the SOV a movement of OB to a position preceding V.

In this work, in general I have discussed the clausal syntax of Ethio-Semitic languages on comparative bases. My major aim is to do a basic and systematic comparative analysis on the functional categories at the level of IP. It is my hope that, this work will provide basic information for those who are interested in a comparative research on these languages.

Notes to Chapter 11

[1] The English complementizer *that,* and the Irish complementizer *go* also are assumed as containing force feature (cf. Rizzi 1997, Roberts 2002).

[2] *ni, wäy* and *inde* are interrogative markers. *ni* is an archaic form. For the distributional facts of *wäy* and *inde* see the preceding chapter.

[3] This is consistent with Matushansky's (2002) claim. According to Matushansky (2002) a functional category that immediately c-commands a lexical category L must have the categorial feature of L.

[4] However, I assume that TP-commands NegP as in (10). Although FTMs are incompatible with negation LTMs are not and they can host negation.

[5] However, since I took in this work a position following Chomsky (1993, 1995, etc) that the verb inserts in the derivation fully inflected in the lexicon, I'm not going to say much about the morphological ordering here.

Appendixes

Appendix I:
Notes on Abbreviations

I will list down most of the abbreviations used in this thesis. However, there are abbreviations which are not mentioned here. Those abbreviations are either conventional such as V for verb, N for noun or have been used for a short term in a section.

ACC = accusative

Agr = Agreement

Agr_O = Object Agreement

Agr_{IO} = Indirect Object Agreement

Agr_S = Subject Agreement

Appl = Applicative

Asp = aspect

caus = causative

ch = chapter

CS = Construct State

CST = Construct State Marker

ES = Ethio-Semitic

f = feminine

ger = gerund/ gerundive

impr = imperative

impf = imperfective

imps = impersonal

infn = infinitive

intn = intention

intr = introgative marker

juss = jussive

m = masculine

AMCM = affirmative main cluase marker

mint = mood of intention

mod = mood

NOM = nominal

nom = nominative

OB = object

past = past

perf = perfective

pl = plural

poss = possessive

pp = pre-/postposition

PP = pre-/postpositional phrase

pres = present

proc = pronoun copula

R, √ = root

rept = repetition

RM = relative clause marker

s = singular/ subject

SU = subject

tran = transitivizer

Persons are represented with numerals; 1, 2 and 3 for first person, second person and third person respectively.

Appendix II:
Notes on Transcriptions

In this work, I have tried to use the standard IPA system. However, for the sake of convenience, familiarity and uniformity to other related works in the Semitic languages, I have made some changes. Below the symbols which are used in the transcription of the languages under investigation are provided.

2.1 Vowels

In Ethio-Semitic, there are seven basic vowels. These vowels are represented with the following symbols.

a = low central vowel
i = high front vowel
e = mid front vowel
u = high back vowel
o = mid back vowel
ɨ = high central vowel
ä = mid central vowel

The long vowels are represented by doubling the short vowel as in below.

ii = long i
ee = long e
aa = long a
uu = long u
oo = long o

Note that, I have never come across literature where the long form of the vowel [ɨ]

are found. Note that also, the vowel [ɨ] in many Ethio-Semitic languages is an

ephenthetic vowel. However, it is very difficult to consider this vowel simply as an ephenthetic vowel since it has a phonemic function in some instances (cf. Hudson 2000).

2.2 Consonants

' = is used as glottal stop
' = voiced pharyngeal fricative
C' = glottal/ ejective consonant, where C stands for any symbol of a consonant
c = as *ch* in chair
j = as g in general

Appendix III:

An Overview of Verb/ Root Types in Ethio-Semitic

In this section, I will discuss only what is known in Semitic linguistic tradition type of verbs or roots. As noticed also by many grammarians, in Ethio-Semitic the classification of verbs has to be left to the classification of roots. However, I use in this work the terms "verb types" and "root types" interchangeably. Note that, the discussion here should be considered as a general overview. Since the issue can be a topic of a dissertation (or more) by itself, I cannot do justice to discuss in detail here.

3.1 Introduction

As in most, if not all Semitic languages most of the Ethio-Semitic roots are triradicals. These roots are categorized into three types in most languages, namely type A, type B and type C. In some others, they are divided into four types, i.e. with the addition of a type D. The division is mainly based on the presence or absence of the lengthening of the penultimate radical and by the quality of vowels which are inserted between the radicals to mark grammatical properties like perfective, imperfective and so on. I give a brief description of the root/ verb types in most of the languages below.

3.2 The North-Ethiopic Verb/ Root Types

3.2.1 The Tigre Verb/ Root Types

In Raz (1983), the Tigre verbs are categorized into four types; type A, type B, type C and type D. What Raz calls type D is a partially reduplicated form of type A root which denote frequentative action. Hence, I will not consider this form as an independent root/ verb type. The following table illustrates the forms of those three types.

TABLE 1:

Basic non-concatenative verbal inflectional forms of the triradical roots in Tigre

Verb types	Type A	Type B	Type C
perfective	$C_1aC_2C_3$-	$C_1aC_2C_2aC_3$-	$C_1aaC_2aC_3$-
imperfective	-$C_1\ddot{a}C_2(C_2i)C_3$(-)	-$C_1aC_2(C_2i)C_3$(-)	-$C_1aaC_2C_3$(-)
imperative	$C_1iC_2aC_3$-	$C_1aC_2(C_2i)C_3$(-)	$C_1aaC_2(i)C_3$(-)
jussive	$C_1C_2aC_3$(-)	$C_1aC_2(C_2i)C_3$(-)	-$C_1aaC_2C_3$(-)

The following are sample examples of all the three types of the Tigre roots with the perfective aspect.

(1) Type A
   a. dagm-a
      repeat$_{perf}$-3ms$_s$
   b. kabr-a
      be.honor$_{perf}$-3ms$_s$

(2) Type B
   a. mazzan-a   (transitive verb)
       weigh$_{perf}$-3ms$_s$
   b. garram-a
      be.beautiful$_{perf}$-3ms$_s$

(3) Type C
   a. taakal-a
      plant$_{perf}$-3ms$_s$
   b.kaatab-a
      vaccinate$_{perf}$-3ms$_s$

According to Raz (1983: 52) type A verbs "have unmarked meaning in relation to coexisting verbs of types B and C. Verbs of type A can be either transitive or intransitive". Consider the following examples:

(4) Transitive Verbs of Type A
   a. lakf-a
     throw$_{perf}$-3ms$_S$
   b. sakb-a
     take.rest$_{perf}$-3ms$_S$

(5) Intransitive Verbs of Type A
   a. fagr-a
     go.out$_{perf}$-3ms$_S$
   b. dangar-a
     be.late $_{perf}$-3ms$_S$

There are some interesting issues when we look at type B and type C verbs. Although most of the type B verbs are lexical in a sense that the assignation of the root to the type may take place in the lexicon, according to Raz (1983), it is possible to find the corresponding root from type A for some forms which have type B or type C pattern. This kind of pattern is not productive in other Ethiopian languages although, it is a typical feature to non-Ethiopic languages.

3.2.2 The Tigrinya Verb/ Root Types

Tigrinya verbs are classified, as in most of Ethio-Semitic, into three types. This classification is based on the vowel quality and the germination of the penultimate radical. The explanation which is given above and below for the other Ethiopic varieties almost fits Tigrinya as well. That is, assigning a particular grammatical or semantic class to any of the types is almost impossible. That is any root type can be any class; i.e. transitive or intransitive, stative or durative and so on.

TABLE 2:

Basic non-concatenative verbal inflectional forms of the triradical roots in Tigrinya

Verb types	Type A	Type B	Type C
perfective	$C_1\text{ä}C_2\text{ä}C_3$-	$C_1\text{ä}C_2C_2\text{ä}C_3$-	$C_1aC_2\text{ä}C_3$-
imperfective	$-C_1\text{ä}C_2(C_2\text{ɨ})C_3(-)$	$-C_1\text{ä}C_2C_2\text{ɨ}C_3(-)$	$-C_1aC_2(C_2\text{ɨ})C_3(-)$
imperative	$C_1\text{ɨ}C_2\text{ɨ}C_3$-/ $C_1\text{ɨ}C_2\text{ä}C_3$-	$C_1\text{ä}C_2C_2\text{ɨ}C_3$-	$C_1aC_2C_3$-
gerund	$C_1\text{ä}C_2\text{ɨ}C_3$-	$C_1\text{ä}C_2C_2\text{ɨ}C_3$-	$C_1aC_2\text{ɨ}C_3$-
jussive	$-C_1C_2\text{ɨ}C_3(-)$/ $-C_1C_2\text{ä}C_3(-)$	$-C_1\text{ä}C_2C_2\text{ɨ}C_3(-)$	$-C_1aC_2C_3(-)$

Type A roots are characterised, for example in the case of the perfective by lacking gemination of any of its radicals. Whereas Type B has gemination. Type C is distinct from the two by the vowel quality which is found immediately after the first radical. The roots √sbr 'break', √bdl 'mistreat' and √hdn 'hunt' can be considered as examples of types A, B and C respectively.

In type A imperatives and jussives, we find two alternative forms. I found the first form from Weldeyesus (2000), who is also a native speaker of Tigray-Tigrinya. The second form is based on my own knowledge and recording of the Eritrean-Tigrinya.

(6) yɨ-sbɨr   (Tigray-Tigrinya)

   3ms$_s$-break$_{juss/imp}$
   'let he break' (Weldeyesus 2000: 67)

(7) yɨ-sbär   (Eritrean-Tigrinya)

   3ms$_s$-break$_{juss/imp}$
   'let he break'

This alternation also exists in Ge'ez as we will see it in a moment. But in the case of Ge'ez, the alternation does not seem dialectal difference, but rather depends on the nature of the root. In Ge'ez, a root can only have one of the two forms but not both.

Note that here, in the Tigrinya roots, the gemination of the penultimate radical is on the imperfective form.[1] Recall from the discussion in chapter two that, this feature is taken as one of the major features which differentiate North Ethio-Semitic from South Ethio-Semitic languages (cf. Hetzron 1972).

3.2.3 The Ge'ez Verb/ Root Types

As in many other varieties, the Ge'ez triradical roots are divided into three types which can be labelled as type A, type B and type C. The forms are almost similar to the Tigrinya ones and only slightly different from Tigre (especially in terms of vowel quality). The major (most probably the only) difference between Ge'ez and Tigrinya concerns on the nature of the vowel which is found after the first radical in the type B roots. In Ge'ez it is *e* (cf. table 9 below) but in Tigrinya it is *ä*.

There are many differences in terms of vowel quality between Tigre and Ge'ez - Tigrinya. In Tigre, according to Raz (1983), the vowel *ä*, which is the mid-central vowel does not exist at all. This vowel corresponds to the vowel *a*, in Tigrinya and Ge'ez. That means, all the forms with the vowel *ä* in Ge'ez and Tigrinya are replaced by *a* in Tigre. The vowel *a* in Ge'ez and Tigrinya is replaced by the long vowel form of it in Tigre. In Type C, as we can see from the tables, the vowel after the first radical is *a* in Tigrinya and Ge'ez whereas in Tigre it is a long vowel, i.e. *aa*.

There is an interesting historical explanation for the vowel system of Ge'ez in Weninger (1993). According to Weninger, the seven vowel system which we find in Ge'ez is an outcome of the basic three short vowels, three long vowels and two diphthongs which developed historically. The following table show the historical development from Weninger (1993: 9).

TABLE 3:

Historical Developments of the Ge'ez Vowels

Order[2]	I	II	III	IV
1st	/a/	/a/	/a/	/ä/
2nd	/uu/	/uu/	/u/	/u/
3rd	/ii/	/ii/	/i/	/i/
4th	/aa/	/aa/	/aa/	/a/
5th	/ay/	/ee/	/e/	/e/
6th	/ɪ/, /u/	/ɨ/	/ɨ/	/ɨ/
7th	/aw/	/oo/	/o/	/o/

What is interesting here is that the Tigre vowel system corresponds exactly to the Ge'ez vowel system at stage III.

Let us see the types of roots in this language in the following table which shows basic non-concatenative inflectional paradigm of the triradical roots.

TABLE 4:

Basic non-concatenative verbal inflectional forms of the triradical roots in Ge'ez

Verb types	Type A[3]	Type B	Type C
perfective	$C_1äC_2äC_3$-	$C_1äC_2C_2äC_3$-	$C_1aC_2äC_3$-
imperfective	-$C_1äC_2(C_2ɨ)C_3$(-)	-$C_1eC_2C_2ɨC_3$(-)	-$C_1aC_2(C_2ɨ)C_3$(-)
imperative	$C_1ɨC_2ɨC_3$-/ $C_1ɨC_2äC_3$-	$C_1äC_2C_2ɨC_3$-	$C_1aC_2C_3$-
gerund	$C_1äC_2ɨC_3$-	$C_1äC_2C_2ɨC_3$-	$C_1aC_2ɨC_3$-
jussive	-$C_1C_2ɨC_3$(-)/ -$C_1C_2äC_3$(-)	-$C_1äC_2C_2ɨC_3$(-)	-$C_1aC_2C_3$(-)

In type A as we can see from the above table, there are two forms in the realization of imperative and jussive. As mentioned above, unlike Tigrinya, these forms cannot alternate on a single root. Consider the following examples:

(8) a. sɨbɨr

   break$_{impr}$2ms$_s$

   b. *sɨbär

(9) a. lɨbäs

   wear$_{impr}$2ms$_s$

   b. *lɨbɨs

3.3 The Central South-Ethiopic Verb/ Root Types

3.3.1 The Amharic Verb/ Root Types

In Amharic triradical roots also divided into, type A, type B and type C. This division is mainly based on the gemination of the penultimate radical and the quality of the vowel which is inserted especially after the first radical. Table one, is list of basic verbal inflectional forms of the triradical roots in this language.

TABLE 5

Basic non-concatenative verbal inflectional forms of the triradical roots in Amharic

Verb types	Type A	Type B	Type C
perfective	C_1äC$_2$C$_2$äC$_3$-	C_1äC$_2$C$_2$äC$_3$-	C_1aC$_2$C$_2$äC$_3$-
imperfective	-C_1äC$_2$C$_3$(-)	-C_1äC$_2$C$_2$iC$_3$(-)	-C_1aC$_2$C$_2$iC$_3$(-)
imperative	C_1iC$_2$äC$_3$-	C_1äC$_2$C$_2$iC$_3$-	C_1aC$_2$C$_3$-
gerund	C_1äC$_2$C$_3$ä-	C_1äC$_2$C$_2$iC$_3$ä-	C_1aC$_2$C$_3$ä-
jussive	-C_1C$_2$äC$_3$(-)	-C_1äC$_2$C$_2$iC$_3$(-)	-C_1aC$_2$C$_3$(-)

Unlike non-Ethiopic each root type in Amharic is lexical. It is lexical in a sense that any of the type can be transitive, intransitive or can fall into any kind of semantic categories: "These types [Type A, B and C] are not conditioned either by the nature of the consonants or by the meaning of the verb. Indeed, the verbs in any one of these types may be active, transitive, verbs of state, and so on, and consists of any kind of consonants" (Leslau 1995: 283).

As we can see from table one, in type A, except in the perfective form, there is no gemination at all. Type B is typically characterized by the gemination of the second radical throughout the conjugation. Type C is different from the two, especially, by the quality of the first vowel in all the conjugations. The root √*sbr* 'break', √*flg* 'want' and √*brk* 'bless' can be examples of type A, type B and type C respectively.

3.3.2 The Argobba Verb/ Root Types

The Argobba verb/ root types are three like in Amharic, but there are some differences with Amharic in particular with the vocalic structure and the gemination of the penultimate radical. The difference of the vocalic structure, especially observed in the type B verbs. In the Argobba type B verbs, unlike Amharic, the vowel next to the first radical is *e* in most conjugations (see the following table). Recall that, this vowel is observed only in the imperfective form in Ge'ez. However, in most Western Gurage speech varieties this vowel is found in all the conjugations.

TABLE 6

Basic non-concatenative verbal inflectional forms of the triradical roots in Argobba

Verb types	Type A	Type B	Type C
perfective	$C_1äC_2C_2äC_3$-	$C_1eC_2C_2äC_3$-	$C_1aC_2C_2äC_3$-
imperfective	-$C_1äC_2C_3$(-)	-$C_1eC_2C_2ɨC_3$(-)	-$C_1aC_2C_2ɨC_3$(-)
imperative	$C_1ɨC_2äC_3$-	$C_1äC_2C_2ɨC_3$-	$C_1aC_2\ C_2ɨ\ C_3$-
gerund	$C_1äC_2C_3ɨd$-	$C_1eC_2C_2ɨC_3d$ -	$C_1aC_2\ C_2ɨ\ C_3d$ -
jussive	-$C_1C_2äC_3$(-)	-$C_1äC_2C_2ɨC_3$(-)	-$C_1aC_2\ C_2ɨC_3$(-)

Type A, as in Amharic, is characterized by the gemination of the penultimate radical only in the perfective paradigm. In type B, there is a gemination of the penultimate radical through out the conjugation. This is also the same in Amharic. The difference between the two languages type B verbs concerns on the vowel found next to the first radical in the perfective, imperfective, and gerund. In Argobba it is *e*, but in Amharic it is *ä*.

> This type corresponds morphologically to 2nd stem of Arabic and to the pi'el of Hebrew, but whereas in Arabic and Hebrew this stem is a derived stem, type B is a basic stem in Argobba as in the Ethiopian languages in general. It can be no longer be derived either morphologically nor semantically from type A. The verbs of type B in Argobba are rather vocabulary items (Leslau 1997: 44).

Type C is different from Amharic in some respect. In Amharic the gemination of the penultimate is observed only in the perfective and imperfective paradigms whereas in Argobba such gemination is observed in all verb forms. Regarding to type C in Argobba Leslau (1997: 45) states that, "this type corresponds formally to the 3rd stem of Arabic, but whereas the 3rd stem of Arabic is a derived stem with a special meaning, type C of Argobba is neither morphologically nor semantically a derived stem. As was the case with type B, type C belongs to the domain of vocabulary".

Leslau suggests the same conclusion as what he suggests to Amharic; "these types are not conditioned either by the nature of the consonants or by the meaning of the verb. Indeed, verbs of any type may be active, transitive, verbs of state, and so on. The types are therefore to be considered lexical items and are not predictable" (Leslau 1997: 43).

The major difference between Amharic and Argobba lies on the gerundive form. In Argobba in the gerundive form there is a consonant d at the end of root consonants. In Amharic we do not find such a consonant in all verb types. In fact, in the gerund form of biradical roots, we find t in Amharic.[4] But t, which is visible in gerund and infinitival forms, in Amharic in most cases is used as a trace, for historically deleted last radical.

3.4 The Western Gurage Verb/ Root Types

3.4.1 Muher verb/ root types

Most of the Muher roots are triradicals as in the case to the other Semitic. These roots, according to Leslau (1992), can be grouped into three types.

TABLE 14:
Basic non-concatenative verbal inflectional forms of the triradical roots in Muher

Verb types	Type A	Type B	Type C
perfective	$C_1äC_2C_2äC_3$-	$C_1äC_2C_2äC_3$-	$C_1aC_2C_2äC_3$-
imperfective	-$C_1äC_2iC_3$(-)	-$C_1äC_2C_2iC_3$(-)	-$C_1aC_2C_2iC_3$(-)
imperative	$C_1iC_2iC_3$-	$C_1äC_2C_2iC_3$-	$C_1aC_2C_3$-
jussive	-$C_1C_2iC_3$(-)	-$C_1äC_2C_2iC_3$(-)	-$C_1aC_2C_3$(-)

3.4.2 The Ezha Verb/ Root Types

The Ezha verbs also can be grouped into those three types, i.e. type A, type B and type C. The forms of these three types are almost similar with Amharic and Mäsqan.

The difference between Mäsqan-Ezha versus Amharic is that; in the first two, the imperative and the jussive forms of type A corresponds exactly with the Tigray-Tigrinya whereas the Amharic has a form similar with the Eritrean-Tigrinya. The following table is the illustration of the three types of Ezha triradical roots.

TABLE 8:

Basic non-concatenative verbal inflectional forms of the triradical roots in Ezha

Verb types	Type A	Type B	Type C
perfective	$C_1äC_2C_2äC_3-$	$C_1äC_2C_2äC_3-$	$C_1aC_2C_2äC_3-$
imperfective	$-C_1äC_2iC_3(-)$	$-C_1äC_2C_2iC_3(-)$	$-C_1aC_2C_2iC_3(-)$
imperative	$C_1iC_2iC_3-$	$C_1äC_2C_2iC_3-$	$C_1aC_2C_3-$
jussive	$-C_1C_2iC_3(-)$	$-C_1äC_2C_2iC_3(-)$	$-C_1aC_2C_3(-)$

As we can see from the above table, in Ezha there is a gemination of the penultimate radical in the same manner as Amharic and Mäsqan (cf. table five and table seven). However, such gemination is not found in other Western Gurage speech varieties, such as Inor, Chaha, Gyeto, Gumer. In those speech varieties, however, there is a devoicing of the penultimate consonant which is assumed to be the result of gemination; where gemination is simplified and devoiced (cf. Rose 1997).

3.4.3 Other Speech Varieties

In Chaha and in other West Gurage languages grouped as 3TG (,except Ezha and Endegeñ) there is no gemination of the penultimate consonant in any of the conjugation.[5] As in many other Ethiopic languages the triradical verbs of this group are divided into three types. The difference between those three types of roots lies on the vocalic melody. Consider the following table.

TABLE 9:

Basic non-concatenative verbal inflectional forms of the trilateral roots in non-Ezha West Gurage 3TG

Verb types	perfective	imperfective	imperative	jussive
Type A	$C_1äC_2äC_3$-	$-C_1äC_2(i)C_3(-)$	$C_1iC_2C_3(-)$	$-C_1C_2iC_3(-)$
Type B	$C_1eC_2äC_3$-	$-C_1eC_2(i)C_3(-)$	$C_1eC_2iC_3(-)$	$-C_1eC_2iC_3(-)$
Type C	$C_1aC_2äC_3$-	$-C_1aC_2(i)C_3(-)$	$C_1aC_2C_3(-)$	$-C_1aC_2C_3(-)$

In these speech varieties however, there is a devoicing of the penultimate radical. This devoicing is assumed to be resulted from gemination. In Endegeñ, however, as in others there is a devoicing of the penultimate radical where the radicals are voiced stops; and, thus gemination will follow after devoicing. Consider the following example where the root is √*sbr* 'break' where /*b*/ is devoiced and geminated.

(10) säppär-hu

   break$_{perf}$-1s$_s$

   'lit. I broke'

3.5 The Eastern South-Ethiopic Verb/ Root Types

3.5.1 The Wolane Verb/ Root Types[6]

The Wolane verbs has been classified in Leslau (1994) into four types. The following table is the list of these types.

TABLE 10:

Basic non-concatenative verbal inflectional forms of the triradical roots in Wolane

Verb type	Type A	Type B	Type C	Type D
perf	C_1äC_2äC_3-	C_1e$C_2(C_2)$äC_3-	C_1aC_2äC_3-	C_1o$C_2(C_2)$äC_3-
impf	-C_1äC_2C_3(-)	-C_1e$C_2(C_2i)C_3$(-)	-C_1aC_2C_3(-)	-C_1o$C_2(C_2i)C_3$(-)
impr	C_1iC_2äC_3-	C_1i$C_2(C_2i)C_3$-	C_1aC_2C_3-	C_1u$C_2(C_2i)C_3$-
juss	-C_1C_2äC_3(-)	-C_1i$C_2(C_2i)C_3$(-)	-C_1aC_2C_3(-)	- C_1u$C_2(C_2i)C_3$(-)

As we can see from the above table, type A is characterized by the vowel *ä* which is realized before and after the second radical. As Leslau (1994: 142) mentioned, though most of the type A verbs are intransitive there are also transitive verbs of this type. The following are examples of both transitive and intransitive verbs of type A.

(11) Intransitive verbs:
   a. bäräd-ä
     be cold$_{perf}$-3ms$_s$
   b. däräq-ä
     be dry$_{perf}$-3ms$_s$
   c. fäqär-ä
     be fat$_{perf}$-3ms$_s$
   d. bäsäl-ä
     be ripe$_{perf}$-3ms$_s$

(12) Transitive verbs:
   a. fälät'-ä
     split$_{perf}$-3ms$_s$
   b. gädäl-ä
     fell a tree$_{perf}$-3ms$_s$

c. gäräf-ä

   lash$_{\text{perf}}$-3ms$_{\text{s}}$

d. säbär-ä

   break$_{\text{perf}}$-3ms$_{\text{s}}$ (Leslau 1994: 142)

As we can see from table 10, type B is typically differ from the other types by the vowel *e* which is found after the first radical. According to Leslau (1994), the gemination of the penultimate radical is not common to the majority of verbs in this language. The following are few examples of the geminated type verbs.

(13) a. ebbät-ä

        give a feast

   b. geddäf-ä

      ward off with a shield$_{\text{perf}}$-3ms$_{\text{s}}$

   c. jemmär-ä

      begin$_{\text{perf}}$-3ms$_{\text{s}}$

   d. kekkäl-ä

      hold in one's armpit$_{\text{perf}}$-3ms$_{\text{s}}$

   e. šettär-ä

     be sickly$_{\text{perf}}$-3ms$_{\text{s}}$ (Leslau 1994: 142).

In this language, there is a tendency of association of verb types to certain semantic class. For example, though there are intransitive verbs in type B, the majority of verbs in this language are transitive (cf. Leslau 1994). The following examples are from transitive and intransitive verbs.

(14) Transitive verbs

   a. beqär-ä

     brew beer$_{\text{perf}}$-3ms$_{\text{s}}$

b. let'ät'-ä

      strip off$_{perf}$-3ms$_s$

   c. šeläm-a

      decorate$_{perf}$-3ms$_s$

   d. qesät-ä

      distend$_{perf}$-3ms$_s$

(15) Intransitive verbs

   a. feläq-ä

      whistle$_{perf}$-3ms$_s$

   b. fetät-ä

      be wide$_{perf}$-3ms$_s$

   c. gebät-ä

      gallop$_{perf}$-3ms$_s$

   d. lezäb-ä

      be smooth$_{perf}$-3ms$_s$

Type C, as in Amharic and other Ethiopic languages, is typically characterized by the vowel *a* which is realized after the 1st radical. However, unlike Amharic there is no gemination in the perfective, imperfective or in any forms at all. The following verbs are a few examples of type C.

(16) a. c'afär-ä

      scratch$_{perf}$-3ms$_s$

    b. gagär-ä

      bake$_{perf}$-3ms$_s$

     c. maräk-ä

     take prisoner$_{perf}$-3ms$_s$

     d. qat'är-ä

      knot$_{perf}$-3ms$_s$

e. zabät-ä

    not find the way$_{\text{perf}}$-3ms$_S$ (Leslau 1994: 143).

Type D is characterized by the vowel *o* after the first radical in the perfective aspect. Most of this type of verbs do not have any gemination at all. Like type B, there are few verbs which have gemination of the penultimate radical throughout the conjugations.

3.5.2 The Zay Verb/ Root Types

According to Shikur (1999) and Leslau (1992, 1999) the Zay verbs can be categorized into four types, namely type A, type B, type C, and type D. These types in Zay are mostly characterized by the quality of the vowels that marks the grammatical function like perfective, imperfective, mood and also some nominal forms.

According to Leslau (1992), in Zay biradicals and triradicals fall into type A, B, C and D. Whereby quadriradical roots fall into type A and C. The following table is illustration of these four types of the triradical verbs.

TABLE 11:

Basic non-concatenative verbal inflectional forms of the triradical roots in Zay

Verb types	perfective	imperfective	imperative	jussive
Type A	$C_1äC_2äC_3$-	-$C_1äC_2C_3$(-)	$C_1iC_2äC_3$-	-$C_1C_2äC_3$(-)
Type B	$C_1iiC_2äC_3$-	-$C_1iiC_2iC_3$(-)	$C_1eC_2iC_3$-	-$C_1eC_2C_2iC_3$(-)
Type C	$C_1aaC_2äC_3$-	-$C_1aaC_2C_3$(-)	$C_1aaC_2C_3$-	-$C_1aaC_2C_3$(-)
Type D	$C_1uuC_2äC_3$-	-$C_1uuC_2C_3$(-)	$C_1ooC_2C_3$ -	-$C_1ooC_2C_3$(-)

For example, the roots √*rgt* 'step on', √*sbl* 'sing', √*brk* 'bless' and √*t'k's* 'beg' belongs to type A, type B, type C and type D respectively (cf. Shikur 1999). In this

language as we can see from the above table, there is no gemination of consonants in any of the types. However, Leslau (1999) discusses some verbs in each type. Leslau mentions that these kinds of verbs are borrowed words most probably, from Amharic.

(17) Type A
  a. bäddäl-ä
     mistreat$_{perf}$-3ms$_s$
  b. qälläb-ä
     support by providing food$_{perf}$-3ms$_s$
  c. sässät-ä
     be thrifty$_{perf}$-3ms$_s$

(18) Type B
  a. c'iillät'-ä
     drink to the last drop$_{perf}$-3ms$_s$
  b. fiikär-ä
     boast, brag$_{perf}$-3ms$_s$
  c. šilläm-ä
     decorate$_{perf}$-3ms$_s$

(19) Type D
  a. quulläf-ä[7]
     lock$_{perf}$-3ms$_s$ (Leslau 1999: 68)

3.5.3 The Harari Verb/ Root Types

Like Zay and Wolane roots, the Harari triradical roots are divided into four types whereas the quadriradicals fall into two types. The difference between those types is observed by the vowel next to the first radical. As in any other Ethio-Semitic languages the difference between the types has no semantic value. It is simply

formal (cf. Wagner 1997). The following table is illustration of triradical roots in this language.

TABLE 12:

Basic non-concatenative verbal inflectional forms of the triradical roots in Harari

Root type	perfective	imperfective	imperative	jussive
Type A	$C_1äC_2äC_3$-	$-C_1äC_2C_3$(-)	$C_1iC_2äC_3$-	$-C_1C_2äC_3$(-)
Type B	$C_1eeC_2äC_3$-	$-C_1iiC_2ɨC_3$(-)	$C_1eeC_2C_3$-	$-C_1eeC_2C_2C_3$(-)
Type C	$C_1aaC_2äC_3$-	$-C_1aaC_2C_3$(-)	$C_1aaC_2C_3$-	$-C_1aaC_2C_3$(-)
Type D	$C_1ooC_2äC_3$-	$-C_1uuC_2C_3$(-)	$C_1oC_2C_3$-	$-C_1ooC_2C_3$(-)

3.6 North Gurage Verb/ Root Types

3.6.1 Soddo Verb/ Root Types

In Soddo be it triradical, biradical or else the roots are grouped as in most Ethio-Semitic languages into three types. The difference of those roots resulted from the gemination of the penultimate radical and the vowel quality which is found after the first radical. For example, type B is characterized by the gemination of the penultimate radical throughout the conjugation. It is also characterized by the front vowel *i* found after the first radical in the perfective and imperfective aspects. The penultimate radical of type A geminates only in perfective aspect and it has the mid-central vowel after the first radical. Type C is characterized as in other Ethio-Semitic languages by the mid-low vowel after the first radical throughout the conjugations. The following table is an illustration of the triradical root types .

TABLE 13:

Basic non-concatenative verbal inflectional forms of the triradical roots in Soddo

Verb types	Type A	Type B	Type C
perfective	$C_1\ddot{a}C_2C_2\ddot{a}C_3$-	$C_1iC_2C_2\ddot{a}C_3$-	$C_1aC_2C_2\ddot{a}C_3$-
imperfective	-$C_1\ddot{a}C_2iC_3$(-)	-$C_1iC_2C_2iC_3$(-)	-$C_1aC_2C_2iC_3$(-)
imperative	$C_1iC_2\ddot{a}C_3$-	$C_1\ddot{a}C_2C_2iC_3$-	$C_1aC_2C_3$-
jussive	-$C_1C_2iC_3$(-)	-$C_1\ddot{a}C_2C_2iC_3$(-)	-$C_1aC_2C_3$(-)

3.6.2 The Mäsqan Verb/ Root Types

Mäsqan is one of the so-called Gurage languages which I classified in chapter two as North Gurage. Its verbs are classified as type A, type B, and type C. This classification and the behavior of the verbs in each group corresponds exactly with the Amharic verb types.

TABLE 7:

Basic non-concatenative verbal inflectional forms of the triradical roots in Mäsqan

Verb types	Type A	Type B	Type C
perfective	$C_1\ddot{a}C_2C_2\ddot{a}C_3$-	$C_1\ddot{a}C_2C_2\ddot{a}C_3$-	$C_1aC_2C_2\ddot{a}C_3$-
imperfective	-$C_1\ddot{a}C_2iC_3$(-)	-$C_1\ddot{a}C_2C_2iC_3$(-)	-$C_1aC_2C_2iC_3$(-)
imperative	$C_1iC_2iC_3$-	$C_1\ddot{a}C_2C_2iC_3$-	$C_1aC_2C_3$-
jussive	-$C_1C_2iC_3$(-)	-$C_1\ddot{a}C_2C_2iC_3$(-)	-$C_1aC_2C_3$(-)

The following are sample examples of the Mäsqan triradical root types with all verbal conjugation given in the above table:

(20) Type A
  a. säbbär-ä
    break$_{perf}$-3ms$_s$
  b. yɨ-säbɨr
    3ms$_s$-break$_{imprf}$
  c yä-sbɨr
    3ms$_s$-break$_{jus}$
  d. sɨbɨr
    break$_{imp}$.2ms$_s$

(21) Type B
  a. zäbbärä
    want$_{perf}$-3ms$_s$
  b. yɨ-zäbbɨr
    3ms$_s$-want$_{impf}$
  c. yä-zäbbɨr
    3ms$_s$-want$_{jus}$
  d. zäbbɨr
    want$_{imp}$.2ms$_s$

(22) Type C
  a. marräk-ä
    take.prisoner$_{perf}$-3ms$_s$
  b. yɨ-marrɨk
    3ms$_s$-take.prisoner$_{impf}$
  c. yä-mark
    3ms$_s$-take prisoner$_{jus}$

    d. mark

      take.prisoner$_{imp}$.2ms$_S$ (Shikur 1989: 9)

3.7 Summary and Remarks

The vowel *ɨ* in most cases is an ephenthetic vowel and subject to be deleted or replaced by other vowels. For example, in the imperative form of the Muher type A roots, we find *ɨ* after and before the second radical (cf. table 14). However, in the feminine singular form, it will be replaced by *i*, i.e. by the Agr morpheme, and in both plural forms it will be deleted as illustrated in (23).

(23) The imperative form of the root √*sbr* 'break' in Muher

	Singular	Plural
Masculine	sɨbɨr	sɨbrɨm^w
Feminine	sɨbir	sɨbrɨma (Leslau 1992: 200)

Except a few cases, in Tigre all root types are lexical. That is the assignment of the types is a property of the root which is, in fact, unmarked to a grammatical category either V or N.

When we examine the penultimate radical of the perfective form of type A, we find four forms in Ethio-Semitic languages (cf. Leslau 1992). These are the Ge'ez form, the Amharic form, the Endegeñ form and the Chaha form. The Ge'ez type has the second radical simple and is found in Ge'ez, Tigrinya, Tigre, Silte, Wolane and Zay; the Chaha type has the second radical simple but shows traces of gemination through devoicing (*näkär-,* from *näggär-* 'tell.perfective') and is found in Chaha, Ennemor and Gyeto; the Amharic type has the second radical geminated and is found in Amharic, Gafat, Mäsqan, Argobba, Ezha, Muher, Gogot, and Soddo; and the Endegeñ type has the penultimate radical geminated with devoicing if the

penultimate consonant is either *b, g* or *d*. That is *b, g* and *d* become voiceless *p, k* and *t* respectively as in *näkkärä*, from *näggärä* (Leslau 1992: 389 ff.).

When we come to the vowel which is found next to the first radical of type B, we have two types; the mid-central vowel and the front vowels. The former one is found in Amharic, Tigrinya, Tigre, Ezha, Endegeñ, Mäsqan and some other few languages. The latter is found in Soddo, Argobba, Gogot, Wolane, Silte and in most 3T languages; i.e. except Ezha and Endegeñ. Ge'ez also has such front vowel in the imperfective form as we have seen above. According to Leslau "on the basis of the vowel *e* (_) of type B in the various languages and dialects one wonders whether the vowel *e* of the imperfect of type B in Ge'ez *[yifes's'im]* would be an indication that the original pattern of the Ge'ez type B was *[fes's'ämä]*. It is by analogy with type A that Ge'ez type B has the pattern *[fäs's'ämä]*" (Leslau 1999: 67).

Since the distribution of the front vowel extends from North to South and it is found in almost each sub-group, and, since it is found in Ge'ez, i.e. a language which is considered as one of the oldest known Semitic languages, it is possible to take such a vowel as a typical feature of the proto-Ethiopic type B roots.

Notes to Appendix III

[1] However, this gemination is only observed when there is no suffix attached to the stem. If there is any suffix then no gemination is observed. Consider the following examples of the root √*sbr* 'break' in the imperfective form:

i.

		Singular	**Plural**
1		ʔɨ-säbbɨr	nɨ-säbbɨr
2	m	tɨ-säbbɨr	tɨ-säbɨr-u/ tɨ-säbɨr-uta
	f	tɨ-säbɨr-i	tɨ-säbɨr-a/ tɨ-säbɨr-ata
3	m	yɨ-säbbɨr	yɨ-säbɨr-u/ yɨ-säbɨr-uta
	f	tɨ-säbbɨr	yɨ-säbɨr-a/ yɨ-säbɨr-ata (Weldeyesus 2000: 30)

[2] This corresponds to the Ge'ez alphabet system.

[3] There are few roots which are categorized under type A but have a different pattern. For example, take the root √khl 'can': in the perfective it has the following form:

(i) kɨhɨl-ä

   can$_{perf}$-3ms$_s$

   'he can'

[4] It might be the case that in earlyer period *t* in Amharic used to occur in any verb types of the gerundive form as in Argobba.

[5] Note that here in terms of genetic classification I argued in Chapter One that Ezha is closer to Chaha than Endegeñ for example. When we come to gemination Ezha differs to all other 3TG Western Gurage languages. This is really unexpected. Such kind of pieces of facts may imply that considering Ezha as a dialect of Chaha or vice versa has to be questionable. It might be the case that the genetic relation of this speech varieties have equal status with the other speech varieties in the same group. The highly mutual intelligibility observed between these two speech varieties unlike to others is might be resulted because of the daily contact of the two nationalities.

[6] Data on Wolane verbs is hard to find from secondary sources. The only work on these language, to the best of my knowlegde, is Leslau (1994). My own primary data is mostly on the syntactic properties of other inflectional staff. Hence the following discusssion is based on the only work of Leslau (1994).

[7] In Amharic this verb is realized as *qʷälläfä*, in Silte *qooläfä* and in Wolane *qoläfä* (cf. Leslau 1999: 68).

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