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RESEARCH

The theory and syntactic representation of control structures: An analysis from Amharic

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This paper conducts a detailed syntactic analysis of control structures in Amharic and sheds light on the current approaches to their syntactic representation and the operation thereof. Amharic control structures consist of the following components: (i) they are marked by the specific clause marker (CM) *li-*; (ii) the control clause always contains an imperfective verb; (iii) the control predicate is fully inflected by phi-features which are coindexical to the matrix subject; (iv) the subject of the control clause is a PRO; and (v) only exhaustive subject control is licensed. Amharic control poses a challenge to Landau (2014)'s proposal that the control possibility stems from particular combinations of tense and agreement features of the control predicate. Instead we claim that Amharic data fit better in the analysis of future infinitives (Wurmbrand 2014) and prospective aspect (Kratzer 2011; Matthewson 2012). In addition, the PRO-analysis of Amharic control also entails that the Movement Theory of Control (MTC) is disfavored.

Keywords: Amharic; aspect; clause marker; control; embedded clause; Movement Theory of Control; PRO-analysis

1 Introduction

The purpose of this paper is to perform a detailed syntactic analysis of control structures in Amharic, and to shed light on the current approaches to their syntactic representation and the operation thereof. We claim that Amharic control structures consist of the following components: (i) they are marked by the specific clause marker (CM) *li-*; (ii) the control clause always contains an imperfective verb; (iii) the control predicate is fully inflected by phi-features which are coindexical to the matrix subject; (iv) the subject of the control clause is a PRO; and (v) only exhaustive subject control is licensed. With respect to the structural description, Amharic control poses a challenge to Landau (2004) proposed typology. We argue against Landau's claim that the control possibility can be predicted by the tense and agreement feature of the control predicate. Instead Amharic data fit better in the latest analysis of future infinitives (Wurmbrand 2014) and prospective aspect (Kratzer 2011; Matthewson 2012). We claim that *li-*, being a prospective aspectual marker, semantically functions as a posterior modal operator. In addition, the PRO-analysis of Amharic control also entails that the Movement Theory of Control (MTC) is disfavored. The paper is structured as follows: Section 2 introduces the morphosyntactic properties of verbal aspect in Amharic. Section 3 illustrates the properties of CMs in Amharic. Section 4 demonstrates the morphosyntactic properties of the control clauses in Amharic. Section 5 discusses Landau's typology of control predicates. Section 6 discusses and presents arguments against the MTC. Section 7 discusses the behavior of "try" as a control predicate in Amharic. Section 8 discusses the relation between embedded imperfective aspect and the

semantics of control by an aspect called "conative". Section 9 deals with the distinction between control clauses and nominal clauses in Amharic.

2 Amharic verbal aspect

It is well known to Ethio-Semiticists that Amharic is an SOV language in which the sentence-final verb is fully inflected with phi-features (Dawkins 1969; Leslau 1995; Demeke 2003, among others). The richness of verbal morphology corresponds to the fact that it allows pro-drop in almost all cases. Amharic verbs contain two morphological aspects, namely perfective and imperfective (Beyene 1973; Halefom 1994; Leslau 1995; Demeke 2003).[1] The two aspects are morphologically distinguished by the placement of phi-features. Phi-features are suffixed to the perfective verbal stems, whereas they are both prefixed and suffixed to the imperfective verbal stems. For instance:

(1) a. (ʔɨne) bälla-hu.
(1s) eat.PF-1sS
'I ate.'

b. (ʔɨne) ʔɨ-bäl-Ø-allä-hu.
(1s) 1sS-eat.IMPF-1sS-AUX.NPST-1sS
'I (will) eat.'

Another salient distinction between the two morphological aspects lies in the use of tense auxiliaries. In root clauses, tense (i.e. past or non-past) auxiliaries are strictly banned if the verb is perfective (2a), whereas they are obligatorily required if the verb is imperfective (e.g. *-čč* in (2b)). In the case of imperfectives, the phi-features of tense auxiliaries must agree with those of the imperfective verbs (see also Section 4.3. for details):

(2) a. hedä-Ø (*-all-Ø/*näbbär).
leave.PF-3SMS (AUX.NPST-3SMS/AUX.PST)
'He (has) left.'

b. tɨ-hed-Ø *(-allä-čč).
3SFS-leave.IMPF-3SFS (-AUX.NPST-3SFS)
'She (will) leave(s).'

However, the asymmetry with regard to the use of tense auxiliaries is restricted to root clauses only. That is to say, such asymmetry will be neutralized if the clause is embedded. Example (3) shows that the past auxiliary *näbbär* is banned in embedded contexts, even if the embedded verb is imperfective:

(3) l-i-mät'a-Ø (*näbbär) fällägä-Ø.
CM-3SMS-come.IMPF-3SMS (AUX.PST) want.PF-3SMS
'He wanted to come.'

Assuming that root clauses regardless of aspect are formed by the same functional projections, the ban on tense auxiliaries in embedded clauses suggests that the embedded clause may involve an impoverished structure, e.g. the lack of a functional projection which

[1] There is a third possible yet controversial aspect "gerundive" (Bender 1968; Beyene 1973; Demeke & Meyer 2001).

hosts tense auxiliaries.[2] By contrast, while embedded perfective clauses equally ban a tense auxiliary (indeed perfective clauses ban tense auxiliaries in general, as shown in (1a) and (2a)), there is evidence showing that they may involve a richer structure than embedded imperfective clauses. Example (4) shows that the embedded perfective predicate *hedä-* 'go' is marked by the complementizer *ʔɨndä-*. Notice that an overt embedded subject *lämma* is felicitous, which contrasts with (3) in which an overt embedded subject is forbidden (see Section 4.4 for more details).

(4) lämma wädä amerika ʔɨndä-hedä-Ø näggärä-čč-ɨň.
Lema to America CM-go.PF-3SMS tell.PF-3SFS-1SO
'She told me that Lemma went to America.'

The semantic interpretations of the two aspects are unsurprising to linguists regardless of the theoretical framework. We follow the consensus that grammatical aspect describes various types of "internal temporal constituency" of the situation/event without reference to the time of speech (Comrie 1976). In Amharic, perfective verbs always denote a past or recently completed event (Demeke & Meyer 2001). Example (5) shows that the perfective verb *hedä* 'left' is compatible with a past or a present time adverb. Note that the use of *ʔahun* 'now' in perfectives is felicitous and it functions as a reference time (which overlaps with the speech time). There is however no context which allows the use of future time adverbs (e.g. *nägä* 'tomorrow') in perfectives:

(5) käbbädä <tɨnant/ʔahun/*nägä> hedä-Ø.
Kebede yesterday/now/tomorrow leave.PF-3SMS
'Kebede left <yesterday/now/*tomorrow>.'

The semantics of imperfective verbs is arguably more context-dependent. Imperfectives can express durative, habitual, and future events (Manahlot 1977; Leslau 1995; Demeke & Meyer 2001). Example (6) is a case of present imperfectives (with the present auxiliary suffix). Note that the present imperfective verb *yɨbälall* is compatible with present and future adverbs. By contrast, example (7) with the past imperfective verb *yɨbäla näbbär* is only compatible with past adverbs:

(6) käbbädä <*tɨnant/ʔahun/nägä> yɨ-bäl-Ø-all-Ø.
Kebede yesterday/now/tomorrow 3SMS-eat.IMPF-3SMS-AUX.NPST-3SMS
'Kebede is going to eat <*yesterday/now/tomorrow>.'

(7) käbbädä <tɨnant/*ʔahun/*nägä> yɨ-bäla-Ø näbbär.
Kebede yesterday/now/tomorrow 3SMS-eat.IMPF-3SMS AUX.PST
'Kebede was eating/used to eat <yesterday/*now/*tomorrow>.'

It should be pointed out, however, that even though *ʔahun* 'now' can be used in imperfectives in (6), the sentence does not express a present ongoing event (i.e. no eating event occurs at the speech time). The function of *ʔahun* in (6) is to provide a reference time (c.f. (5)). Alternatively, if a present ongoing event is expressed, the verb must be prefixed by a progressive aspect morpheme *ʔɨyyä-*, e.g.:

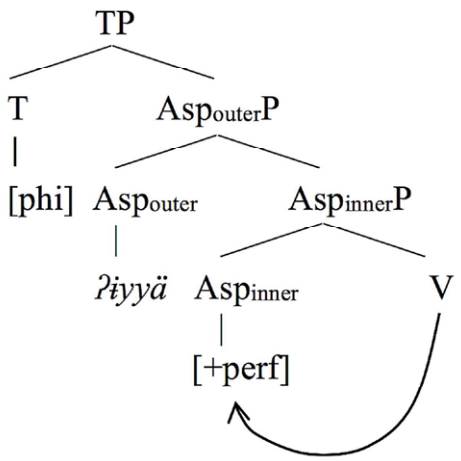
[2] One suggestion is that embedded imperfective clauses, while still projecting a TP, lack a CP. The absence of a C entails that T may not inherit tense and phi-features, in the sense of Chomsky (2008: 143). In the subsequent sections, we shall demonstrate that the phi-features of the embedded predicates in the control clauses are valued by means of some long-distance agreement with the matrix predicates (Section 4.3). In addition, we shall argue that the "tenselike" features of the embedded clause (including the irrealis modality) are derived by the specific clause marker *li-* which projects a prospective aspect (Section 4.1).

(8) a. yonas misa-w-n ʔiyyä-bälla-Ø näw.
Yonas lunch-POSS-ACC PROG-eat.PF-3SMS AUX.NPST
'Yonas is eating his lunch.'

b. yonas misa-w-n ʔiyyä-bälla-Ø näbbär.
Yonas lunch-POSS-ACC PROG-eat.PF-3SMS AUX.PST
'Yonas was eating his lunch.'

While the current paper does not focus on Amharic progressive aspect, some qualification may be necessary. As shown in (8), the progressive functions similarly to imperfectives, both of which accompanied by a tense auxiliary. Given that perfectives are interpreted as inherently past (5), one can analyze the function of the progressive marker *ʔiyyä-* as "imperfectivizing" the perfective verb. In terms of syntactic representation, we can consider *ʔiyyä-* as the progressive aspectual head (Cinque 1999) which selects the aspectual verb (in this case the perfective) as its complement.[3] In the absence of *ʔiyyä-*, the perfective verb moves to the T-head and checks its past tense feature.[4] On the contrary, *ʔiyyä-* functions as a barrier for movement of the perfective verb to T (similar to the constraint on head movement; Travis 1984), and in such case a tense auxiliary is needed to rescue the structure.

(9)



To summarize the distinction between main and embedded clause in Amharic:

(10) a. In main clauses, perfective clauses forbid the use of a tense auxiliary, whereas imperfective clauses obligatorily require a tense (past or non-past) auxiliary.

b. In embedded clauses, the tense auxiliary is banned regardless of aspect.

3 Embedded clause markers in Amharic

In addition to the asymmetry of auxiliation which distinguishes between root and embedded clauses, only embedded clauses are identified by their corresponding clause markers (CMs) (Manahlot 1977).[5] CMs are significant in contributing to the semantics of

[3] This is analogous to the postulation of a viewpoint (outer) aspect in syntax (Smith 1991).
[4] It is therefore desirable to distinguish between lexical (inner) aspect (including Aktionsart and root-pattern aspect) and grammatical (outer) aspect in Amharic. For the original idea of inner and outer aspect, please refer to Smith (1991). For the aspectual system in Amharic, please see Yimam (2006).
[5] Leslau (1995) calls them "subordinate clause introducers".

the embedded clauses on the one hand, and identifying the clausal type (in the sense of Cheng 1991) on the other hand. Below is a short list of CMs with their subcategorized clausal types:

(11) lämma wädä amerika ʔɨndä-hedä-Ø näggärä-čč-ɨň. [declarative]
Lema to America CM-go.PF-3SMS tell.PF-3SFS-1SO
'She told me that Lemma went to America.'

(12) amariňa Ø-awk'-Ø ʔɨndä-honä t'äyyäk'ä-ň. [polar question]
Amharic 1SS-know.IMPF-1SS CM-become ask.PF-3SMS-1SO
'He asked me if I knew Amharic.'

(13) almaz kä-mät't'a-čč alämu yɨ-hed-Ø-all-Ø. [conditional]
Almaz CM-come.PF-3SFS Alemu 3SMS-go.IMPF-3SMS-AUX.NPST-3SMS
'If Almaz comes, Alemu will go/goes/is going.'

(14) zɨnayä wɨdɨdɨr-u-n lɨ-t-aʃʃännɨf-Ø tämäňňä-čč. [control]
Zinaye competition-DEF-ACC CM-3SFS-win.IMPF-3SFS wish.PF-3SFS
'Zinaye wished to win the competition.'

(15) m-at'nat ʤämärä-Ø.[6] [nominal clause]
CM-study begin.PF-3SMS
'He started to study.'

The syntactic position of CMs corresponds to the internal structure of the embedded clause on the one hand, and its intended semantics on the other hand. For instance, it is generally assumed that the CM *ʔɨndä-* (e.g. (11) and (12)) is analogous to the English complementizer "that" or "if", both of which selecting an embedded declarative clause (Amberber 2010). One piece of evidence stems from the strict linear order between *ʔɨndä-*, the tense marker *-mm*, and the negative marker *-a*. Example (16) shows that *ʔɨndä-* precedes negative and tense morphemes, which suggests that *ʔɨndä-* may be positioned higher in the structure (e.g. the head of the CP-field):

(16) a. ʔɨnd-al-mät't'-a-Ø Ø-awk'-Ø-allä-hu.
CM-NEG-come.PF-3SMS 1SS-know.IMPF-1SS-AUX.NPST-1SS
'I know that he did not come.'

b. ʔɨndämm-a-y-mät'a-Ø Ø-awk'-Ø-allä-hu.
CM-NEG-3SMS-come.IMPF-3SMS 1SS-know.IMPF-1SS-AUX.NPST-1SS
'I know that he will not come.'

By contrast, the CM *mä-* (15) appears to belong to a lower domain (see also Section 9). While Amharicists generally consider *mä-* as an infinitive marker similar to English "to" (Manahlot 1977), further evidence strongly suggests that it functions rather as a prefixal nominalizer and should be positioned within the VP-domain, an issue which we are not going to deal with in the present paper. The CM which is the central focus of the present paper is *lɨ-* which selects an embedded (control) clause. Example (17) exhibits a similar observation with (16) with respect to the syntactic position of the CM, namely *lɨ-* precedes and scopes over the negative marker in the embedded clause. This gives further support to the claim that CMs are positioned at the peripheral position of the TP-field.

[6] Amharic does not tolerate two adjacent vowels as a result of affixation, i.e. /mä-at'nat/ → [m-at'nat].

(17) a. käbbädä l-a-y-k'ät't'ɨl-Ø fällägä-Ø.
Kebede CM-NEG-3SMS-continue.IMPF-3SMS want.PF-3SMS
'Kebede wanted not to continue.'

b. käbbädä almaz-ɨn l-a-y-räda-Ø ak' k'ädä-Ø.
Kebede Almaz-ACC CM-NEG-3SMS-help.IMPF-3SMS plan.PF-3SMS
'Kebede planned not to help Almaz.'

In what follows, we shall describe the morphosyntactic properties of control structures in Amharic.

4 Amharic control structures

In the following subsections, we shall discuss various properties of control structures in Amharic. Section 4.1 discusses *lɨ-* as the control CM. Section 4.2 discusses the embedded imperfective aspect. Section 4.3 talks about phi-agreement of the embedded predicate. Section 4.4 claims that the PRO is the embedded subject of control clauses. Section 4.5 shows that Amharic control is mostly exhaustive subject control (4.5). Section 4.6 provides the classification of control predicates.

4.1 The prospective aspectual marker lɨ-

In Amharic, all instances of control structures must be marked by the CM *lɨ-*. Examples in (18) show that the embedded clause functions as the direct argument of matrix predicates, whereas in (19) it functions as an adjunct (i.e. adjunct control):

(18) a. lɨ-t-mät'a-Ø fällägä-čč.
CM-3SFS-come.IMPF-3SFS want.PF-3SFS
'She wanted to come.'

b. almaz-ɨn l-i-räda-Ø täsmama-Ø.
Almaz-ACC CM-3SMS-help.IMPF-3SMS agree.PF-3SMS
'He agreed to help Almaz.'

c. almaz-ɨn l-i-räda-Ø k'al gäbba-Ø.
Almaz-ACC CM-3SMS-help.IMPF-3SMS promise.PF-3SMS
'He promised to help Almaz.'

(19) a. lɨǰ-wa-n lɨ-t-fälɨgä-Ø-w mät't'a-čč.
son-POSS-ACC CM-3SFS-search.IMPF-3SFS-3smO come.PF-3SFS
'She came to search for her son.'

b. sɨra lɨ-t-mokkɨr-Ø kä-bet wät't'a-čč.
work CM-3SFS-try.IMPF-3SFS from-house leave.PF-3SFS
'She left home to try a job.'

Amharic speakers express a strong intuition that sentences which contain a *lɨ-*clause always express an irrealis yet imminent event. It should be noted, however, that the matrix subject of control structures is not necessarily volitional. For instance, (20) shows that non-volitional NPs can function as the subject of the matrix clause:

(20) yɨh mɨrɨmɨr tɨllɨk' čɨggɨr l-y-ak'alɨl-Ø ʔallɨm^{w}-all-Ø.
this reaserch big problem CM-3SMS-solve-3SMS aim-3SMS-AUX.NPST-3SMS
'This research aims to solve a big problem.'

At least two types of examples show that the intensional semantics expressed by the clauses marked by *lɨ-* is independent of the control structure. For instance, the clauses

marked by *li-* in (21) are not control clauses as the matrix predicates are the tensed auxiliaries *näw/näbbär*. The sentences still express an irrealis imminent event:

(21) a. li-Ø-sära-Ø näw.
CM-1sS-work.IMPF-1sS AUX.NPST
'I am about to work.'

b. li-Ø-sära-Ø näbbär.
CM-1sS-work.IMPF-1sS AUX.PST
'I was about to work.'

li- is also compatible with other modal verbs, shown by (22):

(22) a. fätäna-w-in l-y-alf-Ø
examination-DEF-ACC CM-3SMS-pass.IMPF-3SMS
yi-ggäbba-w-all-Ø.
3SMS-should.IMPF-3smS-AUX.NPST-3SMS
'He should pass the examination.'

b. l-i-zänb-Ø yihonall.
CM-3SMS-rain.IMPF-3SMS may
'It may rain.'

Another construction which illustrates the intensional semantics expressed by the clauses marked by *li-* independent of control structures is first-person jussives (cf. English *let me* constructions), e.g. (23):

(23) a. (ʔine) li-Ø-mt'a-Ø.
1S CM-1sS-come.IMPF-1sS
'Let me come.' (lit. 'Shall I come?')

b. (ʔine) li-Ø-hid-Ø.
1S CM-1sS-go.IMPF-1sS
'Let me go.' (lit. 'Shall I go?')

c. (ʔine) li-Ø-bla-Ø.
1S CM-1sS-eat.IMPF-1sS
'Let me eat.' (lit. 'Shall I eat?')

We follow Yimam (2006), Stolen (2013) and Halpert & Stolen (2014) and claim that *li-* is a prospective aspectual marker (cf. Comrie 1976) which combines with an embedded imperfective verb. As we mentioned in (8), grammatical aspect (e.g. progressive *ʔiyyä-*) is realized as a verbal prefix. The primary difference between *ʔiyyä-* and *li-* is that the former is compatible with both root and embedded clauses, whereas the latter is only used in embedded contexts.

4.2 Embedded imperfective aspect

Another defining property of Amharic control, which has been noted by Amharic linguists for long (Dawkins 1969; Manahlot 1977; Leslau 1995), is that the aspect of the embedded clause must be imperfective (24). Note that in (24b), the imperfective verb may not be followed by a tense auxiliary within the embedded clause (which is otherwise required in root clauses (2)):

(24) a. wididdir-u-n li-t-aššännif-Ø tämäňňä-čč.
competition-DEF-ACC CM-3SFS-win.IMPF-3SFS wish.PF-3SFS
'She wished to win the competition.'

b. *wididdir-u-n li-aššännäfä-čč tämäññä-čč.
competition-DEF-ACC CM-win.PF-3SFS wish.PF-3SFS

Recall that the function of tense auxiliaries is to locate the verbal event along the temporal axis, and they are clearly distinguished in terms of the use of time adverbs (cf. (6) and (7)). The ban on tense auxiliaries in control clauses (and all other embedded clauses as well) may imply that temporal distinction is neutralized in embedded events. This prediction seems to be borne out. The following example shows that any time adverb can be used in the control clause:[7]

(25) <tinant/ʔahun/nägä> li-t-mät'a-Ø fällägä-čč.
yesterday/now/tomorrow CM-3SFS-come.IMPF-3SFS want.PF-3SFS
'She wanted to come yesterday/now/tomorrow.'

Are the use of imperfective verbs and the ban of tense auxiliaries in control clauses compatible with the semantics of control structures? As we pointed out previously, the most salient distinction between perfectives and imperfectives is that the former entail completion of events, whereas the latter are compatible with durative, habitual, and future events. It should be noted that imperfective verbs are unable to express a present ongoing event (26a). On the contrary, the progressive aspectual marker can combine with a perfective verb and expresses a present ongoing event (26b):

(26) a. ʔahun yi-bäl-Ø-all-Ø.
now 3SMS-eat.IMPF-3SMS-AUX.NPST-3SMS
'He is going to eat now (i.e. He is not eating at the speech time.)'

b. ʔahun ʔiyyä-ßälla-Ø näw.
now PROG-eat.PF-3SMS AUX.NPST
'He is eating now (i.e. at the speech time.)'

The observation that imperfective verbs express irrealis modality squares with the semantic interpretation of control structures in which the control clause expresses intensional semantics. On the contrary, perfectives and progressives are naturally ruled out as the verbal aspect in control clauses given their realis reading which is incompatible with intensionality. The examples in (27) are definitely ungrammatical:

(27) a. *li-ʔiyyä-ßäla-Ø fällägä-Ø.
CM-PROG-eat.PF-3SMS want.PF-3SMS

b. *li-bälla-Ø fällägä-Ø.
CM-eat.PF-3SMS want.PF-3SMS

4.3 Phi-agreement

The embedded predicates of the control structures in Amharic are fully inflected with phi-features, and moreover the phi-features must agree with those of the matrix predicate (28a, b). In case of a phi-feature mismatch, the control structure will be ungrammatical (28c):

(28) a. li-t-aʃʃännif-Ø tämäñä-čč.
CM-3SFS-win.IMPF-3SFS wish.PF-3SFS
'She wished to win.'

[7] Certainly the event time of the control clause must be subsequent to that of the matrix clause.

b. li-y-aʃʃännɨf-u tämäňň-u.
CM-3PLS-win.IMPF-3PLS wish.PF-3PLS
'They wished to win.'

c. *li-y-aššänɨf-Ø tämäňä-čč.
CM-3SMS-win.IMPF-3SMS wish.PF-3SFS

4.4 PRO as the embedded subject

One major issue surrounding control structures is the identity of the embedded subject, namely whether it is a PRO, a pro or a movement trace. While Amharic is a pro-drop language, there is evidence showing that Amharic control clauses are compatible with the PRO-analysis. First, while pro is only found in full-fledged root clauses and can freely alternate with overt pronouns, the subject of the control clauses must be empty (29):[8]

(29) zɨnnayä (*ʔɨswa) lɨ-t-aʃʃännɨf-Ø fällägä-čč.
Zinaye 3SF CM-3SFS-win.IMPF-3SFS want.PF-3SFS
'Zinaye wants to win.'

By contrast, in other embedded declarative clauses, an overt subject or pronoun can be used (30):

(30) a. ɨnnässu (ʔɨňa) ʔɨndä-n-mät'a-Ø täsmamm-u.
3PL (1PL) CM-1PLS-come.IMPF-1PLS agree.PF-3PLS
'They agreed that (we) come.'

b. (lämma) wädä amerika ʔɨndä-hedä-Ø näggärä-čč-ɨň.
(Lemma) to America COMP-go.PF-3SMS tell.PF-3SFS-1SO
'She told me that (Lemma) went to America.'

Second, the PRO-analysis is semantically motivated. Hornstein (1999) (also in Hornstein 2001; Boeckx, Hornstein & Nunes 2010) has pointed out that one semantic diagnostic of control structures is sloppy reading under ellipsis. For instance, in (31), the second clause which is elided allows a sloppy reading, i.e. the embedded subject must be coindexical with the matrix subject of the second clause (i.e. Girma) instead of the first clause (i.e. Kebede):

(31) Käbbädä l-i-hed-Ø k'al gäbba-Ø gɨrma-mm ʔɨndihu.
Kebede CM-3SMS-leave.IMPF-3SMS promise.PF-3SMS Girma-and likewise
'Kebede$_1$ promised PRO$_1$ to leave, and Girma$_2$ did (promise PRO$_2$ to leave) too.'

On the contrary, other embedded clauses (e.g. those formed by *ʔɨndä-*) do not allow sloppy reading under ellipsis:

(32) alämitu kebede ʔɨnd-i-mät'a-Ø täsmama-čč abat-wa-m
Alemitu Kebede CM-3SMS-come.IMPF-3SMS agree.PF-3SFS father-her-and
ʔɨndihu.
likewise
'Alemitu agreed that Kebede come and her father likewise (agreed that Kebede came).'

[8] While earlier work such as Manahlot (1977) did not mention the PRO-analysis, he pointed out that the embedded subject must be coreferential to the matrix subject, whereas embedded subjects of other types of embedded clauses (e.g. those formed by *ʔɨndä-*) are not coreferential to the matrix subject.

Another diagnostic of PRO comes from the propositional attitudes of control clauses. In particular, PRO is always interpreted *de se*. That is to say, the embedded subject PRO is interpreted as the "self" of the matrix subject. Consider (33):

(33) käbbädä meday l-y-aššännɨf-Ø fällägä-Ø.
Kebede medal CM-3SMS-win.IMPF-3SMS want.PF-3SMS
'Kebede wanted to win a medal.'

According to native speakers, (33) is interpreted as follows: Kebede wanted that he himself won a medal. That Kebede won a medal was within his own mental state of desire. By contrast, embedded clauses formed by *ʔɨndä-* requires a lexical NP or a pro as the embedded subject. Example (34) is unable to express a *de se*, but a *de re* reading. That is to say, within Kebede's mental state of desire, there was a man such that he won a medal. The sentence is true regardless of whether Kebede wanted that he himself won a medal.

(34) käbbädä meday ʔɨndɨ-y-aššännɨf-Ø fällägä-Ø.
Kebede medal CM-3SMS-win.IMPF-3SMS want.PF-3SMS
'Kebede$_i$ wanted that he$_{*i/j}$ won a medal.'

At the outset, postulating the PRO-analysis for Amharic control is potentially problematic since all embedded predicates are fully inflected with phi-features (Section 4.3). At least in the early GB era, it was a consensus that PRO cannot appear at (or move to) a case position. While later developments (Chomsky & Lasnik 1993) claim that it is plausible for PRO to bear a (null) case by valuation with [+tense] of the control clause (Martin 1992, 2001; Bošković 1996, 1997), the argument that [+tense, +finite] of the control clause assigns nominative case to its subject remains largely unchallenged. However, various facts from Albanian (Dobrovie-Sorin 1994, 2001), Greek (Varlokosta & Hornstein 1993), Hebrew (Landau 2004) and Portuguese Brazilian (Ferreira 2004, 2009; Boeckx, Hornstein & Nunes 2010) show clearly finite control is attested across languages (see Section 6). One salient distinction of Amharic control clauses is that they must be marked by the CM *li-*. By contrast, other CMs (e.g. *ʔɨndä-*) always allow an overt subject. One suggestion (as pointed out by one reviewer) is to say that *li-* bears a syntactic function of blocking case assignment to its subject even though the control predicate is [+tense, +finite].

Nevertheless, while Amharic control structures are compatible with the PRO-analysis, they do not provide knockout arguments against analyzing the subject of the control clause as a movement trace. We shall postpone the discussion and arguments against the Movement Theory of Control (MTC) to Section 6.

4.5 Exhaustive subject control

So far, all examples of Amharic control are instances of subject control. Moreover subject control must be exhaustive, shown by the contrast in (35). In (35a), the embedded subject must be exhaustively coreferential with the matrix subject (exhaustive control). (35b, c), nevertheless, are ungrammatical. The adverb *ʔand lay* 'together' suggests that the embedded subject is a superset of the matrix subject Kebede. Moreover, the use of plural agreement in the control clause in (35c) requires an embedded plural subject. These suffice to show that the matrix subject must be identical to the embedded subject (35a), whereas partial control is ruled out in (35b, c):

(35) a. käbbädä l-i-mät'a-Ø tämäňň-ä.
Kebede CM-3SMS-come.IMPF-3SMS wish.PF-3SMS
'Kebede$_1$ wished [PRO$_1$ to come].'

b. *käbbädä ʔand lay bä-sɨddɨst l-i-mät'a-Ø tämäňň-ä.
Kebede together at-six CM-3SMS-come.IMPF-3SMS wish.PF-3SMS

c. *käbbädä ʔand lay bä-sɨddɨst l-i-mät'-u tämäňň-ä.
Kebede together at-six CM-3PLS-come.IMPF-3PLS wish.PF-3SMS

In "non-control" structures (36), it is always possible to construct a sentence in which the embedded subject is not exhaustively coreferential with the matrix subject:

(36) a. käbbädä bä-sɨddɨst ʔɨnd-i-mät'a-Ø tämäňňä-Ø.
Kebede on-six CM-3SMS-come.IMPF-3SMS wish.PF-3SMS
'Kebede$_1$ wished that he$_2$ come at six.'

b. käbbädä ʔand lay bä-sɨddɨst ʔɨnd-i-mät'-u tämäňň-ä.
Kebede together on-six CM-3PLS-come.IMPF-3PLS wish.PF-3SMS
'Kebede$_1$ wished that they$_2$ come together at 6.'

How about object control? Object control in embedded clauses seems to be non-existent in Amharic. Landau (2004) lists a number of object-control verbs such as *recommend, urge, propose, command, order, request, encourage, tempt, warn, demand, persuade, pressure*, etc. However, none of them triggers object control in Amharic. What is more, while these aforementioned verbs can select an embedded clause, the clause must be marked by the complementizer *ʔɨndä-*, not by *lɨ-* (see the contrast in (37)–(41)):

(37) a. wädä parti-w ʔɨnd-i-hed-Ø ʔɨ-fällɨg-Ø-all(-hu).
to party-DEF CM-3SMS-go.IMPF-3SMS 1SS-want.IMPF-1SS-AUX.NPST(-1SS)
'I want him to go to the party.'

b. *wädä parti-w l-i-hed-Ø ʔɨ-fällɨg-Ø-all(-hu).
to party-DEF CM-3SMS-go.IMPF-3SMS 1SS-want.IMPF-1SS-AUX.NPST(-1SS)

(38) a. almaz-ɨn ʔɨndɨ-tɨ-hed-Ø t'äyyäk'-Ø(-at).
Almaz-ACC CM-3SFS-leave.IMPF-3SFS request.PF-3SMS(-3SFO)
'He requested Almaz to leave.'

b. *almaz-ɨn lɨ-t-hed-Ø t'äyyäk'-Ø(-at).
Almaz-ACC CM-3SFS-leave.IMPF-3SFS request.PF-3SMS(-3SFO)

(39) a. almaz-ɨn ʔɨndɨ-tɨ-hed-Ø asgäddädä-Ø(-at).
Almaz-ACC CM-3SMS-leave.IMPF-3SMS force.PF-3SMS(-3SFO)
'He forced Almaz to leave.'

b. *almaz-ɨn lɨ-t-hed-Ø asgäddädä-Ø(-at).
Almaz-ACC CM-3SMS-leave.IMPF-3SMS force.PF-3SMS(-3SFO)

(40) a. käbbädä alämitu-n ʔɨndɨ-t-sära-Ø dägäfä-Ø(-at).
Kebede Alemitu-ACC CM-3SMS-work.IMPF-3SMS support.PF-3SMS(-3SFO)
'Kebede supported Alemitu to work.'

b. *käbbädä alämitu-n lɨ-t-sära-Ø
Kebede Alemitu-ACC CM-3SMS-work.IMPF-3SMS
dägäfä-Ø(-at).
recommend.PF-3SMS(-3SFO)

(41) a. käbbädä alämitu-n ʔiɨndiɨ-t-sära-Ø t'äyyäk'-Ø(-at).
Kebede Alemitu-ACC CM-3SMS-work.IMPF-3SMS urge.PF-3SMS(-3SFO)
'Kebede urged Alemitu to work.'

b. *käbbädä alämitu-n liɨ-t-sära-Ø t'äyyäk'-Ø(-at).
Kebede Alemitu-ACC CM-3SMS-work.IMPF-3SMS urge.PF-3SMS(-3SFO)

One reviewer questions whether adjunct control exists in Amharic, and if yes, whether object control is allowed in such cases. As we demonstrated in (19), subject control into adjunct clauses is possible. The following example (42), in which the matrix subject Kebede controls the subject of the adjunct clause, is another piece of evidence:

(42) käbbädä alämitu-n gänzäb l-i-k'otɨb-Ø kä-sɨra
Kebede Alemitu-ACC money CM-3SMS-save.IMPF-3SMS from-work
abbarär-Ø-at.
fire.PF-3SMS-3SFO
'Kebede$_i$ fired Alemitu [PRO$_i$ to save money].'

Object control in adjunct clauses is extremely rare, if existent at all. Probably the only object-control verb which can take an adjunct clause is *rädd-* 'help'.[9] In English, *help* is ambiguous between an argument-taking verb (i.e. the embedded clause is an argument of 'help', e.g. *John helped Mary (to) pass the driving test*) and a transitive verb which can be further followed by an adjunct clause (e.g. *John helped Mary in order to pass the driving test*). In Amharic, the two interpretations of the adjunct clause selected by *rädd-* can be distinguished by the use of *ʔiɨndä-* and *liɨ-* (43):

(43) a. käbbädä alämitu-n gänzäb ʔiɨndiɨ-t-k'ot'ɨb-Ø
Kebede Alemitu-ACC money CM-3SFS-save.IMPF-3SFS
ʔiɨ-rädd-Ø-at.
3SMS-help.PF-3SMS-3SFO
'Kebede helped Alemitu (such that) she saved money.'

b. ?käbbädä alämitu-n gänzäb liɨ-t-k'ot'ɨb-Ø
Kebede Alemitu-ACC money CM-3SFS-save.IMPF-3SFS
ʔiɨ-rädd-Ø-at.
3SMS-help.PF-3SMS-3SFO
'Kebede helped Alemitu to save money.'

The interpretations of (43a, b) are distinct from each other. In (43a), what Kebede helped Alemitu is saving money (e.g. make investments, opening a saving account, minimizing expenses, etc). The embedded clause in (43a) is realized simultaneously with the matrix clause. On the contrary, the adjunct clause in (43b) is analogous to an *object purpose clause* (Huettner 1989; Landau 2000, 2013), as it expresses the purpose of the matrix event without necessarily realizing it at the speech time. The semantic nature of *rädd-* is unclear and subject to more research, yet it is clearly distinct from English *help*. In English, *help* is ambiguous between subject and object control (44). By contrast, subject control by *rädd-* is strictly forbidden. Example (45a) shows that the near-synonymous verb *täßabbärä* 'assist', while similar to *rädd-*, is a subject-control verb. It can never function as an object-control verb (45b):

[9] While all native speakers would judge (43a) to be absolutely grammatical, the judgement for (43b) is not uniform.

(44) a. John helped to clean the house. [subject control]
b. John helped Mary to clean the house. [subject control]
c. John helped Mary to pass the exam (by offering private tuition). [object control]

(45) a. käbbädä bet-u-n l-y-as'äda-Ø täβabbärä-Ø.
Kebede house-DEF-ACC CM-3SMS-clean.IMPF-3SMS assist.PF-3SMS
'Kebede assisted (to) clean the house.'

b. *käbbädä alämitu-n bet-u-n l-y-as'äda-Ø
Kebede Alemitu-ACC house-DEF-ACC CM-3SMS-clean.IMPF-3SMS
täβabbärä-Ø-t.
assist.PF-3smS-3sfO

To summarize so far:

(46) a. The majority of Amharic control structures are exhaustive subject control.
b. Object control in embedded clauses is ungrammatical.
c. Object control in adjunct clauses is ungrammatical (with the exception of *rädd-* 'help').
d. Non-obligatory control is ungrammatical.

Questions arise as to why Amharic control structures are largely limited to subject control. We will return to this issue when the Movement Theory of Control (MTC) is further discussed in Section 6.

4.6 Classifications of control predicates

Given the previous observation that Amharic control predicates are more restricted, one ensuing question is whether it is possible to classify Amharic control predicates in a meaningful way. As we mentioned before, control predicates generally fall in two types, i.e. verbs of desire (desiderative) and irrealis modality.

4.6.1 Desiderative

Desiderative predicates constitute the majority of control predicates in Amharic. In many (though not necessarily all) cases, these predicates express the subject's volitional control over the actional event suggested by the control clause. This semantic class squares perfectly with Culicover & Jackendoff's (2001) semantic analysis of the volitional predicates, in which their subjects exercise a volitional control over the action as suggested by the control clause. Moreover, as shown in the examples in (47), all embedded subjects are coreferential with the embedded subjects as the unique controller.

(47) a. parisɨ-n l-i-goßäň-Ø assäßä-Ø.
Paris-ACC CM-3SMS-visit.IMPF-3SMS intend.PF-3SMS
'He intended to visit Paris.'

b. parisɨ-n l-i-goßäň-Ø täsfa adärägä-Ø.
Paris-ACC CM-3SMS-visit.IMPF-3SMS hope.PF-3SMS
'He hoped to visit Paris.'

c. käbbädä l-i-bärr-Ø märrät'ä-Ø.
Kebede CM-3SMS-fly.IMPF-3SMS prefer.PF-3SMS
'Kebede preferred to fly.'

d. käbbädä addis aßäßa l-i-hed-Ø wäddädä-Ø.
Kebede Addis Ababa CM-3SMS-go.IMPF-3SMS like.PF-3SMS
'Kebede liked to go to Addis Ababa.'

e. käbbädä bet li-sära-Ø allämä-Ø.
Kebede house CM-3SMS-work.IMPF-3SMS aim.PF-3SMS
'Kebede aimed to build a house.'

f. käbbädä guzo-w-in l-y-ak'k'id-Ø assäbä-Ø.
Kebede trip-DEF-ACC CM-3SMS-plan.IMPF-3SMS think.PF-3SMS
'Kebede thought of planning his trip.'

Since object control structures are mostly banned in Amharic (46), all matrix predicates in (47) are subject control predicates. Semantically, most subject-control predicates require a volitional subject who exercises control over a "self-action", i.e. the embedded subject is also the action doer of the embedded event. One can describe the semantics of desiderative predicates as scoping over an irrealis verbal event expressed by the control clause. That is to say, all embedded events in (47) are not realized at the time when the matrix subject expresses his/her attitude (e.g. intending, hoping, preferring, liking). Irrealis intentionality seems to be one defining property of Amharic control clauses. While volitional verbs such as those in (47) typically select for irrealis embedded events, it is also possible for non-volitional desiderative predicates to select for irrealis embedded events formed by the CM *li-*. For instance, in (48), the matrix subject expresses his fear that the embedded event will be realized in the future.

(48) a. käbbädä alämu-n li-y-agäňňä-Ø-w färra-Ø.
Kebede Alemu-ACC CM-3SMS-meet.IMPF-3SMS-3SMO afraid.PF-3SMS
'Kebede is afraid to meet Alemu.'

b. käbbädä alämu-n li-y-agäňňä-Ø-w
Kebede Alemu-ACC CM-3SMS-meet.IMPF-3SMS-3SMO
a-y-fälli-Ø-mm.
NEG-3SMS-want.IMPF-3SMS-NEG
'Kebede avoids to meet Alemu.' (Lit. Kebede doesn't want to meet Alemu)

c. käbbädä alämu-n li-y-agäňä-Ø-w gʷagʷa-Ø.
Kebede Alemu-ACC CM-3SMS-meet.IMPF-3SMS-3SMO eager.PF.3SMS
'Kebede was eager to meet Alemu.'

Moreover, as we mentioned above, the subject of desiderative predicates can be the weather noun, such as *zinab* 'rain':

(49) zinab l-i-mät'a-Ø yi-fälli-Ø-all-Ø.
rain cm-3SMS-come.IMPF-3SMS 3SMS-want.IMPF-3SMS-AUX.NPST-3SMS
'The rain is about to come.' (lit. the rain wants to come.)

To summarize so far:

(50) The Amharic desiderative predicates in control structures are compatible with volitional and non-volitional matrix subject.

4.6.2 Modal

Since Amharic control expresses a prospective event, we expect that modal predicates assume a similar function. Cross-linguistically, one always encounters languages in which control predicates and modal predicates behave identically with respect to Equi-deletion

(Sharvit 2003). Amharic displays an identical observation. Example (51a) is a case of dynamic modal predicates such as *čal-* 'able', whereas (51b) consists of the epistemic modal predicates *tagäbb-* 'should':

(51) a. tɨmhɨrt-u-n l-i-k'ät't'ɨl-Ø čalä-Ø.
study-DEF-ACC CM-3SMS-continue.IMPF-3SMS able.PF-3SMS
'He is able to continue his study.'

b. fätäna-w-ɨn l-y-alf-Ø
examination-DEF-ACC CM-3SMS-pass.IMPF-3SMS
yi-ggäbba-w-all-Ø.
3SMS-should.IMPF-3SMS-AUX.NPST-3SMS
'He should pass the examination.'

One can understand the compatibility of dynamic and epistemic modality with control structures if we focus on the intensionality of these modal predicates. Dynamic modality is a type of event modality in which the conditioning factors are internal to the individual (Palmer 2001). The use of *čal-* 'able' in (51a) suggests that continuing study is within the capability of the matrix subject, and this is independent of any external conditions. Example (51b) is trickier. The use of the epistemic modal predicate *tagäbba-* 'should' is understood dynamically, i.e. passing the examination is within the capacity of the matrix subject (e.g. he is hardworking) or by implication (e.g. the overall passing rate is high).

By contrast, modal predicates which select non-prospective events are not compatible with control. This prediction seems to be borne out for deontic modal predicates. In (52a, b), the modal predicates *alläbbät-* 'must' and *asfällägä-* 'need' must be interpreted deontically. For (52a), the embedded event of continuing his study is an obligation for the matrix subject, whereas in (52b) working is a responsibility on the part of the matrix subject. Neither is compatible with control:

(52) a. *käbbädä tmhɨrt-u-n l-i-k'ät'ɨl-Ø alläbbät-Ø.
Kebede study-DEF-ACC CM-3SMS-continue.IMPF-3SMS must.PF-3SMS
'Kebede had to continue his studies.'

b. *käbbädä sɨra l-i-sära-Ø asfälägä-Ø-w.
Kebede work CM-3SMS-work.IMPF-3SMS need.PF-3SMS-3SMO
'Kebede needed to work.'

4.6.3 *Try*-predicates

The third major class of control predicates in Amharic is the verbs of attempt, e.g. *mokärä-* 'try'. This class of predicates is arguably distinct from the aforementioned control predicates in that they consist of an extensional component. Unless it is otherwise stated, for all the examples in (53), not only has the matrix subject expressed an attempt for the realization of the embedded event, but some actions have been realized by the subject:

(53) a. käbbädä paris-ɨn l-i-goßäň-Ø mokärä-Ø.
Kebede Paris-ACC CM-3SMS-visit.IMPF-3SMS try.PF-3SMS
'Kebede tried to visit Paris.'

b. käbbädä bet l-i-sära-Ø täfč'äräčč'ärä-Ø.
Kebede house CM-3SMS-work.IMPF-3SMS struggle.PF-3SMS
'Kebede struggled to build a house.'

c. käbbädä bet l-i-sära-Ø t'ärä-Ø.
Kebede house CM-3SMS-work.IMPF-3SMS strive.PF-3SMS
'Kebede strived to build a house.'

d. käbbädä l-i-bäla-Ø s'älläyä-Ø.
Kebede CM-3SMS-eat.IMPF-3SMS pray.PF-3SMS
'Kebede prayed to eat.'

It has been argued that the embedded clauses selected by *try*-predicates contain a definitive extensional component. For instance, Sharvit (2003) lists (54) to demonstrate the extensional semantics of the embedded clauses. The object *a tomato* in the embedded clauses receives different interpretations in (54a, b). While it is ambiguous between an existential and a non-existential reading in (54a), it must be interpreted as existential in (54b):

(54) a. John wanted to cut a tomato. [existential/non-existential]
b. John tried to cut a tomato. [existential/#non-existential]

The observation that English *try*-predicates consist only of an extensional component poses a challenge to our analysis that *li-* is a prospective aspectual marker and the control clause denotes an irrealis event. This "extensional" approach to *try*-predicates is further discussed by Wurmbrand (2014) who considers *try*-predicates as selecting a "tenseless simultaneous infinitives". To Wurmbrand, *try* belongs to the same natural class with other aspectual verbs (e.g. *begin*) and raising verbs (e.g. *seem*). Examples in (55) show that the embedded events must be time-dependent of the matrix predicate (Wurmbrand 2014: 436):

(55) a. Yesterday, John tried/began/managed to sing (*tomorrow/*next week).
b. The bridge began/seemed to tremble (*tomorrow/*next week).

We do not agree with Wurmbrand's analysis of *try*-predicates as selecting tenseless simultaneous infinitives. We claim that *try*-predicates highlight the intensional component which is compatible with the semantic requirement for the control clauses in Amharic. More details will be given in Section 7.

5 Syntactic representation of Amharic control structures

In this section, we discuss the two major proposals for the syntactic structure of control in detail, namely Landau (2000, 2003, 2004, 2013) (Section 5.1) and Wurmbrand (2014) (Section 5.2).

5.1 Landau (2000, 2003, 2004, 2013)

The aforementioned discussion of the morphosyntactic properties of control structures in Amharic directly sheds light on some recent approaches to control. In particular, we claim that Amharic control structures question the seminal work by Landau (2000, 2003, 2004, 2013). Landau's contribution to the study of control structures is at least two-fold. First of all, he distinguishes various classes of control predicates in terms of whether they allow the possibility of exhaustive or partial control. As we discussed before, a structure allows exhaustive control if the controller (i.e. the matrix subject) and PRO (i.e. the embedded subject) are referentially identical to each other. That is to say, the referent of PRO is exhaustively coreferential to that of the matrix subject and nothing else. Partial control suggests that the reference of PRO does not need to be exhaustively coreferential to the

matrix subject. The textbook examples are shown in the following. Examples in (56) are exhaustive control (EC), and those in (57) partial control (PC):

(56) *Exhaustive control* (EC)
a. John$_1$ managed [PRO1$_{1/*1+}$ to gather at 6].
b. The chair$_1$ began [PRO$_{1/*1+}$ meeting without a concrete agenda].

(57) *Partial control* (PC)
a. The chair$_1$ preferred [PRO$_{*1/1+}$ to gather at 6].
b. Bill$_1$ regretted [PRO$_{*1/1+}$ meeting without a concrete agenda].

Landau argues that the control type is predetermined by the control predicates. Predicates which select an EC-complement include implicative (e.g. *dare, manage*), aspectual (e.g. *begin, stop*) and modal (e.g. *able, capable*) predicates. By contrast, predicates which select a PC-complement include desiderative (e.g. *want, prefer*), interrogative (e.g. *wonder, ask*), and factive (e.g. *hate, regret*) predicates. Recall that Amharic control predicates are restricted to desiderative, modal and *try*-predicates (Section 4.6), and moreover, they only allow exhaustive subject control (Section 4.5). By contrast, the following examples show clearly that other potential English control predicates such as deontic modal, factive, aspectual, interrogative and propositional, are unavailable in Amharic control:

(58) a. *tɨmhɨrt-u-n l-i-k'ät't'ɨl-Ø allläbbät-Ø. [deontic]
study-DEF-ACC CM-3SMS-continue.IMPF-3SMS must.PF-3SMS
b. *bä-sɨbsäba-w l-i-ggäǎ-Ø astawäsä-Ø. [factive]
with-meeting-ACC CM-3SMS-attend.IMPF-3SMS remember.PF-3SMS
c. *gɨdgɨdä-w-ɨn l-i-k'äbba-Ø ʤämmärä-Ø. [aspectual]
wall-DEF-ACC CM-3SMS-paint.IMPF-3SMS begin.PF-3SMS
d. *l-i-dännɨs y-awk'-Ø-all-Ø. [interrogative]
CM-3SMS-dance.IMPF 3SMS-know.IMPF-3SMS-AUX.NPST-3SMS
e. *almaz-ɨn l-i-räda-Ø tänaggärä-Ø. [propositional]
Almaz-ACC CM-3SMS-help.IMPF-3SMS announce.PF-3SMS

The dichotomy between EC and PC is pivotal to Landau's hypothesis, and this division becomes a consensus among syntacticians in the sense that any subsequent work on control structures needs to take this division into account. In addition, Landau further claims that the type of control corresponds nicely to the semantic features of the embedded clause. In particular, he makes the following claim (Landau 2004):

(59) PC-complements are tensed [+T]; EC-complements are untensed [–T].

Tense feature [±T] is a semantic feature which determines the temporal specification of events. Tensed complements mean that they can express a time-independent event, whereas the temporal specification of untensed complements must be dependent on that of the matrix predicate. The relation between the type of control and tense features is illustrated as the following example. Example (60a) is exhaustive control given the matrix predicate *manage*, and as a result the embedded clause is [–T] which means that the temporal specification must be dependent on that of the matrix clause. The use of *tomorrow* in the embedded clause is therefore ruled out. On the contrary, example (60b) is grammatical with *tomorrow* in the embedded clause since the matrix predicate *hope* selects a partial control complement which is [+T].

(60) a. *Yesterday, John managed to solve the problem tomorrow.
b. Yesterday, John hoped to solve the problem tomorrow.

However, as we showed before, Landau's classification finds little application in Amharic, as Amharic control predicates are much more restricted. We guess that the driving force stems from the semantic function of *li-* which determines that the control clause must express intensional semantics. This immediately rules out lots of potential control predicates defined by Landau. Landau further extends the split between EC and PC to the general typology of control structures. In particular, he postulates that whether a structure allows control can be informed by the value of the formal features in the embedded clause. Recall that the tense feature [±T] is argued to correspond to the type of control (i.e. EC vs. PC). Landau enriches the features and includes [±Agr] in the embedded clause as a diagnostic of the control type. [+Agr] means that the embedded predicate/T bears full-fledged phi-features, whereas embedded Ts with [–Agr] do not. This is shown in the table (61) (Landau 2004: 869; adjusted by Boeckx et al. 2010: 24):

(61)

	Obligatory control				No control	
	EC-infinitive	Balkan C-subjunctive	Hebrew 3rd person subjunctive	PC-infinitive	Balkan F-subjunctive	Indicative
I	[–T, –Agr]	[–T, +Agr]	[+T, +Agr]	[+T, –Agr]	[+T, +Agr]	[+T, +Agr]
C	[–T]	[–T]	[+T, +Agr]	[+T, (+Agr)]	[+T, +Agr]	Ø

Details aside, the upshot of (61) is that control follows the elsewhere condition, i.e. control is allowed in almost all combinations of [T] and [Agr] (i.e. [+T, +Agr], [+T, –Agr], [–T, +Agr] and [–T, –Agr]). The only case in which control is strictly ruled out is if the embedded T bears [+T, +Agr] and the embedded C is empty. Note that Landau makes two important assumptions here: (i) the tense feature [T] is a semantic feature (Landau 2004: 839), (ii) a TP and a CP are projected as the universal structural configuration of the control clause. The second assumption, however, contradicts our early claim that Amharic control clause is structurally deficient (Section 2). In the following subsection, we shall introduce an alternative syntactic representation proposed by Wurmbrand (2014).

5.2 Wurmbrand (2014)

Wurmbrand (2014) claims that temporal specification of events can be represented independently of a TP projection, and the tense feature may not be indispensable in expressing temporal events. In addition to Tense, Aspect and Mood can also express temporal/intensional specifications of an event. Along this line of idea, Wurmbrand (2003) studies future infinitives and claimed that they are tenseless (i.e. no TP) even though they can express a futuristic meaning. The following German examples (62) can verify this claim. (62) shows that while both *beschloß* 'decided' and *versuchte* 'tried' select a future irrealis embedded event, they differ with respect to the use of temporal adverbs. The PP *in zwei Monaten* 'in two months' is compatible with *beschloß* (62a), but not with *versuchte* (62b) (Wurmbrand 2003: 70–71):

(62) a. Hans beschloß Maria in zwei Monaten zu besuchen.
John decided Mary in two months to visit
'John decided to visit Mary in two months.'

b. *Hans versuchte María in zwei Monaten zu besuchen.
John tried Mary in two months to visit
'John tried to visit Mary in two months.'

How can syntactic representation express the future irrealis interpretation in the absence of TP? Wurmbrand (2014) adopts the spirit of Condoravdi (2002), Kaufmann (2005), and Copley (2009) and claims that future infinitives contain a future modal operator *woll* instead of a future tense feature. The semantic function of *woll* is to express posterior modality (Wurmbrand 2014: 412). In English, the present future *will* and past future *would* are derived if *woll* combines with the corresponding tense feature (i.e. PRES and PAST, respectively). To schematize (Wurmbrand 2014):

(63) a. finite *will*: [$_{TP}$ T [PRES] [$_{wollP}$ WOLL [$_{vp}$]]]
morphological spell-out: PRES + WOLL → *will*

b. finite *would*: [$_{TP}$ T [PAST] [$_{wollP}$ WOLL [$_{vp}$]]]
morphological spell-out: PAST + WOLL → *would*

c. nonfinite future: [$_{wollP}$ WOLL [$_{vp}$]]]
morphological spell-out: WOLL → Ø

How does the *woll* in English future infinitives shed light on the grammatical expression of intensionality in Amharic control? Recall that one salient distinction between imperfectives in main and embedded clauses in Amharic is that a tense auxiliary must be used in the former, but not in the latter. We repeat the following examples, in which the tense auxiliaries determine the temporal events (indicated by the use of different temporal adverbs):

(64) käbbädä <*tɨnant/ʔahun/nägä> yɨ-bäl-Ø-all-Ø.
Kebede yesterday/now/tomorrow 3SMS-eat.IMPF-3SMS-AUX.NPST-3SMS
'Kebede is going to eat <*yesterday/now/tomorrow>.'

(65) käbbädä <tɨnant/*ʔahun/*nägä> yɨ-bäla-Ø näbbär.
Kebede yesterday/now/tomorrow 3SMS-eat.IMPF-3SMS AUX.PST
'Kebede was eating/used to eat <yesterday/*now/*tomorrow>.'

As we suggest in Section 2 (and moreover in footnote 2), the control structure may not contain a C, which suggests that the embedded T does not inherit tense (e.g. present, past), tense-like features (e.g. modality) and phi-features (in the sense of Chomsky 2008). The semantic interpretation of posterior modality of the control clause must be derived by *li-* as the prospective marker:

(66) Amharic prospective aspectual marker *lɨ-* is semantically interpreted as the posterior modal operator.

The use of a prospective aspect to indicate future orientation of an event has been noted by Kratzer (2011) and Matthewson (2012) (while studying the semantics of epistemic and circumstantial modals). Both argue that the future orientation of English modals such as *will* and *might* is given by the viewpoint prospective aspect. What is unique in Amharic is that the prospective marker is overt, whereas the English prospective marker is null. Notice that viewpoint aspect relates event time and reference time, and prospective aspect entails that the event time is subsequent to the reference time. This is a desirable outcome since the control clause marked by *li-* is not necessarily subsequent to the speech time. It can be productively used from the past-tense perspective (i.e. future-in-the-past reading).

The following structural description (67) for Amharic control clause is thereby proposed. The embedded T is fully inflected with phi-features and establishes a long-distance Agree relation with the matrix T. Nevertheless, the embedded T does not bear any tense/tense-like features. It selects the grammatical (outer) aspectual phrase $Asp_{outer}P$, of which the prefix *li-* is its head. Moreover, Aspect constitutes a shell structure in the sense that the grammatical aspectual head selects a lexical (inner) aspectual head (Asp_{inner}) which is specified for [-perf] feature. To schematize:

(67) $[_{TP}$ PRO-φ_i T-φ_i $[_{Asp(outer)P}$ *li-* $[_{Asp(inner)P}$ [-perf] $[_{vp}$ V-φ_i]]]]

6 Against the Movement Theory of Control (MTC)

Any discussion of the syntactic representation and operation of control structures would need to address their formal relation with raising structures and moreover A-movement. Proponents of the Movement Theory of Control (MTC) (Boeckx & Hornstein 2003; 2006a, b; Boeckx, Hornstein & Nunes 2010) claim that the MTC is more scientifically parsimonious than the PRO-analysis (Section 4.4) as constituting an independent module in grammar. Conceptually speaking, PRO and NP-traces exhibit identical properties in terms of licensing conditions (e.g. c-command, minimality) and interpretive properties (i.e. coindexation with the antecedent). Accordingly, the following structural descriptions of control and raising examples should receive a unified analysis:

(68) a. [John$_i$ seemed [t$_i$ to kiss Mary]]
b. [John$_i$ tried [PRO$_i$ to kiss Mary]]

Certainly while the MTC is favored by Occam's razor, the theory inevitably complicates the theory of movement, especially that of raising, which is motivated by uninterpretable feature checking (in the sense of Chomsky 1995). The primary interpretive distinction between raising and control is that for the former, the matrix subject is not the thematic subject of the matrix predicate. That is to say, John is not the 'seemer' in (68a), whereas John is both the trier and kisser in (68b). As a consequence of MTC, the proposed A-chain involved in the derivation of control structures will receive two theta roles, in violation of the chain condition (Chomsky & Lasnik 1993):

(69) (E)very argument chain must be headed by a Case position and must terminate in a θ-position (the Chain Condition).

While the descriptive power of MTC is subject to cross-linguistic scrutiny, we can safely claim that the theory of control is parasitic on the theory of raising. Empirically, the MTC appears to make the following prediction:

(70) Within a language L, the structural description for control is analogous to that for raising.[10]

[10] The MTC argues that the major (if not the only) difference between raising and control lies in the semantics. That is to say, control involves movement to a thematic position, whereas raising is movement to a non-thematic position. However, it is evident that the MTC assumes that raising/control resorts to the same grammatical device and equally involves A-movement (Boeckx, Hornstein & Nunes 2010: 36).

An empirical advantage of (70) is that some non-typical cases of control can be properly described. The finite control in (71) can be analogized to hyper-raising (72), at least in Greek and Romanian:

(71) a. *Greek* (Terzi 1997)
I Maria prospathise na divasi.
the Maria tried.3S SUBJ read.3S
'Maria tried to read.'

b. *Romanian* (Dobrovie-Sorin 1994)
Ion vrea să plece devreme mîine.
Ion want.3S SUBJ leave.3S early tomorrow
'Ion wants to leave early tomorrow.'

(72) a. *Greek* (Alexiadou & Anagnostopoulou 1998)
Ta pedhia dhen fenonte na doulevoun.
The children not seem.3PL SUBJ work.3PL
'The children do not seem to work.'

b. *Romanian* (Dobrovie-Sorin 1994)
Copiii tăi par să fie foarte obosiți.
Children your seem.3PL SUBJ be.3PL very tired
'Your children seem to be very tired.'

Boeckx, Hornstein & Nunes (2010) further argue that (71) and (72) can receive an A-movement analysis, in which the embedded subject undergoes A-movement to the matrix subject position. Comparing with prototypical cases of A-movement in which the trace position does not receive case from the embedded T, the embedded clauses in (71) and (72) contain a subjunctive marker which renders the embedded T deficient (i.e. [–T]), hence the motivation for A-movement. Another example which they cite is Brazilian Portuguese (BP) (Rodrigues 2002, 2004; Ferreira 2004, 2009). Example (73a) shows that BP does not allow third-person singular pro-drop, whereas (73b) is a case of obligatory control (OC) into indicative clauses:

(73) *Brazilian Portuguese* (Rodrigues 2002, 2004; Ferreira 2004, 2009)
a. *Comprou um carro novo.
bought a car new
'She/he bought a new car.'

b. O Jõao disse que comprou um carro novo.
the Jõao said that bought a car new
'Jõao said that he bought a new car.'

Boeckx, Hornstein & Nunes (2010) claim that BP presents a strong case in favor of the MTC. Their reasoning is that the verbal paradigm in BP distinguishes various types of phi-features. Some phi-features (e.g. *eu* 'I' requires the present indicative form such as *canto* 'to sing') must be specified in the course of numeration, whereas others receive a default value given their preponderance (e.g. the subject pronoun *você* 'you (SG)', *ele* 'he', *ela* 'she' and *a gente* 'we' share the same present indicative form such as *canta* 'to sing'). It is the latter which are considered as the incomplete/deficient T and therefore its embedded subject needs to A-move to the matrix subject position. The same motivation for hyper-raising in BP exerts an equal force on typical raising and control structures. In (74), the embedded subject *os estudantes* 'the students' establishes phi-agreement with the embedded T. It can

either stay in-situ (74a) or undergoes A-movement to the matrix subject position (74b). In the control structure (75), the matrix subject *vitima* 'victim' is feminine regardless of whether the victim is a male or a female. The observation that the passive participle *transferida* 'transferred' is used shows that it establishes a phi-agreement relation with the embedded subject. The MTC advocates the claim that the embedded subject undergoes A-movement to the matrix subject position and moreover checks the additional theta role (i.e. the trier) (Hornstein 1999, 2004, 2006b; Boeckx, Hornstein & Nunes 2010).

(74) *Brazilian Portuguese*

a. Parece/acabou que os estudantes viajaram mais cedo.
Seem.3S/finished.3S that the students traveled.3PL more early
'It seems/turned out that the students traveled earlier.'

b. Os estudantes parecem/acabaram que viajaram mais cedo.
the students seem.3PL/finished.3PL that traveled.3PL more early
'The students seem to have traveled earlier.'/'The students ended up traveling earlier.'

(75) *Brazilian Portuguese*

A vítima tentou ser transferida/??transferido para a delegacia de polícia
the victim tried be transferred.F/transferred.M to the station of police
de College Park.
of College Park
'The victim tried to be transferred to the police station at College Park.'

However, applying the MTC to Amharic control in one fell swoop is not fully supported by data. The crucial evidence lies in the fact that Amharic hyper-raising constructions do not involve A-movement. At least two observations lead us to this conclusion. First, the motivation for the MTC stems from the claim that A-movement from the embedded subject position is driven by the incompleteness of phi-features. On the contrary, Amharic control clauses are fully inflected with phi-features, which renders A-movement of the embedded subject unmotivated. Second, Amharic hyper-raising is clearly distinct from BP and other Bantu languages (Carstens 2011; Carstens & Diercks 2013). Lumsden & Halefom (2011) show that (76a, b) are not paraphrases of each other. They differ in the verbal agreement of the matrix T, i.e. *säwočču* 'the men' is the embedded subject in (76a) and the matrix subject in (76b). Lumsden & Halefom point out that there exists an interpretive distinction. Example (76a) can be used as a response in a context-neutral situation (e.g. a sheep is missing in the souq). By contrast, (76b) can only be uttered if the speaker has prior knowledge about the men in the sentence (e.g. the speaker has perceived that the men have been celebrating for the Eid).[11] (76c) shows that an overt pronoun is banned at the embedded subject position (Yimam 1990):

(76) a. säw-očč-u bäg yä-gäzz-u yi-mäsl-Ø-al-Ø.
man-PL-DET sheep REL-buy.PF-3PL 3SS-seem.IMPF-3SS-AUX.NPST-3SS
'It seems that the men have bought a sheep.'

b. säw-očč-u bäg yä-gäzz-u yi-mäsl-al-u.
man-PL-DET sheep REL-buy.PF-3PL 3PLS-seem.IMPF-AUX.NPST-3PLS
'The men seem that (they) have bought a sheep.'

[11] As a result, (76b) looks like a copy raising construction in which the sentential subject is the *perceptual source* (Rogers 1971, 1972; Asudeh & Toivonen 2005).

c. *säw-očč-u ʔɨnnäsu bäg yä-gäzz-u
man-PL-DET they sheep REL-buy.PF-3PL
yi-mäsl-Ø-al-u.
3PLS-seem.IMPF-3PLS-AUX.NPST-3PLS

One reviewer points out correctly that the interpretative distinction in (76a, b) does not suffice to argue against the A-reconstruction (and moreover the MTC) analysis to Amharic hyper-raising, as the sentential subject *säwočču* 'the men' is specific which makes the scope effect (if any) hardly visible. Let us look at the following examples in which the subject *ʔɨyyandandu bäg* 'every sheep' is indefinite. While both (77a, b) are grammatical, their interpretations differ with respect to scope, i.e. 'every' scopes over 'two' in (77a), whereas 'two' scopes over 'every' in (77b). This suffices to show that only the surface scope is salient in Amharic hyper-raising, whereas scope reconstruction is deemed impossible:[12]

(77) a. ʔɨyyandandu bäg lä-hulät ʔɨräň-očč yä-tamämä
every sheep to-two shepard-PL REL-sick
yɨ-mäsl-Ø-al-Ø.
3SMS-seem.IMPF-3SMS-AUX.NPST-3SMS
'Every sheep seems to two shepards to be sick.' (every > two)

b. lä-hulät ʔɨräňa ʔɨyyandandu bäg yä-tamämä
to-two shepards every sheep REL-sick
yɨ-mäsl-Ø-al-Ø.
3SMS-seem.IMPF-3SMS-AUX.NPST-3SMS
'For two shepards, each sheep seems to be sick.' (two > every)

The interpretive distinction can be attributed to an instance of anti-A-reconstruction in (76b) and (77b). Given the observation of anti-A-reconstruction in Amharic hyper-raising, it stands to reason to argue against MTC:

(78) a. The embedded subject of the control structures in Amharic is a PRO.
b. Amharic control does not support the Movement Theory of Control, since A-movement does not exist.

7 *Try*-predicates are intensional

Recall that Amharic control predicates fall into three major classes, namely, desiderative, modal and *try*-predicates. While Landau considers *try* as an exhaustive control (EC) predicate, *try* does not belong to implicative, aspectual or modal predicates. In her influential paper, Karttunen (1971) claimed that verbs like *manage* and *try* belong to the class of implicative verb and non-implicative verbs, respectively:

[12] The reviewer lists the coexistence of (i) and (ii) in English and argues that the speaker's preference for (i) over (ii) out of context cannot rule out the A-movement analysis of (ii):

(i) It seems that John is mad.
(ii) John seems to be mad.

However, the A-movement construction of (ii) is incompatible with (77b) in that the embedded clause of the latter consists of the relativizer *yä-*, and the embedded predicate is fully inflected with phi-features. Instead, (77b) is more compatible with (iii-iv) which are cases of copy raising (not typical raising) in English (Rogers 1971, 1972; Asudeh & Toivonen 2005). Notice that the embedded clauses of copy raising are consistently finite:

(iii) They seem like they've missed the bus.
(iv) John appears as if he is tired.

(79) a. Implicative
manage, remember, bother, get, dare, care, venture, condescend, happen, see fit, be careful, have the misfortune/sense, take the time/opportunity/trouble, take it upon oneself

b. Non-implicative
agree, decide, want, hope, promise, plan, intend, try, be likely, be eager/ready, have in mind

The defining property of implicative verbs is that asserting (80a) automatically implicates the truth of (80b). However such implication does not exist for non-implicative verbs, as shown in the contrast in (81):

(80) a. John managed to solve the problem.
b. John solved the problem.

(81) a. John tried to solve the problem.
b. #John solved the problem.

As we can see in (79b), putting *try* in the same class with *want* and *hope* strongly suggests that it belongs to the class of desiderative predicates. Its classification stands in stark contrast with Wurmbrand (2014) who considers *try* as selecting tenseless simultaneous infinitives. Recall Wurmbrand's analysis stems from Sharvit (2003) who claims that *try* has an extensional component. In particular, Sharvit states explicitly that *try* differs from other intensional predicates such as *want* and *expect* in that the former expresses some activity in addition to the speaker's attitude. That is to say, the semantics of *try* must consist of an ongoing (i.e. extensional) event.

However, some recent analyses strongly cast doubt on the extensionality of *try*-predicates. Indeed, even Sharvit acknowledges in her concluding paragraph that it is possible that the concept of *try/attempt* is purely intensional in other languages. For instance, both Hebrew verbs *nisa* and *hiStadel* can be translated as 'try', yet the former receives an extensional reading, whereas the latter is overwhelmingly intensional (Wurmbrand 2014: 443). From this, we claim that while intensionality is an indispensable component of *try*, whether extensionality should be included as one component is subject to variation. Grano (2011) claims that the concept of trying denotes a mental action whose actional consequence is not necessarily realized. Moreover he points out that the consequence of the mental action of trying may not be realized in the real world. Thus *try*-predicates should be clearly distinguished from other progressives which suggest an ongoing event. Consider the following pairs of contrast given by Grano:

(82) a. #John was unknowingly paralyzed and was raising his arm.
b. John was unknowingly paralyzed and tried to raise his arm.

(83) a. #John was making two plus two equal five.
b. John tried to make two plus two equal five.

Example (82a) and (83a) are semantically weird (or logically false, to say the least). In (82a), given that John is paralyzed, it is virtually impossible for him to raise his arm. The same applies to (83a) as it is impossible for John in reality to conduct an ongoing calcu-

lating event which results to the equation "two plus two equal five" (unless John is being self-deceptive and/or consciously flouts some logical steps). By contrast, the use of *try* makes the sentences felicitous. The paralyzed John can definitely try (without any foreseeable success) to raise his arm, or to prove an impossible equation, without conducting any observable action (since any such action will be doomed to fail).

Let us return to Amharic. Example (84) shows that the subject can express her mental action of trying without realizing any physical action:

(84) lɨ-tɨ-däwwɨl-ɨll-ä-t mokkärä-čč, gɨn sɨlk-u
CM-3SFS-ring.IMPF-BEN-3SFS-3smO try.PF-3SFS but phone-DEF
a-y-sära-Ø-mm.
NEG-3SMS-work.IMPF-3SMS-NEG
'She tried to ring him, but the phone does not work.'

Moreover, the mental action of *try* can be remote from the attempted event, temporally and spatially. Consider the following examples:

(85) a. (tɨnantɨna) yä-bet sɨra-w-ɨn (zare)
(yesterday) homework-DEF-ACC (today)
li-č'ärɨs-Ø mokkärä-Ø.
CM-3SMS-finish.IMPF-3SMS try.PF-3SMS
'(Yesterday) he tried to finish the homework (today).'

b. obama (kä-amerika) binladɨn-ɨn (afganistan)
Obama (from-America) Bin Laden-ACC (Afghanistan)
l-i-gäll-Ø mokkärä-Ø.
CM-3SMS-kill.IMPF-3SMS try.PF-3SMS
'Obama tried (from America) to kill Bin Laden (in Afghanistan).'

If the two sentences are uttered without temporal and spatial specification, it is natural to consider the embedded clause as dependent on the matrix predicate, which in turn gives the feeling that *try* consists of an extensional component (as advocated by Sharvit 2003). However nothing forbids the embedded clauses to be interpreted independently of the matrix clause. In (85a), the time when the subject finishes the homework can be distinct from the time of trying, imagining that the homework requires a whole day of work. The same concept applies to spatial remoteness of the embedded clauses in (85b). It is plausible for Obama to exercise his attempt in America to kill Bin Laden who hides in Afghanistan. What is required is a logical relation (which can be regulated by some encyclopedia knowledge) which creates a link between the matrix event and the embedded event. In these cases, *try* does not have any extensional component, yet the sentence is still true as long as the subject has performed such as a mental action.[13]

8 The conative aspect

Having argued that the semantics of *try*-predicates (including Amharic *mokkär-*) fit in the semantics of control, we would like to point out that cross-linguistically, there are languages which grammaticalize the meaning of trying as a grammatical aspect. In

[13] This said, no one can try to finish the homework by sleeping or attempting nothing, or Obama cannot try to kill Bin Laden by playing pinball.

many cases, the imperfective verbs can express the meaning of trying. Let us look at two languages, Russian and Ancient Greek, as given by Vincent (2013):

(86) *Russian*

a. On rešil zadaču.
he solve.PF task.ACC
'He solved the problem.'

b. On rešal zadaču.
he solve.IMPF task.ACC
'He tried to solve the problem.'

(87) *Ancient Greek*
captābat plūmās.
catch.IMPF.3s feather.ACC.PL
'He constantly tried to catch the feathers.'

(86b) differs from (86a) in that the imperfective verb *rešal* in (86b) consists of trying as a semantic component, whereas the perfective verb *rešil* entails that the event is complete. The same observation is found in Ancient Greek, in which the imperfective verb implicates a trying activity. Vincent (2013) calls the use of imperfective aspect in expressing an attempt "conatives". A conative situation usually describes mere attempts without any implication of the completion of the attempted event. The reason we point this out is because Amharic control must contain an embedded imperfective clause, and concidently, *mokkär-* falls in one major class of control predicates. As a result, Amharic imperfective clauses can be interpreted conatively if they are selected by *li-* and the matrix predicate *mokkär-*. This does not necessarily entail that Amharic consists of a conative aspect, or that *li-* functions as a marker of conation (e.g. a conative modal as observed in other languages). While linguists (especially conceptual semanticists) would most likely assign the meaning of conatives as a semantic component of *mokärä-*, we merely mention that the use of imperfective aspect in the embedded clause is compatible with this usage.

9 Further issue: Distinction with nominal clauses

In the literature of Amharic grammar, the embedded clause formed by the prospective aspect marker *li-* is always compared with another embedded structure formed by the nominalizer *mä-*. One reviewer suggests that embedded clauses formed by the nominalizer *mä-* may demonstrate some properties of control structures. Native speakers always express the feeling that (88a, b) are semantically equivalent:

(88) a. wädä amerika l-i-hed-Ø fällägä-Ø.
to America CM-3SMS-go.IMPF.3SMS want.PF-3SMS
'He wanted to go to America.'

b. wädä amerika lä-mä-hed fällägä-Ø.
to America CM-NML-go want.PF-3SMS
'He wanted to go to America.'

Manahlot (1977) considered (88a, b) as forming two types of "nominal clauses".[14] The affinity between the two clause markers extends to matrix predicates which can optionally

[14] Indeed, the term "nominal clauses" are *de facto* embedded clauses in that they are subcategorized by the matrix predicate regardless of the semantic function. They are marked by different clause markers (CMs), namely *mä-*, *li-*, *ində-*, *ʔində-*, and *zänd-*.

selects an object, e.g. *gäbba-* 'promise'. Example (88a, b) show that the indirect object Almaz is optional (with a preposition *lä-*):

(89) a. käbbädä gänzäb-u-n nägä (lä-almaz)
Kebede money-DEF-ACC tomorrow (to-Almaz)
l-i-mälisi-lat k'al gäbba-Ø(-lat).
CM-3SMS-return.IMPF-3SMS-3SFO promise.PF-3SMS(-3SFO)
'Kebede promised Almaz to return the money tomorrow.'

b. käbbädä gänzäb-u-n nägä (lä-almaz) lä-mä-mäläs
Kebede money-DEF-ACC tomorrow (to-Almaz) CM-NML-return
k'al gäbba-Ø(-lat).
promise.PF-3SMS(-3SFO)
'Kebede promised Almaz to return the money tomorrow.'

However, a number of distinctions lead us to conclude that the *li-* and *mä-* are not identical, functionally and categorically. First, Manahlot (1977: 197) pointed out that the two markers exhibit different linear relations with the negative marker. While the negative marker occurs after *li-*, it occurs before *mä-*. (90c) shows that the negative marker also occurs before *inda-* (with gloss adjusted):

(90) a. l-alä-mä-hed fällägä-Ø.
CM-NEG-NML-go want.PF-3SMS
'He wanted not to go.'

b. l-a-yi-hed-Ø fällägä-Ø.
CM-NEG-3SMS-go.IMPF-3SMS want.PF-3SMS
'He wanted not to go.'

c. ʔind-a-n-hed-Ø fällägä-Ø.
CM-NEG-3PLS-go.IMPF-3PLS want.PF-3SMS
'He wanted us not to go.'

Another major distinction between *li-* and *mä-* is that the embedded verb of the former is fully inflected with phi-features which agree with the phi-features of the matrix subject. The embedded nominalized verb, on the contrary, cannot bear any agreement feature. This is shown by the contrast in (91), in which the use of agreement feature for the nominalized verb is ungrammatical:

(91) käbbädä gänzäb-u-n nägä lä-mä-mäläs(*-ilat)
Kebede money-DEF-ACC tomorrow CM-NML-3SMS-return-3SMS(-3SFO)
k'al gäbba(-lat).
promised(-3SFO)
'Kebede promised (her) to return the money tomorrow.'

Third, in addition to functioning as the direct object, the nominalized verb can function as the subject (Manahlot 1977: 76), contrary to control clauses formed by *li-*:

(92) a. asa mä-blat t'iru näw.
fish NML-eat good AUX.NPST
'Eating fish is good.'

b. *asa li-bla t'iru naw.
fish CM-eat good AUX.NPST

Fourth, adjunct clauses can be marked by *li-*. By contrast, nominalized verbs can only function as adjunct clauses if they are prefixed by the preposition *lä-*:

(93) a. liǰ-wa-n li-t-fäliɡ-Ø-äw mät't'a-čč.
son-POSS-ACC CM-3SFS-search.IMPF-3SFS-3SMO come.PF-3SFS
'She came to search for her son.'

b. liǰ-wa-n *(lä-)mä-fäläg mät't'a-čč.
son-POSS-ACC (to-)NML-search come.PF-3SFS
'She came for searching for her son.'

The difference between nominalized clauses (which are quite flexible) and control clauses (which are more restricted) can be attributed by their semantic functions, further shown by their matrix predicates. Manahlot already pointed out that the class of matrix predicates for the control clause formed by *li-* is more restricted than that for the nominalized clause formed by *mä-*. For instance, most aspectual verbs can subcategorize for the nominalized clause, but not the control clause:

(94) a. ma-t'nat ʤämärä-Ø. [aspectual]
NML-study begin.PF-3SMS
'He started to study.'

b. *ɡidɡidä-w-in li-k'äba-Ø ʤämärä-Ø.
wall-DEF-ACC CM-3SMS-paint.IMPF-3SMS begin.PF-3SMS

(95) a. ɡidɡidä-w-in mä-k'äbat ak'omä-Ø. [aspectual]
wall-DEF-ACC NML-paint stop.PF-3SMS
'He stopped painting the wall.'

b. *ɡidɡidä-w-in li-k'äba-Ø ak'omä-Ø.
wall-DEF-ACC CM-3SMS-paint.IMPF-3SMS stop.PF-3SMS

Moreover, factive and proposition-taking (e.g. interrogative, declarative) predicates are compatible with *mä-* clauses, but not *li-* clauses:

(96) a. bä-sibsäba-w mä-gäňät-u-n astawäsä-Ø. [factive]
with-meeting-DEF NML-attend-DEF-ACC remember.PF-3SMS
'He remembered attending the meeting.'

b. *bä-sibsäba-w li-gäň-Ø astawäsä-Ø.
with-meeting-ACC CM-3SMS-attend.IMPF-3SMS remember.PF-3SMS

(97) a. almaz-in bä-mä-rdat-u täs'äs'ätä-Ø. [factive]
Almaz-ACC with-NML-help-DEF regret.PF-3SMS
'He regretted for helping Almaz.'

b. *almaz-in l-i-räda-Ø täs'äs'ätä-Ø.
Almaz-ACC CM-3SMS-help.IMPF-3SMS regret.PF-3SMS

(98) a. mä-dänäs y-awk'-Ø-all-Ø. [interrogative]
NML-dance 3SMS-know.IMPF-3SMS-AUX.NPST-3SMS
'He knows dancing.'

b. *l-i-dänis-Ø y-awk'-Ø-all-Ø.
CM-3SMS-dance.IMPF-3SMS 3SMS-know.IMPF-3SMS-AUX.NPST-3SMS

(99) a. almaz-in mä-rdat-u-n astawäk'ä-Ø. [declarative]
Almaz-ACC NML-help-DEF-ACC announce.PF-3SMS
'He announced helping Almaz.'

b. *almaz-ɨn l-i-räda-Ø tänagärä-Ø.
Almaz-ACC CM-3SMS-help.IMPF-3SMS announce.PF-3SMS

Recently Stolen (2013) points out that the two types of clauses can be distinguished semantically. The use of *mä-* always implies a strong obligation for the embedded event to be realized. On the contrary, the clauses marked by *lɨ-* merely express the prospective aspect which is less obligatory (transcription and gloss adjusted):

(100) a. marta mä-zfɨn yɨ-gäb-at-all-Ø.
Marta NML-sing 3SFS-ought.IMPF-3SFS-AUX.NPST-3SFS
'Marta is obligated to sing.'

b. marta lɨ-t-zäfɨn-Ø yɨ-gäb-at-all-Ø.
Marta CM-3SFS-sing.IMPF-3SFS 3SFS-ought.IMPF-3SFS-AUX.NPST-3SFS
'Marta should sing.'

10 Conclusion

This paper focuses on the Amharic control structures and sheds light on their morphosyntactic properties and further theoretical consequences. Amharic control clauses are marked by the following properties: (i) the control clause is marked by clause marker (CM) *lɨ-* which is the prospective aspect marker, (ii) the embedded verb is imperfective, (iii) the embedded T is fully inflected for phi-features and they agree with the phi-features of the matrix subject, (iv) the embedded subject is PRO, and (v) only exhaustive subject control is licensed. There are three classes of control predicates, i.e. desiderative, modal and *try* (conative), all of which are compatible with irrealis intensionality. The observations of Amharic control support the PRO-analysis and argue against the Movement Theory of Control (MTC) (Hornstein 1999; Boeckx & Hornstein 2004, 2006b; Boeckx, Hornstein & Nunes 2010; Hornstein & Polinsky 2010) as A-movement does not exist in Amharic hyper-raising constructions (Lumsden & Halefom 2011). In addition, Amharic control presents evidence against Landau's theory of control. We have shown that Amharic control clauses are structurally deficient and are devoid of a CP projection as Landau claims. Instead they are compatible with Wurmbrand's (2001, 2004) proposal of future infinitives, and moreover the claim that the prospective aspect independently express posterior modality (Kratzer 2011; Matthewson 2012). The control clause contains a TP along with the projection of the viewpoint (outer) aspect, of which the prospective aspect marker *lɨ-* is the head. The grammatical aspectual head further selects a lexical aspectual head [-perf] which expresses the semantics of conativity.

Abbreviations

1, 2, 3 = person, F = feminine, M = masculine, S = singular, O = object, S = subject, T = tense marker, ACC = accusative, AUX = auxiliary, BEN = benefactive, BP = Brazilian Portuguese, CM = clause marker, COMP = complementizer, DEF = definite, EC = exhaustive control, IMPF = imperfective, MTC = Movement Theory of Control, NEG = negation, NML = nominalizer, NPST = non-past, OC = obligatory control, PC = partial control, PF = perfective, PL = plural, POSS = possessive, PROG = progressive, PST = past, REL = relativizer, SA = subject agreement, SUBJ = subjunctive. Numerals appearing before the subject agreement in Bantu languages represent a noun class.

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Competing Interests

The authors have no competing interests to declare.

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