

# Nonlocal selection--a case study on the complement clauses of Amharic

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## Abstract

Amharic has different types of complement clauses. These complement clause types are selected by different classes of verbs. The current paper sets out to study how exactly the selection of the complement clauses works.

In contrast to English and many other languages where the types of complementizers heading over the complement clauses appear to determine the selection, the complementizers have a little direct role in the selection mechanism in Amharic. The important attribute for the selection turns out to be the features available in the sub-CP domain. For a class of verbs selecting finite complement clause, the perfective aspect appears to be the crucial feature, whereas the imperfective feature is the target of nonfinite clause selecting predicates.

This kind of nonlocal kind of selection is at odds with the standard assumption that selection is effected via a strictly local relationship between the selector and the selectee syntactic objects. In this paper, I will argue that while the selection relation appears to be nonlocal, the locality assumption can still be saved if we allow Agree relationship to be established between the lower functional layers of the complement domain and the C head.

## Keywords

selection, complementation, Amharic, gerund, Agree, complementizer

# 1 Introduction<sup>1</sup>

Amharic has a number of complementizers which appear either attached to the verbs in the form of prefixes and suffixes or as independent clitics. Each of the complementizers displays quite distinct properties in their morphological form, types of hosts they attach on, and other attributes. The properties of complementizers, and the pattern of complementation is one of the least studied topics in Amharic linguistics. [Manahlot \(1977\)](#) is the only work which attempted to describe and explain complementation in Amharic.

[Noonan \(2007, 42\)](#) describes complementation as a “syntactic situation that arises when a notional sentence or predication is an argument of a predicate”. Languages use different strategies to put a predicate into an argument of another predicate. The use of specialized functional items or particles to turn clauses into arguments is one of the pervasive patterns across languages. Functional items which turn independent clauses into complements of other predicates are known as complementizers since [Bresnan \(1970\)](#).

A study of complement clauses goes much beyond the study of complementizers. At a general theoretical level, a syntactic study of complementation needs to address at least the following major issues:

- (a) The types and properties of the verbs that combine with the complement clauses.
- (b) The types and properties of linker (clause marker) items such as the complementizers
- (c) The properties of the subordinate clauses embedded, and the types of dependency relations they have with the matrix clauses—shared arguments, agreement patterns, etc.
- (d) Finally, the patterns of combinatorics: that is, what kinds of predicates do or do not combine with which types of complement clauses, and what factors do determine the combination.

In this paper, however, I will concentrate only on a subset of issues listed above. I start by investigating the types of selector predicates, the types of complementizers associated with each type of predicate, and the types of clauses embedded under them. That is to mean that clausal selection is the main focus of the current study.

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<sup>1</sup>**Glosses:** 1 = first person, 3 = third person, acc = accusative, aux = auxiliary, CAUS = indirect causative, CM = clause marker, def = definite, f = feminine, ipfv = imperfective, irr = irrealis, m = masculine, neg = negative, O = Object, pfv = perfective, pl = plural, poss = possessive, S = Subject, sg = singular.

**Acronyms:** Asp = Aspectual, Cog = Cognitive, Com = Communicative/utterance, Des = Desiderative, Inte = Intentional, Man = Manipulative, Mod = Modality, Perc = Perception, Perm = Permission, PMSF = The problem of multiple subcategorization frames, PRDG = The Problem from the Restrictedness of the Distribution of Gerundives, Pre = Pretense, Prop = Propositional attitude, SO = Syntactic Object.

There are two reasons why I will focus on the selection part. First, it is one of the most important theoretical issues. How a certain type of  $SO_\alpha$  combine with some other  $SO_\beta$ , but not with the other type  $SO_\gamma$  is one of the crucial issues that any principled theory of linguistics needs to address. Second, Amharic has displayed interesting, and at the same time, puzzling patterns concerning the clausal selection. Of these, the nonlocal relationship between the selector predicates and the lower clausal features such as the verbal aspect is the most puzzling from the theoretical perspective. Consider the following examples.

- (1) a. yosef məkina-it-u-n ʔndə-t'əggən-ə-at səmma-hu  
*Josef car-f-def-acc CM-repair.pfv-3msgS-3fsgO hear-1sgS*  
 'I heard that Josef has repaired the car.'
- b. \*yosef məkina-it-u-n ʔndə(i)-t'əggin-at səmma-hu  
*Josef car-f-def-acc CM-repair.ipfv-3msgS-3fsgO hear-1sgS*  
 'I heard that Josef has repaired the car.'
- (2) a. \*yosef məkina-it-u-n ʔndə(i)-t'əggən-ə-at fəlləg-hu  
*Josef car-f-def-acc CM-repair.pfv-3msgS-3fsgO want-1sgS*  
 'I wanted that Josef repaired the car.'
- b. yosef məkina-it-u-n ʔndi-t'əggin-at fəlləg-hu  
*Josef car-f-def-acc CM-repair.ipfv-3msgS-3fsgO want-1sgS*  
 'I wanted Josef to repair the car'

In (1-a) we have the perception verb *səmm-* ('hear') selecting a complement clause that contains the perfective form of the verb. This produces a fine construction. But, if we change the form of the embedded verb from the perfective to the imperfective, as we have in (1-b), the construction becomes illicit.

The situation gets reversed if we consider another verb *fəlləg-* ('want'). This verb combines with clauses containing imperfective verbs, but never with the perfective ones, as illustrated in the examples in (2).

This is an unusual pattern of selection from the cross-linguistic perspective because the verbal aspect has rarely been associated with clausal selection. From the cross-linguistic studies, the selection of the complement clauses is known to be sensitive to finiteness, mood, and tense features. But the verbal aspect, to the best of my knowledge, has never been noted to affect clausal selection.

Not only is this unusual from the cross-linguistic perspective, but it also raises major issues for the theory of selection at large because the relationship between the selector predicates and the aspectual features is nonlocal. The aspectual features are assumed to appear pretty low in the verbal fseq, Cinque (1999); Amberber (1996); Ramchand and Svenonius (2014) where they could not have a local relationship with the selector verbs. This is at odds with the standard assumption that selection is a local relation, Svenonius (1994); Baltin (1989).

If selection relation can be established between the matrix predicates and lower verbal functional features such as aspect—crossing a number of functional domains such as the CP, TP, and other similar layers—then the selection is as nonlocal as any syntactic relation can be.

To explain this anomaly, in this paper, I will argue that this apparent nonlocal selection is due to an unusual agreement occurring in Amharic clauses which transfers the features of the verbal aspect to the C domain.

## 2 Organization

I start the paper by presenting a brief description of the complementizers in [section 3](#). There, I will briefly describe the typical functions of the complementizers and their status as clause markers. The purpose is to familiarize the reader on what types of items we will be dealing with in the subsequent sections.

As I have noted above, another important aspect of the study of complement clauses is the study of classes verbs that participate in the clausal selection. For that, in [section 4](#), I will present the classification of the verbs. I will start out from the typologically established classes of verbs, and then refine them to specify the categories that are directly relevant to the current study.

Once I lay out the basic facts on the complementizers & verb classes, I will then present the main facts on the possible and impossible combinations in [section 5](#). These facts will serve as the main inputs for the analysis to follow.

Finally, in [section 6](#), I will present the main proposal. I will entertain different alternative approaches used in the literature to explain selection such as feature checking and semantic selection, and finally propose Agree as a solution for the apparent nonlocal selection going on in Amharic clauses.

## 3 An overview of the clause markers

Amharic has a number of functional items which apparently serve as complementizers. There are occasional mentions of these elements either as complementizers or prepositions in various places in the literature. But there is no much discussion on the distribution and categorial status of those items. The current work also doesn't provide any contribution in this area.

In the following subsection, I will simply provide an overview of some the well-known and less-known clause markers in Amharic.

### 3.1 The finite clause complementizer *?ndə*

This is the finite complementizer in Amharic. It appears on the perfective form of the verbs and converts them to subordinate clauses. It is quite similar to the English *that* complementizer because it attaches to finite declarative sentences, [Amberber \(2010\)](#). Just like *that*, it also seems to lack clear semantic specification. As we will see in later sections, it also has a broad distribution appearing under many types of CTPs. Unlike that of the English complementizer *that*, however, it never heads complement clauses that function as subjects of finite clauses. *?ndə*-clauses are restricted to complement positions.

- (3)    yosef məkina-it-u-n ?ndə-t'əggən-ə-at            səmma-hu  
         Josef car-f-def-acc CM-repair-3msgS-3fsgO hear-1sgS  
         'I heard that Josef has repaired the car.'

Even if the *?ndə* complementizer typically attaches to the perfective form of the verbs, there are some situations where it might also appear on the imperfective ones. One of these cases is the presence of an aspectual prefix *mi*. If this prefix is attached to the imperfective verb, the complementizer may appear with it.

- (4)    yosef məkina-it-u-n ?ndə-mi-t'əggin-Ø-at            nəggər-ə-ñ  
         Josef car-f-def-acc CM-mi-repair-3msgS-3fsgO tell-3msgS-1sg  
         'Josef told me as he will repair the car'

### 3.2 The imperfective complementizer *?ndi*

This complementizer appears on the imperfective form of the verbs and turn them to complement clauses.

- (5)    yosef məkina-it-u-n ?ndi-t'əggin-Ø-at            fəllag-hu  
         Josef car-f-def-acc CM-repair-3msgS-3fsgO hear-1sgS  
         'I wanted Josef to repair the car.'

### 3.3 The relativizer *yə*

*Yə* is one of the most productive functional items in Amharic. It typically marks possessive and relative clauses.

- (6)    yə-yosef makina  
         Of-Josef car  
         'Josef's car.'
- (7)    yosef yə-t'əggən-ə-at            makina...  
         Josef of-repair-3msgS-3fsgO car

‘The car Josef repaired...’

In addition to marking possessives and relative clauses, the morpheme also functions as a complementizer.

- (8) [yosef makina yə-gəzz-a ] yiməslal  
Josef car CM-buy-3msgS seems  
‘It seems that yosef has bought a car.’

Like the *ʔndə*, and unlike *ʔndi*, this complementizer attaches on the perfective forms of the verbs. The *ʔndə* and *yə*, complementizers, however, differ in their distributions. *Yə* as a complementizer has quite restricted distributions. Clauses headed by this *yə* are able to combine only with a handful of predicates.

### 3.4 The gerundive marker *mə*

The *mə*- complementizer appears on gerundive clauses. Appearing on the perfective form of the verbs, it turns the verbal clauses into nominal clauses, in much similar fashion to the English gerundive morpheme *-ing*, Leslau (1995); Yimam (1999).

Due to their nominal property, *mə*-clauses generally function as external or internal arguments of clausal argument-taking predicates (CTPs).

- (9) yə-yosef makina mə-t’əggən lij-it-u-n asgərrəm-ə-at  
of-Josef car CM-repair child-f-def-acc surprise-3msgS-3fsgO  
‘Josef’s repairing a car surprised the girl.’

Even if it seems to add nominal properties to the clauses, it is still a complementizer to the extent that it identifies the clause as a complement to another predicate, in the same sense to the *-ing* morpheme, Noonan (2007); Bresnan (1972).

### 3.5 The prospective marker *li*

This marker is often treated as a prospective marker. It attaches to the imperfective form of the verbs and denotes the imminence of the event.

Whether this functional item should be included under the class of complementizers is not a straightforward matter. On one hand, it behaves like prototypical aspectual prefixes which simply prefixes on the base verbs. This is evident when the clause is headed by auxiliaries.

- (10) yosef li-yi-mət’-a nəw  
Josef CM-3msg-come-3msgS is  
‘Josef is about to come.’

Here, the prefix behaves like a regular aspect marker because it also appears with root clauses. Because of this pattern, some linguists treat it with other regular aspectual prefixes, [Yimam \(1999\)](#). The interpretation of the prefix as a marker of a prospective/imminent event also supports this idea. Morphemes that imply the imminence of the event are traditionally treated as aspect markers, [Comrie \(1976\)](#).

In the cases where the clause appears embedded inside another clause, on the other hand, the morpheme seems to serve as a complementizer, ([Leung and Halefom, 2017, 5](#)).

- (11) a. yosef li-yi-mət'-a                      fəlləg-ə  
           Josef CM-3msgS-come-3msg want-3msgS  
           'Josef wants to come.'
- b. \*yosef yi-mət't'-a                      fəlləg-ə  
           Josef 3msgS-come-3msg want-3msgS  
           'Josef wants to come.' (intended)

Here, the prefix is the one identifying the clause as a subordinate to the matrix because without it the subordination would be illicit as shown in (11-b). Given the assumption that only embedded clauses need to appear with clause markers, and that embedded clauses appear with a clause marker, [Manahlot \(1977\)](#), we can safely conclude that the *li* morpheme is serving as a clause marker in the the above examples.

The other reason to consider it as a clause marker (complementizer) is its position in the fseq. Unlike regular aspectual prefixes, it appears higher up in the structure. It, for example, scopes over the negation marker.

- (12) Li-ay-mət'-a                      məssəl-əñ  
       CM-neg-come-3msgS seem-1sgO  
       'I think he is not about to come.'

The other reason to treat it as a complementizer is its similarity with the English 'to'. The 'to', treated as an infinitive marker, is also often considered a complementizer, [Noonan \(2007\)](#); [Ransom \(1986\)](#); [Mark \(1996\)](#). With this analogy and the fact that the *li* prefix is quite similar to the 'to' item, we can treat it as a complementizer as well.

## 4 Complement taking predicates (CTPs)

Previous studies have made it clear that the complementation patterns are often determined by the lexical properties of the matrix predicates. Typologically, it is well established fact that different classes of verbs combine with different kinds of complementizers and/or complement clauses, [Cristofaro \(2005\)](#). Accordingly, the predicates

that select complement clauses are classified into a number of classes based on their selectional properties. Verbs such as *believe* in English, for example, are classified as ECM verbs because of the nature of the complement clause (or its arguments) it selects. Similarly, raising verbs are another category broadly discussed in the generative literature.

In this subsection, we are going to look at the classes of verbs in Amharic which select different types of complement clauses. I will start by reviewing previous classifications made in the literature.

As I have noted above, [Manahlot \(1977\)](#) is the only work which takes a closer look into the complement clauses of Amharic. In that work, Manahlot Demissie classified the CTPs in Amharic into five major classes.

Table 1

Class	Sample verbs
<b>Communication</b>	nəggərə ('tell'), asrədda ('explain'), gəlləs'ə ('describe'), abassar ('tell good news'), arədda ('break the bad news'), ləmmənə ('beg'), məkkərə ('advise'), t'əyyək'ə ('ask')
<b>Cognitive</b>	tagənəzzəbə ('realize'), tarədda ('understand'), astəwalə ('comprehend/observe'), awwək'ə ('know'), səmma ('hear'), ammənenə ('believe'), təmələkkətə ('watch')
<b>Desiderative</b>	fəlləgə ('want'), assəbə ('think'), təməññə ('wish'), guwaguwa ('be eager'), goməjjə ('lust'), kəjjələ ('yearn'), wəddədə ('like'), ak'k'ədə ('plan'), wəssənə ('decide'), fək'k'ədə ('allow')
<b>Aspectual</b>	məkkərə ('try'), čalə ('be able to'), jəmmərə ('begin'), k'ət'tələ ('continue'), fəs's'əmə ('complete'), ak'omə ('halt'), ak'k'uwarret'ə ('discontinue'), awwək'ə ('know'), ləmmədə ('get used to'), təmarə ('learn')
<b>Emotive</b>	gərrəmə ('amaze'), dənnek'ə ('surprise'), dass alə ('be pleased'), nəddədə ('get annoyed'), k'oč'č'ə ('regret'), s'as's'at ('feel guilty')

Cross-linguistic, typological studies have also identified similar classes of verbs. [Noonan \(2007\)](#), for example, has identified a large number of verb classes including utterance (communication), propositional attitude, pretense, commetative, knowledge, desiderative, etc. With the exception of the *emotive* verbs, all the other classes of verbs identified by [Manahlot \(1977\)](#) are covered in Noonan's typology. As will see in the later sections, the reason why the *emotive* is not under Noonan's category is simply because his investigation doesn't include subject arguments.

The notion of complement is restricted, in the standard assumptions, to internal arguments. External arguments are not taken as complements of predicates. In some theories, they are generally assumed not to be selected by predicates at all, Marantz,



Kratzer. In that sense, it is sufficient to restrict the selectional restrictions to the complement domains. Even if I am not here to address the general assumptions made in Marantz and Kratzer, I think, there are some semantic or categorial restrictions on the class of predicates which can take clausal arguments as their external arguments.

Because of the depth and breadth of the classes of verbs laid out, I will largely follow Noonan's categories. The five classes identified by [Manahlot](#) are not sufficient to explain all the distributional patterns. The propositional attitude verbs, which are relevant to explain the selection and the distribution of PRO, for example, are omitted from his typology. [Manahlot](#) has also fused some verbs to the groups that they don't belong (fit well). So, amendments need to be made.

With the exception of three classes of verbs that don't seem relevant to the Amharic predicates (ie, fear, native and conjunctive), and the modals mainly because I believe that they need a separate treatment, I will follow Noonan's typology.

Removing the verb classes which don't select any of the complement clauses, and incorporating the *achievements* into *aspectual* category because they denote the completion or success of an event, just the same concept with the aspectual class, we are left with 11 classes of verbs. These classes are again grouped into 3 major categories on the basis of [Givón \(2001\)](#).

Table 2: Modified verb classes

	Class	sample verbs
PCU	<a href="#">Com</a>	nəggər ('tell') asrədda ('explain'), gəlləs'ə ('describe'), abassar ('tell good news'), arədda ('break the bad news'), məkkərə ('advise'), t'əyyək'ə ('ask')
	<a href="#">Cog</a>	tagənəzzəbə ('realize'), tarədda ('understand'), astəwalə ('comprehend/observe'), awwək'ə ('know'), ammənə ('believe')
	<a href="#">Perc</a>	səmma ('hear'), ayyə ('see'), təmələkkətə ('watch')
	<a href="#">Prop</a>	ammənə ('believe'), gəmmətə ('predict'), assəbə ('think/assume'), kadə ('deny')
MOD	<a href="#">Des</a>	fəlləgə ('want'), assəbə ('think'), təməññə ('wish'), g <sup>w</sup> ag <sup>w</sup> a ('be eager'), goməjjə ('desire'), kəjjələ ('yearn'), wəddədə ('like')
	<a href="#">Inte</a>	ak'k'ədə ('plan'), wəssənə ('decide'), k'orrət'ə ('determine')
	<a href="#">Asp</a>	, jəmmərə ('begin'), k'ət'tələ ('continue'), fəs's'əmə ('finish'), ak'omə ('halt'), ak <sup>w</sup> arrət'ə ('discontinue')
	<a href="#">Mod</a>	mökkərə ('try'), čalə ('be able to')
MAN	<a href="#">Pre</a>	attallələ ('fool'), asməssələ ('pretend'), assasatə ('trick')
	<a href="#">Man</a>	asgəddədə ('force'), asammənə ('persuade')
	<a href="#">Perm</a>	fək'k'əda ('permit'), kələkkələ ('prohibit')

The verbs under the PCU class do not form a semantically unified category. They are grouped under a major class because of their selection patterns. They typically select complete clauses with full verbal projections including lexical subjects of their own. Co-referentiality of arguments across the complements of these predicates is uncommon. The clause themselves also tend to be finite. This turn out to be the case across a large number of languages. Out of the 143 languages covered in Cristofaro's [2013](#) study of

utterance verbs, for example, only 11 languages turn out to have nonfinite (deranked) clauses.

The modality verbs which are set as the second major class, on the other hand, appear to have an internal semantic unity. They denote either the mental or real-world inception, continuation, success, or failure of an eventuality. The desiderative and *intentional* classes denote the mental state of the situations while the *aspectual* class denotes the real-world eventualities.

Givón (2001) has subdivided this class into two: the *modal attitude* which includes the desiderative and intention class, and *aspectual* verbs which correspond to the aspectual verbs in Noonan’s typology.

The verbs under the MOD super-class are known to select clauses with ‘smaller’ clause structures. The embedded clauses often appear either in infinitive or nominal forms. Clauses embedded under these predicates rarely project lexical subjects.

Finally, the manipulative super-category includes verbs that denote the manipulation/influence/coercion of an entity from a sentient agent. The arguments are typically human participants. The causee argument, which is the doer of the embedded eventuality often appears as patient or manipulatee of the subject argument of the matrix clause. Because of this relation, verbs under this class are often considered object-raising verbs.

These are general categories based on the universal tendencies of languages from a cross-linguistic typological evidence. Needless to say, individual languages, indeed, display idiosyncrasies in the selection, projection of arguments, as well as many more details as well. That is why we need to see the specifics of individual languages.

In the following section, we will look at the verb classes of Amharic focusing on their selection parameters.

## 5 Complement selection: the basic facts

In this section, I am going to look at the selectional (semantic or categorial) parameters of the classes of predicates.

### 5.1 PCU verbs

Of the five classes of complement clauses discussed in section 3, the verbs under this class select clauses headed by *?ndə* and *mə* complementizers.

- (13) [yosef wadə-bet-u            ?ndə-hed-ə]    nəggər-əčč-ñ            (?ndə:Com)  
*Josef to-home-3msg.poss CM-went-3msgS told-3fsgS-1sgO*  
 ‘She told me that Josef went to his home.’

- (14) [yosef wadə-bet-u                    ʔndə-hed-ə]                    səmma-hu                    (ʔndə:Perc)  
*Josef to-home-3msg.poss CM-went-3msg heard-1sgO*  
 ‘I heard that Josef went to his home.’
- (15) [yosef wadə-bet-u                    ʔndə-hed-ə]                    tərədda-hu                    (ʔndə:Cog)  
*Josef to-home-3msg.poss CM-went-3msg realize-1sgO*  
 ‘I realize that Josef went to his home.’
- (16) Mariyam [yosef wadə-bet-u                    mə-hed]-u-n                    səmm-aččə                    (mə:Perc)  
*Mary [Josef to-home-3msg.poss CM-went-3msg.poss-acc heard-3fsgS*  
 ‘Mary heard Josef’s going to his home.’
- (17) yosef [kə-fətəna-w                    mə-widək’-u-n]                    tərədd-a                    (mə:Cog)  
*Josef [from-exam-the CM-fall-3msg.poss-acc] realize-3msgS*  
 ‘Josef realized his failing the exam.’

Clauses headed by *yə* and *li* items are illicit with these verbs. Take the *yə*-clause we saw in [example \(8\)](#), for example. Putting it under any of the CPU verbs would never generate any grammatical sentence.

- (18) \*[yosef wadə-bet-u                      yə-hed-ə]                      səmma-hu  
*Josef to-house-3msg.poss CM-went-3msgS heard-1sgS*  
 ‘I heard that yosef has gone to his home.’

The same is true with the *li* & *?ndi*<sup>2</sup>-clauses.

Table 3: Selection of PCU verbs

No	Verb class	ʔndə	ʔndi	yə	li	mə
1	Communication	✓	-	-	-	✓
2	Cognitive	✓	-	-	-	✓
3	Perception	✓	-	-	-	✓
4	Propositional	✓	-	-	-	✓

## 5.2 Modality Verbs

As we have seen, the MOD class includes verbs of various subclasses. Out of these subclasses, the *desiderative* verbs are the most malleable of all as they can select all the three major complement clause types.

<sup>2</sup>I will finally argue that the *?ndi* and *?nda* complementizers are different forms of the same underlying complementizer. But, for the sake of descriptive accuracy, I will treat them separately in the descriptive sections.

- (19) Mariam [yosef makina-it-u-n ʔndi-yi-t'əgin-at] fəlləg-əčč  
 Mary yosef car-f-def-acc CM-3msgS-repair-3fsgO want-3fsgS  
 'Mary wants Josef to repair the car.'
- (20) Mariam [yə-yosef-n wədə-bet-u mə-hed] təmənñəčč  
 Mary of-yosef-acc to-home-3msg.poss CM-go wish-3fsgS  
 'Mary wished Josef's going to his home.'
- (21) yosef wədə-bet-u li-yi-hed fəlləg-ə  
 Josef to-home-3msg.poss CM-3msgS-go want-3msgS  
 'Josef wants to go to his home.'

There are a number of points to notice about the complements of the *desiderative* verbs, in contrast to that of the PCU verbs we saw above. First, the compatible complementizer (*ʔndi*) with these clauses, not that of the *ʔndə*. Second, co-indexed (shared) subjects are more natural with this class of verbs. This is especially true of the *li-* complement clauses where lexical subjects are completely ruled out.

Another, less common, irrealis (subjunctive) mood marker *bi* can also appear within the clauses embedded under the *desiderative* class.

- (22) yosef wədə-bet-u bi-hed fəlləg-ə (təmənñə-ə)  
 Josef to-home-3msg.poss irr-go want-3msgS (wish-3msgS)  
 'Josef wants/wishes to go to his home.'
- (23) yosef wədə-bet-u li-hed fəlləg-ə (təmənñə-ə)  
 Josef to-home-3msg.poss CM-go want-3msgS (wish-3msgS)  
 'Josef wants/wishes to go to his home.'
- (24) yosef wədə-betu mə-hed fəlləg-ə (təmənñə-ə)  
 Josef to-home-3msg.poss CM-go want-3msgS (wish-3msgS)  
 'Josef wants/wishes to go to his home.'

**Intention** verbs also behave the same with the *desiderative* verbs in their selection. They can combine with *ʔndi*, *li-* as well as *mə* clauses.

- (25) yosef wədə-bet-u \*(lə)-mə-hed ak'ədd-ə  
 Josef to-house-3msg.poss (for)-CM-go plan-3msgS  
 'Josef planned to go to his home.'
- (26) yosef wədə-bet-u li-hed ak'id-o-al  
 Josef to-home-3msg.poss CM-go plan-3msgS-aux  
 'Josef has planned to go to his home.'

- (27)     astəmari-w riʔis-u-n             bə-samint wust' li-č'ərs ak'id-o-al  
            teacher-def chapter-def-acc by-week     in     CM-fish plan-3msgS-aux  
            'The teacher has planned to finish up the chapter within a week.'

Aspectual verbs are the other class of verbs under the MOD superclass. In the literature, verbs such as *try* and *begin*-each exemplifying *achievement* and *aspectual* classes, respectively, are sometimes treated as separate classes. But, some works, including Givón (2001) put them under one category. The unification is based on similarities in their argument selection—that both classes contain control verbs. But, they also display some subtle distinctions at least in their semantics. In Amharic clauses, probably due to their control properties, both classes select only *li-clauses* and the *mə-* clauses. Even with this limited selection, they still display some idiosyncratic selectional restrictions.

First, many of the verbs under the *aspectual* class don't take *li-clauses* <sup>3</sup>.

- (28)     \*yosef li-səra     ak'om-ə  
            Josef CM-work stop-3msgS  
            'Josef stopped to work.'

But, in the *achievement* subclass, some verbs such as *try* can combine with *li clauses*. They can also take the verbal nouns-but the infinitive marker preposition *lə* ('to/for'), is highly preferred to appear with the verbal nouns.

- (29)     yosef li-at'əna mōkkər-ə  
            Josef CM-study tried-3msgS  
            'Josef tried to study.'
- (30)     yosef lə-mə-at'nat mōkkər-ə  
            Josef CM-CM-study try-3msgS  
            'Josef started to study.'
- (31)     ?yosef mə-at'nat mōkkər-ə  
            Josef CM-study try-3msgS  
            'Josef started to study.'

Other verbs of achievement subclass such as *asakka* ('manage', 'succeed in'), *aswəg-gədə/təwə* ('avoid'), *dəffərə* ('dare'), etc cannot take the *li-clauses*. They can marginally

<sup>3</sup>In some cases where a special semantic effect is implied, however, some of the aspectual verbs are able to select *li-clauses*.

- (i)     li-alazin jəmmər-ə  
            CM-cry begin-3msgS  
            'He/It began to cry.'

Here, the speaker wants to emphasize how the child routinely cries.

take the verbal nouns, again, to the extent that the verbal noun is more nominalized (namely, accusative case marked).

- (32) \*yosef lə-mə-at'nat təw-ə  
*Josef to-CM-study abandon-3msgS*  
 'Josef abandoned studying.'
- (33) ?yosef mə-at'nat-u-n təw-ə-w  
*yosef CM-study-def-acc abandon-3msgS-3msgO*  
 'Josef abandoned the studying.'

The *avoid* class of verbs seems to require nominal DP complements, rather than clausal complements. In this case, they require the definite and accusative case marked verbal nouns.

Overall, aspectuals & achievements<sup>4</sup> have some subtle distinctions in their selection patterns. Having said that, it is still possible to treat them in a unified manner since both classes contain the most prototypical control verbs such as *begin*, *continue*, *try* and *manage*.

- (34) yosef bet-u-n lə-mə-as'dat mōkkər-ə  
*Josef hose-def-acc to-CM-clean tried-3msgS*  
 'Josef tried to clean the house.'

### 5.3 Manipulative Verbs

As noted above, the verbs under this super-category are semantically related. They express a situation where a sentient individual influences/permits/requests another sentient individual to do some activity (task). The relationship between the influencer and the influenced arguments is syntactically represented by agent and patient arguments. Unlike standard agent-patient clauses, however, in manipulative clauses, the patient participant appears in a clause that appears embedded under another clause.

Verbs under this class are sometimes known as *object control* verbs in the standard GB literature. They are called object control because the object of the matrix is theta marked by the embedded predicate as well. Whether the patient argument shared between the two clauses belongs to the higher or lower domain is a theoretical construct and is open to debate.

Givón has included four of the verb classes of Noonan under the MAN super-category including manipulative verbs themselves, pretense verbs, and permission verbs. The *Pretense* verbs in Amharic behave exactly like the prototypical manipulative verb in almost

<sup>4</sup>Given that the number of verbs falling under *achievement* class is limited; and the most productive ones in taking clausal complements behave the same with the aspectuals, it is possible to incorporate them under the aspectuals.

all respects. Therefore, I will not treat them separately. *Permission* verbs display some idiosyncratic properties in their selection. For that I will treat them separately.

In general, manipulative verbs select *?ndi* clauses.

- (35) Mariam [yosef məkina-it-u-n ?ndi-Ø-at'b-at] asammən-əčč-w  
 Mary [Josef car-f-def-acc CM-3msgS-wash-3fsgO] persuade-3fsgS-3msgO  
 'Mary persuade Josef to wash the car.'

These verbs don't normally select *mə*, *yə*, and *li* clauses.

- (36) \*Mariam [yə-yosef-n məkina-it-u-n mə-at'əb] asammən-əčč-w  
 Mary [of-Josef-acc carf-def-acc CM-wash] persuade-3fsgS-3msgO  
 'Mary persuade Josef's washing (of) the car.'

The only exception to this are the permission verbs because they can combine with the verbal nouns.

- (37) Mariam [yə-yosef-n wədə-bet-u mə-hed] fək'k'əd-əčč (mə:Perm)  
 Mary [of-Josef-acc to-home-3msg.poss CM-go] permit-3fsgS  
 'Mary permitted Josef's going to his home.'

## 5.4 Summary of complement clause selection

Table 4: Summary of the selection

	class	?ndə	?ndi	li	mə	yə
PCU	<b>Communication</b>	✓	-	-	✓	-
	<b>Cognitive</b>	✓	-	-	✓	-
	<b>Perception</b>	✓	-	-	✓	-
	<b>Propositional</b>	✓	-	-	✓	-
MOD	<b>Desiderative</b>	-	✓	✓	✓	-
	<b>Intention</b>	-	✓	✓	✓	-
	<b>Aspectual</b>	-	-	-	✓	-
	<b>Modal</b>	-	-	✓	✓	-
MAN	<b>Pretense</b>	-	✓	-	-	-
	<b>Manipulative</b>	-	✓	-	-	-
	<b>Permission</b>	-	✓	-	✓	-

As shown in the above table, the *yə*-clauses are the least selected complement clause. Only a single verb such as *yiməslal* ('seems') is able to select these complement clauses.

Clauses headed by *li*-clauses also have quite restricted distribution, [Leung and Halefom \(2017\)](#). They are selected by the *desiderative*, *intention* and *modal* verbs.

Finally, the *mə*-clause appears to have the broadest distribution. Only manipulative and pretense verbs are incompatible with them. In the rest of the cases, they have a broad distribution.

*?ndi* and *?ndə* clauses also have wide distribution. What is unique about them is that they are complementary to each other. A verb selecting one of them never selects the other. In later sections, I will use this fact to justify the proposal that two complementizers have an underlying unity.

## 6 The analysis: explanations for the selection patterns

Once we establish the basic facts on the verb classes, complementizer types, and the selection patterns, it is time to return to the main analysis the paper. In this section, we return to the main issues that I raised at the outset of the paper—namely, why the verbs appear to select non-local features such as the aspect properties of the embedded clauses, as well as the general problem of selection. To do so, I will start by reviewing the two main approaches used to explain selection under the GB framework. Once I presented the main tools of selection used in the GB, I will present various shortcomings of those mechanisms, and why they fall short of explaining the nonlocal relationship evident in selection of Amharic clauses.

### 6.1 The two mechanisms of selection in the GB

[Chomsky \(1965\)](#) put the foundations to explain the distribution of different clause types. His approach is based on his earlier analysis where different syntactic objects subcategorize into different types of categories. The subcategorization is considered the main factor that determines whether two syntactic objects would combine together or not. For a transitive verb selecting an NP object, for instance, its subcategorization frame is assumed to be like  $[+ \_ (NP)]$ .

The subcategorization approach takes the category of the subcategorized items as the main factor to determine the combinatorics. The semantic category is assumed to fit with the subcategorization frames.

But, later studies noted that the subcategorization of the items is not sufficient to explain the distribution of complement clauses.

[Grimshaw \(1979\)](#) is one of the most influential works in this regard. Grimshaw made an explicit argument for the separation of categorial selection (subcategorization) from semantic selection (s-selection). The crucial point for her theory is the observation that verbs of the same semantic type select complements of different categorial types.



- (38) Semantic types
- a. Q (Question)
  - b. P (Proposition)
  - c. E (Exclamation)

These semantic types, she argued, don't have a one-to-one correlation with syntactic categories such as CP & NP(DP). Verbs of the same semantic type such as *ask* and *inquire* (both the Q semantic type), for example, impose distinct requirements on the syntactic category.

- (39) a. John asked [<sub>CP</sub> what the time was]  
 b. John asked [<sub>NP</sub> the time]
- (40) a. John inquired [<sub>CP</sub> What the time was]  
 b. \*John inquired [<sub>NP</sub> the time]

As exemplified in the above sentences, both of the verbs select for Q semantic type. But, only the *ask* verb is able to combine both the CP and NP (DP) syntactic types (categories). *Inquire* combines only with the CP syntactic type. From this, she concluded that the theory of s-selection and c-selection are orthogonal mechanisms. A verb selecting a Q semantic type<sup>1</sup> may or may not select for a CP complement. The same goes for the other semantic types.

She (1981) further observed that the c-selection of the semantic classes is not free. That is, verbs s-selecting say Q semantic type have two choices when it comes to their c-selection—they either select a CP or a CP and an NP. There are no verbs that s-selects Q semantic type and NP syntactic type only.

- (41) a. *ask* [+<sub>CP/NP</sub>]  
 b. *inquire* [+<sub>CP</sub>]  
 c. \**VERB* [+<sub>NP</sub>]

The non-existence of verbs like *VERB* in English made Grimshaw modify her earlier theory to accommodate the gap. In her new theory, she proposes for a “canonical” correlation between semantic types and syntactic categories. In a proposal called *Canonical Structural Realization (CSR)* she correlated Propositions, Question and Exclamation semantic types with a CP syntactic category. For a child learning a certain language L<sub>x</sub>, a certain verb taking a proposition as its complement tells the child that the verb subcategorizes for CP in L<sub>x</sub>.

Her *Context Principle* stipulates that for a predicate s-selecting a semantic class such as *proposition*, then, it subcategorizes for the canonical realization of C. According to this approach, questions, propositions, and exclamatives are canonically mapped to the CP

in the syntactic domain.

Taking CSR as a starting point, a child who acquires data like *John asked the time* would posit [+ \_NP] to the subcategorial frame of the verb. According to this system, the verb doesn't directly subcategorize for the CP or NP. Rather, the subcategory of the verb is acquired by the Context Principle for free.

That is, a Proposition is simply mapped to the CP unless there is evidence to the contrary. This algorithm avoids redundancies where both s-selection and c-selection are assumed to determine combinations independently. Given the s-selection of a predicate, the Context Principle lets the child easily deduce the c-selection of the predicate. For the NP complements, however, the child needs to get a piece of direct evidence that the category is compatible with the predicate. That means the subcategorization of the verb directly to the NP is necessary for the NP complement while the CP complementation is acquired for free by the Context Principle.

Later works have used the idea to eliminate c-selection altogether from the grammar. The first attempt to replace c-selection with a combination of s-select and case theory was Pesetsky (1982). In that work, Pesetsky argued that s-selection in combination with case theory can make obviate the c-selection part of the grammar. He hypothesized that NP/DP complements, but not CP complements of predicates require abstract cases. Predicates which s-select for propositions or questions canonically take sentential complements following Grimshaw's CSR. A crucial idea of his theory is the assumption that not all question or proposition-taking predicates are able to assign accusative cases to their complements. Those predicates which are able to assign accusative case then can take DP/NP complements, in addition to the CP. The *ask* verb we mentioned above is able to assign an accusative case to its complement. Therefore, it is able to take DP complement, in addition to its canonical CP complement. The verb *inquire* however is incapable of assigning accusative case. Therefore, it is restricted to CP complements.

## 6.2 Some issues with standard mechanisms of selection

### 6.2.1 S-select is not compatible with Minimalism

As we have seen in the above subsection, the s-select analysis is one of the most promising approaches to explain selection. There are, however, a number of issues that makes it hard to apply to the selection issues we have here.

First, the analysis has been argued to be insufficient to cover all the facts of selection that the c-selection approach has covered. Further issues have been raised against the s-select in a number of works including Webelhuth (1992); Odijk (1997); Alrenga (2005).

But, out of all these issues, the architectural shifts presented in the Minimalism program pose the most difficult and immediate setback to apply the technique. Minimal-

ism largely follows the Late Interpretation mechanism (also known as the Y/T model) architecture. What this means is that the semantic content of syntactic categories is not available later in the derivation. Syntax has to finish up its derivation before the semantic and phonological components apply. In this framework, Grimshaw's *Canonical Structural Realization*, a mapping mechanism which maps syntactic categories from the semantic properties of the selectors, cannot be used.

Consider the derivation of the following sentence where the verb *ask* takes an NP complement.

(42) Mary asked a question

The standard Minimalist derivation, Chomsky (1995), proceeds in the following ways.

(43)  $\text{Merge}(\alpha, \beta) \rightarrow K = \{K, \{\alpha, \beta\}\}$

That is, in the first step for the DP to merge with the verb, there is what Chomsky calls the Edge feature which triggers the merging of the selector and the selectee. The selectors are presumably the holders of the Edger feature:

- (44) a. The edge features on *ask* probes for a DP  
 b. The two categories merge and create a set

The derivation then introduces the external argument, still under the assumption that some other unchecked (unvalued) feature in *ask* triggers the merging of the external argument. As soon as the derivation introduced the external argument at Spec,vP, a phase boundary, the derivation would be sent to the interfaces for interpretation. That is, to the point where the syntactic derivations are sent to the interfaces for interpretation, no meaning or phonological value can be assigned to them. This again means that the semantic module has no access to the elements of the syntactic derivation. The late interpretation doesn't allow an inference from meaning to category. It is the categorization that should feed to the semantics, not the other way around as Grimshaw's & Pesetsky's theories postulate. This makes the GB theories of s-select feeding into the derivation incompatible with the Minimalism system.

The semantic features of each of the lexical items would be available only in the post-syntactic domain where the interpretations are assigned. For that, we cannot use the s-select mechanisms devised in the GB era within the Minimalist frameworks.

### 6.2.2 Subcategorization is not feature-checking

For *c-select* is often assumed to be a strictly local relation between two heads, the *mediated* approach, first argued in Grimshaw (1977) and adopted in Baltin (1989), is considered the standard approach, Svenonius (1994). According to this approach, if a lexical verb is assumed to select a finite clause, the selection is assumed to occur with the intermediary of the complementizers.

The mediated approach enables us to formulate a strict local relationship between the selector V and the C. Different types of C heads then select different types of complement clauses.

The subcategorization of the CTPs can be formulated as follows using the standard GB subcategorization frames, Chomsky (1965).

(45) PCU + [\_CP]

This classical subcategorization system has been reanalyzed as a feature-checking mechanism within the Minimalist system, Svenonius (1994); Chomsky (1995). The selector verb is assumed to appear with an uninterpretable/unchecked categorial feature. In some versions of Minimalism, the uninterpretable feature on the selector verb serves as a trigger for the Merge operation to operate, Adger (2003, 2010). The complement, on the other hand, is assumed to come with the interpretable counterpart of the categorial feature.

For a CPU verb such as *tell* for example, the selection features would come as follows:

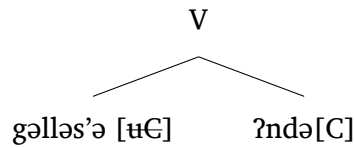
(46) gəlləs'ə ('describe') [uC/uD ]

What this feature specification says is that the lexical verb comes with two unvalued/uninterpretable features which need to be checked before the derivation is sent to the interfaces. To check the unchecked features, a syntactic object with the interpretable counterparts needs to merge with the verb. The complementizers are the ones that are able to check the [uC] feature.

(47) ində [C]

The presence of the uninterpretable uC makes it possible for the Merge operation to combine these two items. Once they are combined, the uninterpretable uC on the verb would be checked by the [C] on the complementizer.

Figure 1: Categorical feature checking



As shown in the tree structure, in Adger's version, just like the classical subcategorization system, sisterhood is assumed to be sufficient to create necessary local relations (checking in the former case).

In (46) it has been important to assign two unchecked features because the verb has selection subcategorization both for DP arguments and CP arguments. The [uD] is also important because the same verb is able to select regular nominal DP complements as well, as in *described the story*.

In this case, the verb is just a regular transitive verb. Like a transitive verb, the internal argument which is headed by the D categorial feature merges with the verb. The merger of the DP, which is *a story* in this case, checks the uninterpretable feature.

This is a general pattern of most CTPs. They are able to take DP complements, in addition to the CP complements. In this sense, CTPs are just transitive verbs. They differ from the regular transitive verbs such as *kill* only because of the fact that they permit CP-complements, in addition to the standard DP arguments.

The duality of the unchecked features, however, is problematic for the feature-checking interpretation of selection. The two uninterpretable features which come with the verb can never be checked in a single derivation. In cases where the verb appears with the regular nominal DP, the [uC] feature of the verb would remain unchecked. This is supposed to cause a crash on the interfaces, Chomsky (1995); Julien (2002). But, it doesn't.

(48) **The Problem of Multiple Subcategorization Frames (PMSF<sup>5</sup>)**

A selector lexical item L appears with more than one uninterpretable subcategorial feature.

The problem is when a lexical item appears with two or more uninterpretable categorial features that cannot be checked in a single derivation.

(49) a. Mary described the incident.

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<sup>5</sup>Note that this is an issue only for the feature checking interpretation of the subcategorization. The classical subcategorization frame won't have problems assigning multiple frames for lexical items. Look at Emonds (2000) for assigning multiple features to the subcategory frames of lexical items.

- b. Mary described that the politicians fought over the issue.

In the first sentence, the verb takes a DP complement. This means that the [uD] feature of the verb has been checked. But, the [uC] feature of it remains unchecked. In the same manner, the [uD] feature of the verb remains unchecked in (49-b).

The only way to check both of the features at the same time is to merge the verb with two complements at the same time. This kind of merger seems available in natural languages—most prevalently in the case of coordination, and probably in the case of ditransitive verbs. One might think of a similar combination as a possibility for the CTPs. Consider the combination of the above two complements.

- (50) Mary described the incident that the politicians fought over the issue.

But, the relation of the DP and the CP in this clause is a recursion of some sort. The CP is rather part of the DP, or a relative clause modifier to the noun. It has not been directly selected by the matrix verb. As such, the merging of dual complements with regular transitive verbs is normally empirically illicit.

Furthermore, the basic Minimalist architecture also doesn't allow dual complements to a single **SO** because Merge is assumed to be a binary operation where only two objects combine at a single step.

Based on this, I conclude that the feature-checking interpretation of selection is not tenable. For additional conceptual problems of feature-checking understanding of selection, look at Balázs (2010).

### 6.2.3 The categorial features are not sufficient

One strategy one might use to alleviate the issue raised against the feature-checking interpretation of the subcategorization is to unify the two categories such as the C and the D at some level of the grammar. Indeed, a similar kind of idea has been entertained in the Romance literature where complementizers appear to have pronominal functions as well, Manzini and Roussou (2020).

The idea has quite interesting correlations with the generalization that CP-selecting predicates tend to select DP complements as well.

- (51) **D-inclusivity generalization**  
If a verb selects a CP, it also selects a DP.

This rule seems to hold for most verbs that take CP complements tend to select also DP complements. A few counter-examples have been noted by Grimshaw (1979).

- (52) a. They claimed that the construction is ungrammatical.  
 b. \*They claimed the ungrammaticality of the construction

Other works such as Rothstein (1992), however, argued that these verbs actually don't strictly block nominal complements. The main evidence for the argument is from wh-constructions.

As it turns out, CP-taking verbs that don't license nominal complements license traces for moved wh-items.

- (53) What<sub>i</sub> they *t<sub>i</sub>* is that it was an accident

This has been used by Rothstein to argue that what makes the sentences such as (52-b) ungrammatical is not the projection of the arguments per se. Rather, it is the absence of movement out of the complement position.

In addition to the Rothstein, I have noted that the CTPs in Amharic invariably select nominal complements as well.

Then, if the generalization is correct, it supports Manzini & Roussou's idea that complementizers are somehow related to nominal items. If the two categories have some underlying unity, then, it would be possible to formulate a general categorial selection that targets the underlying feature.

That is, if the complementizers and DPs have an underlying unity, we then don't need separate features specified on the verb. We can simply make them relate by implicational rules.

- (54) VERB [uC] → VERB [uD]

This implicational correlation between the two complement types makes the stipulation of separate subcategorization rules for the DP and CP complements superfluous. That is, if the CPs are a special type of DP, making a subcategorization rule with the CP complements makes it sufficient to imply that the DP complements are also licensed. According to this, the only subcategorization rule we need is the one that involves the CP complement.

- (55) gəlləs'ə ('describe') [uC]

The presence of the [uD] is simply implied from the presence of the [uC]. As such, we

don't need to assume two distinct uninterpretable features with the lexical verb.

In addition to explaining the problem the [PMSF](#), the implicational rule presented above has additional explanatory functions as well. That is if the rule succeeds, it is possible to predict the distribution of gerundive complements from the CP complements.

Given the assumption that gerundives are headed by the DP layer, it makes an immediate prediction on their distribution. Any verb that selects a CP complement is predicated to select a DP complement as well. As such, the gerundives are predicated to be selected by the CP selecting verbs.

We can make the prediction explicit as follows.

(56) **G-inclusivity hypothesis**

If a verb selects a complement clause (CP), it also selects a gerundive clause.

In the above sections, we have seen that the *mə* clause marker introduces a nominal category on top of the regular verbal spine, just like any gerundivizer morpheme does. This means that any verb selecting CP-complement such as *ʔnd-* selects the *mə*-clauses as well.

If this proposal turns out to be correct, the selection of the gerundives would come for free. The hypothesis makes a straightforward prediction that any verb that selects CP complements would also be able to select them.

The subcategorization rule given in (55) in combination with the G-inclusivity hypothesis does indeed elegantly explain the combination of *ʔndə* and *mə* clauses not only with PCU verbs but also with that of *desiderative*, *intention*, *permission* and *modal* verbs.

While this makes the proposal<sup>6</sup> promising to extend to explain the distribution of other verb classes, unfortunately, it fails on some verb classes. Verb classes such as *manipulative* and *pretense* fail to select the *mə* clauses, even if they license CP complements (as well as regular DP complements).

Consider the examples I presented in page 15 once more.

- (57) Mariam [yosef məkina-it-u-n ʔndi-yi-at'b-at] asammən-əčč-w  
 Mary [Josef car-f-def-acc CM-3msgS-wash-3fsgO] persuade-3fsgS-3msgO  
 'Mary persuade Josef to wash the car.'

- (58) \*Mariam [yə-yosef-n məkina-it-u-n mə-at't'əb] asammən-əčč-w  
 Mary [of-Josef-acc car-f-def-acc CM-wash-def-acc] persuade-3fsgS-3msgO  
 'Mary persuade Josef's washing (of) the car.'

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<sup>6</sup>Note that the success of the rule/proposal to solve the problem of multiple subcategorization frames ([PMSF](#)) is independent of the success of the rule to predict the distribution of the gerundives.



- (59) Mariam yosef-n asammən-əčč-w  
 Mary Josef-acc persuade-3fsgS-3msgS  
 'Mary persuaded Josef.'

The sentence in (57) shows that the verb *persuade* is able to select a clausal complement. The same verb is also able to take a DP complement as illustrated in example (59). According to the hypothesis given above, the verb should also be able to combine with the gerundives. The prediction, however, is not borne out, as the illicitness of the sentence in (58) shows.

In other terms, the impossibility of the gerundive appearing with these classes of verbs shows that the distribution of the gerundives cannot be predicted from the distribution of the CP complements.

The distributional mismatch of the gerundives is not even restricted to the CP-complements. They do not exactly match with the regular nominal DP arguments either. Needless to say, most transitive verbs that license regular nominal DPs are not able to license the gerundives.

Consider the following English sentences.

- (60) a. Mary enjoyed the game.  
 b. Mary enjoyed kissing John.
- (61) a. Mary kissed John.  
 b. \*Mary kissed pleasing John.

The first pair of sentences shows that the verb *enjoy* is able to take regular nominal DP arguments as well as gerundive DP arguments. But, the verb *kill* cannot take a gerund DP complement as the ungrammaticality in (61-b) shows. Only the nominal DP complement is licensed with it.

This raises a serious issue for the category-based selection theory at the very fundamental level. If the category feature of the complements is assumed to be the prime source of selection, as assumed by the subcategorization theory, it is a mystery why the gerundives, which are assumed to have DP category, cannot have the same distribution as that of regular nominal DPs.

(62) **The Problem from the Restrictedness of the Distribution of Gerundives (PRDG)**

The distribution of gerundive DP is different from the regular nominal DP. This is a problem for the subcategorization theory which predicts consistent distribution for the same category items.

For the problem at hand, this also means that we cannot just formulate a general se-

lection rule that would work across all DP complements. As the verbs that combine with the gerundives are a specific class, we need some mechanism for differentiating the verbs which can combine with the gerundives from those which cannot.

There are two ways to solve the problem in (62). One way of solving it is to reject the assumption that gerundives are headed by a DP projection.

This option is less likely to be successful because the idea that gerundives are headed by nominal or DP projection has deep roots in the field, Abney (1987); Baker et al. (2005); Pires (2007, 2006). It has found a lot of empirical support from a wide range of languages. As such, the outer DP projection of the gerundive construction is well established.

The second alternative is to reject the assumption that the selection of the gerundive is due to categorial selection. As such, an alternative approach would be to reintroduce the semantic selection that was used in the GB era. S-select specifically would be a very promising direction because the selection of the gerundive complements seems to have to do with the semantic class of the verbs. Assume that some classes of verbs select a semantic category such as *situations*, in the sense of Ramchand and Svenonius (2014). In this case, the relationship between the gerundive clause and the selector predicate is a semantic selection. The top category of the gerundive would be irrelevant to the point that the embedded clause within the DP satisfies the s-select requirement of the verb. It is also known that s-select is not as local as c-select is assumed to be, as it “can ‘see’ more than just the label of its sister”, in Biskup’s (2012) words.

But, as I have already noted above, bringing back the s-select mechanism to the Minimalist system requires rethinking the whole architecture (the Y-model) of the system where the Minimalist approach lays its ground.

#### 6.2.4 The complementizers are not clause-type markers

Another issue for the standard theory of complement clause selection comes from the assumption that complementizers are clause type markers.

As I have noted above, complement clauses embedded under interrogatives are marked with a different set of complementizers than the declarative, according to Grimshaw. Interrogative complement clauses in English are marked by complementizers such as *whether* and *if*, in contrast to the declarative clauses which appear with *that* complementizer.

- (63)
- a. He asked whether Mary left to school.
  - b. The police inquired who killed the rabbit.
  - c. The police claims that he killed the rabbit.

Based on this, Grimshaw and other subsequent works considered complementizers as clause-type markers. These complementizers are assumed to select or combine with

different types of clauses such as declarative, interrogative, and exclamations.

This kind of semantic type, however, appears to be irrelevant to the clausal selection in Amharic.

Interrogative, declarative, or exclamation are introduced in the same manner, with the same set of complementizers.

- (64) Mariam wede timihirtbet hed-a      ?ndə-honə t'əyyək'-u-aččəw  
*Mary to school went-3fsgS CM-be ask-1sgS-3plO*  
 'I asked them whether/if Mary has left to school.'

The complementizer *?ndə* attached here is the same complementizer that appears on the declarative embedded clauses. What appears to be different here is not the type of complementizer. It is rather the position it holds. In the interrogative clauses, the complementizer appears on the auxiliary verb, rather than on the lexical verb. The reason for its position is the presence of the auxiliary verbs in questions.

If there is no auxiliary in the embedded clause, which is the case for wh-questions, the complementizer appears on the lexical verb.

- (65) Mariam məčə wede timihirtbet ?ndə-hed-ačč t'əyyək'-hu-aččəw  
*Mary when to school CM-went-3fsgS ask-1sgS-3plO*  
 'I asked them when Mary left to school.'

Here, when the wh-item is available, the embedded clause behaves exactly like a regular declarative clause; hence, the complementizer appears on the lexical verb.

Therefore, the position of the complementizer is not sensitive to the clause type. What rather determines its position is the presence or absence of a higher verb—which is the auxiliary. If there is an auxiliary verb in the embedded clause, it appears on the auxiliary. If there is none, it appears on the lexical verb. This is the usual *floating property* of functional morphemes in this language which known to happen on the definite article, case, gender marker and other functional morphemes, [Kramer \(2009\)](#); [Workneh \(2011\)](#).

- (66) bə-min yakil fit'nət ?ndə-rot'-ə      adənnək'-u  
*by-what size speed CM-run-3msgS appreciated-1sgS*  
 'I appreciated how fast he runs.'

From this, I conclude that the relation of complementizers or complement clauses with different clause types is irrelevant in this language. If there is any theory we need to deploy for the selection or distribution of the clauses or the complementizers, we have to do it with other means than clause types (or Force). The complementizers are not the

realization of Force. Based on the specific function assigned for the ForceP as a functional layer where the clause type is defined, and that the complementizers in Amharic have nothing to do with clause type, it becomes incumbent on us to dissociate these two elements. I assume that the function of the complementizers is simply “to identify the entity as a complement” to another clause, [Noonan \(2007\)](#). I assume that under-specified CP is sufficient to express this core function of the complementizers. The CP bears no specific semantic value or force property, so to speak. It is an uninterpretable parameter like case and other similar syntax internal features.

### 6.2.5 Nonlocal selection

Just to recap the facts and remind the reader about the selection patterns of the CTPs, a condensed form of the summary presented in [Table 4](#) has been repeated here.

Table 5: Condensed summary

	class	?nd-	li	mə	yə
PCU	<b>Communication</b>	✓	-	✓	-
	<b>Cognitive</b>	✓	-	✓	-
	<b>Perception</b>	✓	-	✓	-
	<b>Propositional</b>	✓	-	✓	-
MOD	<b>Desiderative</b>	✓	✓	✓	-
	<b>Intention</b>	✓	✓	✓	-
	<b>Aspectual</b>	-	-	✓	-
	<b>Modal</b>	-	✓	✓	-
MAN	<b>Pretense</b>	✓	-	-	-
	<b>Manipulative</b>	✓	-	-	-
	<b>Permission</b>	✓	-	✓	-

Our purpose is then to explain why some classes of verbs are able to combine with some kinds of complement clauses but not others.

To start with the PCU verbs, these verbs canonically select the finite complement clauses, as shown in the above table. A relation of this kind can be explained using Grimshaw’s Canonical Structural Realization, which maps propositions into CP categories.

(67) PCU [+proposition]

Given the ?nd- complementizer is a C-head, the CPU verbs select propositions. Hence, the proposition is canonically mapped to the CP structure. This kind of analysis, however, cannot be applied in the current Minimalist system, as we have noted above,

where the mapping is assumed to be from syntax to semantics, not the other way around. Therefore, if there is a selection, the selection needs to be determined by the syntactic system itself, as no semantic information is available in the pre-Spellout stage.

Therefore, we need to formulate the selection parameter using syntax internal features only.

One of the most common approaches to explain the distribution of complement clauses within the syntactic system is to use feature compatibility. That is to mean, some classes of verbs select CP layers specified with certain features (properties). Some verbs are known to select complete or finite complement clauses while other verbs select nonfinite clauses. The selection of verbs taking finite complement clauses, such as *tell*, for example, can be explained by assuming a selection specification on the verb to combine with a complement clause specified with the finiteness property.

To solve some of the issues raised in the above subsections, what we probably need is an elaborated system of feature specification on the complement such that the selection mechanism can be further fine-tuned to those specifications.

The category features are often assumed to be a different class from the other more specific features such as tense, aspect, etc. Here, I suggest that the selection could target any of the feature types, depending on the properties of the selector predicates.

From the cross-linguistic literature, we know that *finiteness*, *mood* and *clause* type are the three most important features that CTPs target. But, the selection is not restricted to these features. Verbs that select smaller complement clauses might target lower verbal hierarchies such as the vP or the VoiceP.

Fine-tuning the selection parameters of each verb class is probably a way to solve one of the fundamental issues of the subcategorization analysis we saw above.

For the gerundives, we know that they are different from the regular nominal DPs because their internal structure is built out of verbal components. Structurally, this means that the gerundive clause contains a TP or AspP projection embedded inside the DP projection.

We can program this fact of the gerundives into the subcategorization system to differentiate them from nominal DP arguments. Given the assumption that the DP is the highest functional item, what we need is a mechanism to pass the internal verbal features of the gerundive to the highest domain such that verbs specialized in gerundive selection would be able to ‘see’ the verbal features.

For Amharic, we have seen in [Figure 9](#) that the DP head of the gerundives appears to project on top of the VoiceP/CausP. The evidence is mainly from the relative position of the nominalizer and the voice morphemes. Based on this, the selection relation between the higher selector predicates and the gerundive can then be constructed around

this syntactic relation. More specifically, we can assume that the verbs that select the gerundive are the ones that select the DP with a voice complement.

(68)    *nəggər* ('tell') + [uD + [uVoice]]

What this rule says is that the verb *tell* subcategorizes for a DP complement which itself subcategorizes for a voice feature. The presence of the Voice complement associated with the DP makes the gerundive complements distinct from the regular nominal DP complements.

As one can easily note, this kind of tripartite relation is not a strictly local (sisterhood) relation because the matrix verb is specifying not only its immediate complement but also the complement of its complement. This is at odds with the standard assumption which takes c-selection as a strictly local relation.

While we largely know c-selection is one of the most consistently local relations, a number of cases have been demonstrated where selection relates SOs from distance, [Svenonius \(1994\)](#). Mood selection, for example, is known to hold from distance. [Shlonsky \(2006\)](#) noted that the *think* verb in French selects an indicative complement, while *want* selects a subjunctive. Both mood types are embedded under a single complementizer *que*.

- (69)    a.    *Jean pense que Marie dort*  
               Jean thinks that Marie sleeps.Ind  
               b.    *Jean veut que Marie dorme*  
                       Jean wants that Marie sleeps.Subj

The same kind of selection exists in Italian as well. The verbs select the types of mood skipping across the complementizer.

In the same manner, CTPs select either finite or nonfinite complement clauses in Icelandic. The following example is from ([Svenonius, 1994, 140](#)).

- (70)    a.    *Hann lofaði að lesa ekki bókina.*  
               *He    promised [to] read not the.book*  
               'He promised not to read the book.'  
               b.    *Hann sagði að María læs ekki bókina.*  
               *He    said    [that] Maria read not the.book*  
               'He said that Maria didn't read the book.'

What makes the local selection untenable for these cases is the fact that the same complementizer is used for both the finite and nonfinite complement clauses. The matrix predicate cannot differentiate the embedded clauses via the complementizer because

it is the same item in both cases. To target just the non-finite clauses, and exclude the finite ones, the verb *promise* must have access to the features of the embedded clause. As Svenonius has argued, these facts weaken Baltin's hypothesis that selection is always a strictly local relation.

As we have seen in the in the introduction, the same holds for the Amharic clauses where the selector predicate targets verbal aspects.

- (71) a. yosef məkina-it-u-n ʔndə-t'əggən-ə-at səmma-hu  
*Josef car-f-def-acc CM-repair.pfv-3msgS-3fsgO hear-1sgS*  
 'I heard that Josef has repaired the car.'
- b. \*yosef məkina-it-u-n ʔndə(i)-t'əggin-at səmma-hu  
*Josef car-f-def-acc CM-repair.ipfv-3msgS-3fsgO hear-1sgS*  
 'I heard that Josef has repaired the car.'

As we have seen in the introduction, the perception verb *səm-* ('hear') can never combine with complement clauses that contain imperfective verbs. This is definitely a nonlocal restriction imposed by the selector predicate on the aspect feature of the complement clause.

This means that it is the fact of human language that syntactic objects could select each other from distance. But, the fact that most of the selection occurs in strict locality makes it very attractive. A reasonable compromise is to acknowledge that the actual syntactic objects remain at a distance, while relevant features might pass from one item to the other.

To explain those selection parameters, we need to means of connecting the features of the selector and the selectee. The selection from the lexical verb to the finite complement clause can be executed in two different ways

- (72) Two logical options for selectional relations:
- Nonlocal selection
  - Local selection

The first approach permits a selection relation from distance. One head selects another head across an intervening projection. This kind of relationship seems to be available in natural languages as documented in [Svenonius \(1994\)](#). But, most linguists don't take the nonlocal relation on the surface value. These distance relations are often assumed to have some kind of local relation at some level of the grammar. That is why different strategies for creating local relations are applied.

- (73) Strategies for creating local selection relations
- An immediate/direct strategy:** here, we can assume that the C head bears or inherits some properties of the lower clause by some means. The

- V of the higher domain then would select that specific feature on C.
- b. **A mediated/indirect strategy:** here, we can assume that the V selects a specific kind of C or complementizer. The complementizer then regulates the features of the complement clauses. That is, the V selects the C, and the C selects the feature of the embedded clause—would it be finiteness or mood.

To create a locality relation, the direct method requires some methods of transferring features of the lower clause to the CP projection. Indeed, the syntactic theory is full of tools that enable us to relate distant syntactic items. The one suggested in [Svenonius \(1994\)](#) is chain formation via head movement. Since the head movement has been argued to apply in the post-syntactic domain in the Minimalism [Chomsky \(2000\)](#), it won't be relevant to the selection which functions as a constraint to the Merge (core syntactic derivation).

The other renowned method of passing the feature of the lower functional projections to higher domains is known as feature percolation, [Grimshaw \(1991\)](#). Feature percolation has been a popular approach during the GB era to pass features from one domain to the other. It has also been applied to explain selection relations, [Grimshaw \(1991\)](#); [Abney \(1987\)](#).

But, recently, it has fallen out of favor presumably for a number of reasons. First, its status in the Minimalist system is unclear. Feature percolation is not one of the primal mechanisms used in Minimalist works. Because of this, the operation has not been properly scrutinized, and its properties are less understood. Second, in relation to the little attention paid to it, mechanisms to constrain it have not been devised. It is a very powerful operation that can be applied anywhere in any situation. Unless we put constraints on it, it predicts the transfer of features from anywhere to anywhere else. That is against the whole spirit of Minimalism.

Another, recently introduced mechanism for passing the features of one of the heads to the other is known as *feature inheritance*, [Fortuny \(2008\)](#); [Chomsky \(2008\)](#). Movement operations such as feature movement or head movement can also transfer features from one layer to the other. Indeed, we can think of feature percolation as the movement of features. The fourth approach that I will apply in this analysis is the Agree.

## 6.3 Agree as solutions for nonlocal selection

### 6.3.1 The two forms of a complementizer

In [section 3](#), I have noted that at least five types of complementizers head the complement clauses of Amharic. From these complementizers, the *?ndi* and *?ndə* have an uncanny resemblance in form and function. In their form, they differ only by the last vowel.

They also have relations in their function because they appear in complementary posi-



tions. That is, the PCU verbs almost exclusively select the *?ndə* clauses while the rest of the verb classes select the *?ndi* complementizer. Unlike the case with the other complementizers, there is no single overlap between these two complementizers. Not a single verb class selects both of them.

More importantly, the form of verbs where the *?ndi* complementizer appears to be imperfective, while the *?ndə* appears on the perfective forms.

Having these properties led me to think that these two forms are not really distinct complementizers. They are simply different forms of the same underlying complementizer, which we can mark as *?nd-*.

(74) **Underlying ?nd-**

*?ndi* & *?ndə* are different surface forms of the single underlying complementizer *?nd-*

If a CTP selects *?nd-* complementizer (complement clause), the form of the complementizer depends on the types of verb embedded under it. If the lexical verb of the embedded clause is perfective, the complementizer appears as *?ndi*, if it appears with the perfective form, it appears as *?ndə*.

Given the presence of complement agreement across languages, we can then explain the patterns with the help of Agree operation.

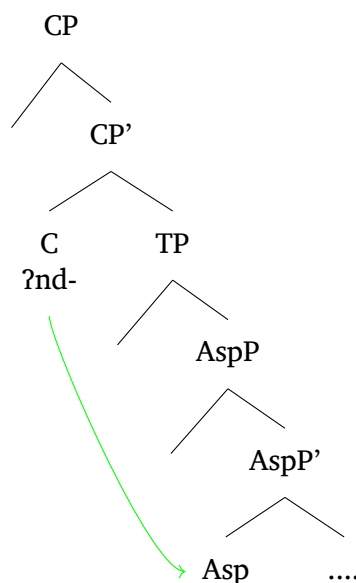
(75) **The two forms of ?nd-** reflect agreement

The single underlying complementizer *?nd-* appears in two different forms due to its agreement with the verbal aspect.

More specifically, it appears as *?ndə* because it agrees with the perfective aspect, and as *?ndi* because it agrees with the imperfective. The last vowel of the complementizer mirrors the forms of the verbs. The *ə* vowel is the core marker of the perfective aspect in this language. it is one of the core attributes that all perfective verbs share. The *i* vowel is also a feature of the imperfective verb paradigm. As such, the two forms of the complementizer are simply reflections of the two types of verbal aspects.

This means that the functional layer where these complementizers merge agrees with the AspP projection to determine the form of the complementizer.

Figure 2: Complementizer agreement



If the AspP head is filled with the perfective feature, the complementizer appears with the *ə* morpheme. But, if the Asp head is filled with the imperfective value, the complementizer receives the *i* morpheme.

As we will see in later sections, the presence of the TP projection is a bit unclear. The perfective aspect, especially, seems to be able to induce finiteness by itself. As such, we can extend this idea and further assume that the *ə* marker on the complementizer reflects the finiteness feature.

This idea is even more attractive because the *ʔndə* complementizer is also associated with the finiteness marking tense auxiliaries as well. Consider the following sentence.

- (76)    yosef məkina-it-u-n t'əggin-o-at            ʔndə-nabbər səmma-hu  
           Josef car-f-def-acc repair-3msgS-3fsgO CM-was        hear-1sgS  
           'I heard that Josef had repaired the car.'

Here, the complementizer doesn't project over a perfective lexical verb. It appears over the tense auxiliary *nəbbər*. Still, it appears in the perfective form. One might consider this as a falsification to the *agreement with the verbal aspect* idea I present here because the lexical verb is in the imperfective form.

Note, however, that the auxiliary itself appears in a perfective form. It displays all the properties of the perfective verbs: the middle consonant can be geminated, subject agreement markers could appear as suffixes, etc.

As such, we can simply assume that the auxiliary itself is in the perfective, and the complementizer copies the perfective feature of the auxiliary.

Admittedly, the situation is much more complex than this because the factors that determine the form of the complementizer can be complicated especially when other functional items intervene between the complementizer and the lexical verb.

Consider the form of the complementizer with the *t'əggən-* ('repair') verb we have seen above.

- (77)
- a. *ʔndi-t'əggin*
  - b. *ʔndə-t'əggənə*
  - c. *ʔndə-mi-t'əggin*
  - d. *ʔndə-as-t'əggənə*
  - e. *ʔndə-mi-as-t'əggin*
  - f. *ʔndi-as-t'əggin*

What exactly determines the forms of the complementizer is pretty complex as we can see in the above examples. In one way, the surface linear appearance of the complementizer with either aspectuals of the verbs seems to affect its form.

In (77-a), the complementizer directly attaches to the imperfective form of the verb. As expected, it appears as *ʔndi*. In the same manner, the complementizer appears as *ʔndə* if it directly attaches to the perfective form of the verb as in (77-b). These are expected patterns.

What rather seems odd is the case we have in (77-c) and (77-e). In these examples, the complementizer appears as *ʔndə* even if the verb appears in the imperfective. This is not expected because we have said that the *ʔndə* complementizer is not possible with the imperfective. It also gives the impression that the surface linearity of the complementizer with the forms of the verbs is what makes the agreement possible. That is, if the complementizer directly attaches to the imperfective form of it, it appears as *ʔndi*, as shown in (77-a). If there is an intervening item between the verb and the complementizer, it appears as *ʔndə*. From this, one might be tempted to think that the *ʔndə* form is simply an elsewhere condition while the *ʔndi* form is restricted to the surface linearity of it with the imperfective.

This analysis, however, cannot be right. Look at the following examples.

- (78)
- a. *ʔndi-as-t'əggin*
  - b. \**ʔndə-as-t'əggin*
  - c. \**ʔndə-mi-t'əggənə*
  - d. \**ʔndi-mi-t'əggin*

Here, we have the causative *as* intervening between the complementizer and the im-

perfective form of the verb. Still, the complementizer appears as *?ndi*, not as *?nda*. This suggests that the form of the complementizer has nothing to do with the surface linearity of the verbs.

Rather than surface linearity, what really matters is the structural features available on the verb. Even if *as* intervenes between the complementizer and the verb, the complementizer still appears in the imperfective. Therefore, the explanation for the (77-c) and (77-e) is not surface linearity between the complementizers and the verbs.

Rather, the reason why the complementizer appears as *?nda* form in these examples has to do with the feature specification of the *mi* marker itself. It appears that this prefix is some kind of perfective aspect marker. It selects the imperfective form of the verb and turns it into a perfective. The complementizer rather agrees with it (the highest item) and changes its form to the *?nda*. Functional items such as the causative *as* have little to do with aspectuality. As such, they don't induce any shift of form on the causative. The complementizer simply agrees with the form of the lexical verb embedded under the causative marker *as*—appearing in the imperfective as in (77-f) and in the perfective form in (77-d). Put in other words, the non-aspectual functional items don't function as a barrier to the agreement between the aspectual features of the verbs and that of the complementizers. Functional items that contain aspectual features act as intervener. The agreement will be between the C head and the functional items.

### 6.3.2 Agree for nonlocal selection

Agree is one of the core operations in the Minimalist syntax. Agree is sometimes considered to connect SOs appearing in spec-head relations. But, a large body of work has recently shown that agreement also holds across long distances, Bhatt (2005); Polinsky and Potsdam (2001); Boeckx (2009); Bošković (2007).

For the current purpose, we assume that Agree relates the heads of two contiguous projections. This is based on the empirical observation that nonlocal selection is a relation between a head and the complement of its complement.

(79) Longest distance selection

The farthest a head can select is the complement of its complement.

Of the three features that the CTPs select, the clause type appears to be the closest. Since clause type specification is directly associated with the C head itself, this relation is often assumed to be local. The two other features that appear to be nonlocal to the predicates are finiteness and mood. Both these features are often associated with the TP projection, Bruening et al. (2018). Finiteness, both under Rizzi's<sup>7</sup> analysis, as well as the traditional classification, comes as a complement to the CP projection, which itself is the complement of the matrix predicate. Mood has been associated with the TP head as well. As such, the furthest a functional item can be a complement to the

matrix predicate is to appear as the complement of the CP.

Given (79) is a mere empirical generalization, one wonders if Baltin's kind of mediated method of selection would be able to capture it. Her method interpreted into the Minimalist system would look like the following:

(80) **Complementizer types**

- (a)  $C_{uFin}$
- (b)  $C_{uSub}$
- (c)  $C_{u-Fin}$

(81) VERB [V,  $uC_{uFin}$ ]]

What this rule says is that the complementizer or the C head comes with different uninterpretable features. The one that comes with the uninterpretable finiteness feature is selected by specific classes of verbs while the one with the uninterpretable mood feature will be selected by some other classes of verbs. This would be the feature-checking application of Baltin's theory.

But, as we have seen, the problem with this approach is that it predicts different complementizers would be used for different complement clause types. As each C in (80) contains different types of features, it would appear in different forms in the phonological component. As such, different kinds of complementizers are predicted for different types of clauses.

As Baltin (1989, 5) explicitly stated, "if we find a complementizer that cooccurs with both finite and infinitival Ss, we predict that any predicate that selects said complementizer will not be able to require a particular finiteness value for the complement."

We have seen that this is not borne out. We have seen the *ɲndə* complementizer appears both with the finite and nonfinite complement clauses (and agree with the aspect form). Even if the same complementizer appears with both types of complement clauses, the verbs still require either the finite/imperfective or finite/perfective complement clauses. The MAN verbs appear with the imperfective/nonfinite forms, while the PCU verbs do so with the perfective/finite forms.

Therefore, I propose Agree as a means to transfer the features of the complement clauses to the C layer. We know that for independent reasons, there is an agreement relation between the finiteness domain and the CP domain in a large number of languages. We can use the opportunity to transfer the features of the finiteness domain to the CP domain so that the features will be visible to the selector predicates.

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<sup>7</sup>For the sake of clarity, I don't consider focus and topic as part of the main structure of the left periphery in contrast to Rizzi's theory. Considering these optional heads as part of the main structural derivation poses a lot of issues for selection, Boeckx (2008); Shlonsky (2006). As such, I consider these as adjuncts that freely attach to the existing structures.

- (82) Agree-based long-distance selection  
 Long-distance selection is possible when Agree copies the features of the selectees to the complements of the selectors.

According to this hypothesis, the long-distance selection relation is created when the C head probes down to the C domain and agrees with it. We know that Agree copies features of one head to the other. As such, the features of the TP/FinP layer will be available on the C head. The copied features then function to determine the distribution of the CTPs, in a local relationship to the C. Indeed, that is exactly the form of the *2nd*-complementizer confirms. Not only in Amharic but a large number of other languages are known to have complementizers agreeing in tense and mood features, (Zwart, 1993; Diercks, 2013; Koppen, 2005; Koenenman, 2010; Federico, 2011; Maria-Luisa, 1989; van Koppen, 2017).

The following example shows the inflection of the Irish complementizer agreeing with the tense of the complement clause, van Koppen (2017).

- (83) a. Deir sé **go** dtógfaidh sé an peann.  
           *sayPRES he that takeFUT he the pen*  
           ‘He says that he will take the pen.’  
       b. Deir sé **gur** thóg sé an peann.  
           *sayPRES he that-PAST takePAST he the pen*  
           ‘He says that he took the pen.’

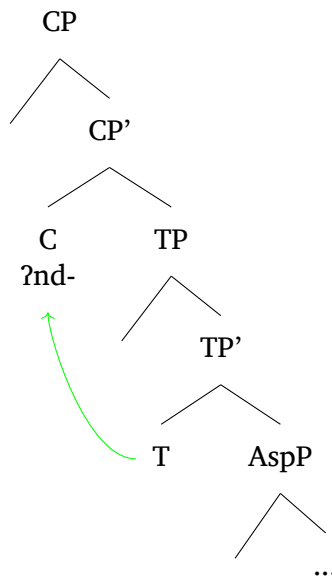
The proposal is not completely new. Observing the correlation of *that* and *for* complementizers with the finiteness and nonfinite complement clauses respectively, Chomsky and Lasnik (1977, 445) already suggested “what is required is a kind of ‘rule of agreement’ ”.

Agree operation that copies the features of the Fin/TP domain to the C layer creates a local relation between the selector and the feature of the selectee.

### 6.3.3 The selection of *ind*- clauses

The generalization we made in (79) then can be explained by assuming that the Agree relation is from the C head to the head of its complements.

Figure 3: Complementizer agreement



The exact head that creates the Agree relationship with the C-head could vary from one language to another. For Amharic, we have seen that the complementizers inflect for aspect. In other languages, the agreement might be with tense, or mood. The exact syntactic heads that Agree connects can be inferred from the forms of the complementizers.

Given the variability of the exact morphemes that appear on the complementizers from one language to the other, we can assume that the agreement is always between the relevant heads of FinP and CP. We know that finiteness is determined by different features in different languages. In some languages, finiteness is achieved with the tense features; while in other languages, mood might be the crucial factor. We can exploit these typological differences to develop a consistent agreement system between the C and FinP heads.

For tense-based languages (where the finiteness is largely determined by tense) the agreement is between the TP and the CP. That is because the TP is the FinP in this case. It is the tense feature that gets copied to the C.

For aspect-based languages where the finiteness is determined by aspect, aspect would be the active feature. Then, this exact feature gets copied to the C-head.

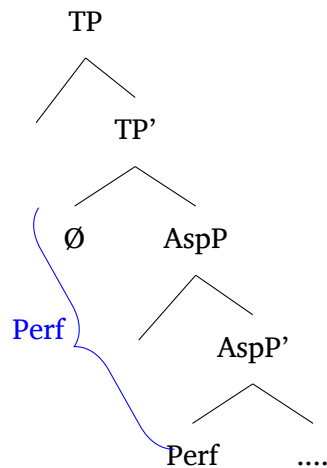
All these different active feature types are unified under the notion of finiteness.

For Amharic, finiteness is determined either by the presence of the perfective aspect, or the explicit projection of tense auxiliaries, Meyer (2010); Appleyard (2002). Verbs selecting finite complement clauses such as the CPU verbs then get access to the finite

feature of the TP layer via the Agree relation established between the C head and the Fin/T head.

More precisely, for the perfective, we have seen that the perfective aspect is the lexicalization of both the TP and AspP projections. The perfective is what determines the finiteness of the clause, without any tense morphology.

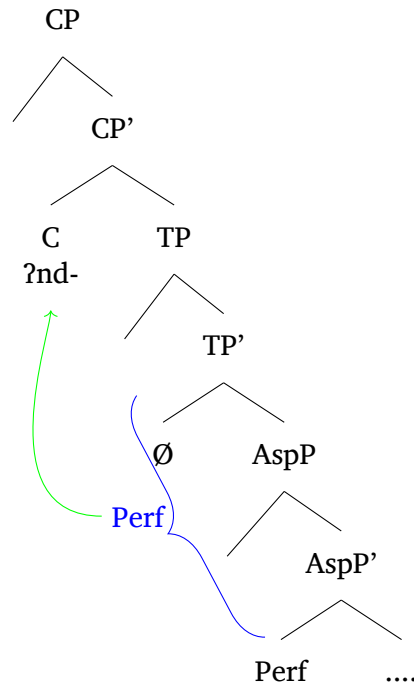
Figure 4: Perfective



In this case, the finiteness is determined by the perfective aspect. As such, the CP layer agrees with the [Perf] which, by hypothesis, spans the Asp and TP projections.



Figure 5: Perfective



This analysis requires a slightly late agreement because the two functional heads because the agreement needs to follow the spanning. We also need to assume that spanning is a syntactic operation (in contrast to the PF operation). The agreement relation is then established between the higher CP layer and the fusion of the TP and AspP layers.

Alternatively, we can assume that the Tense projection doesn't project in the perfective. This might sound strange given the standard assumption that TP is a universal projection. But, I think, given the perfective itself seems to encode tense meaning, the assumption that tense is blocked in the perfective is a plausible alternative analysis.

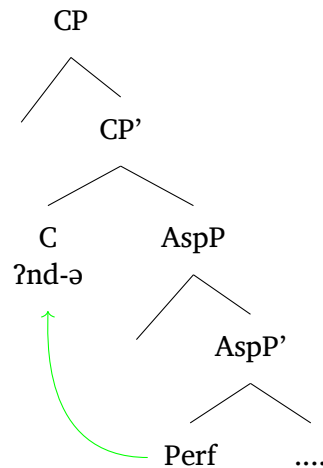
In an attempt to explain why causative morphemes don't merge with lexical causative verbs, in [Workneh \(2020\)](#), I have proposed that the merger of the causative morphemes is blocked due to the economic principle which blocks redundant features in the same projection.

The same kind of analysis can be extended to the projection of tense. The tense feature is able to project in the verbal fseq only if no other tense feature has been merged in the same fseq. If tense is already part of the derivation, an economy requirement blocks it because redundancy is uneconomical. In this sense, tense auxiliaries are blocked with the perfective as the perfective already contains tense properties. Merging tense on top

of the perfective aspect would cause redundancy of the tense feature. As such, it is blocked.

If this turns out to be the case, then the perfective would be assumed to be an immediate complement of the CP.

Figure 6: C agrees with the perfective



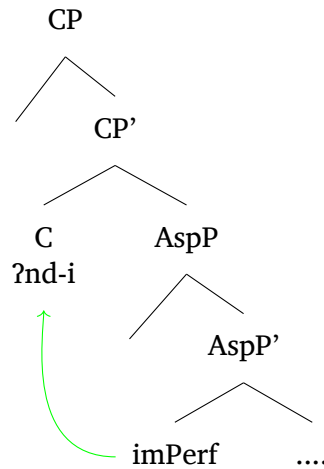
The above structure explains how the *səmma* ('hear') is able to filter the perfective embedded verbs from the imperfectives—the logicity issues I raised in the introduction part of the paper. Let's see the crucial examples once more.

- (84) a. yosef məkina-it-u-n ʔndə-t'əggən-ə-at səmma-hu  
*Josef car-f-def-acc CM-repair.pfv-3msgS-3fsgO hear-1sgS*  
 'I heard that Josef has repaired the car.'
- b. \*yosef məkina-it-u-n ʔndə(i)-t'əggin-at səmma-hu  
*Josef car-f-def-acc CM-repair.ipfv-3msgS-3fsgO hear-1sgS*  
 'I heard that Josef has repaired the car.'

Here, the aspectual specifications of the embedded clause are passed to the C-domain via the Agree operation. Even if the perception verb has no direct/local access to the embedded clauses, the Agree operation that connects the AspP with the CP manages to make the features of the Asp visible to the selector verb. That is how I suggest, the nonlocal selection becomes a possibility.

If the embedded clause appears in the imperfective/nonfinite form, on the other hand, the complementizer appears in an imperfective pattern, as *ʔndi*. This again is a case of the agreement of the C with the imperfective aspect head.

Figure 7: C agrees with imperfective



- (85) a. \*yosef məkina-it-u-n ?ndə(i)-t'əggən-ə-at fəlləg-hu  
*Josef car-f-def-acc CM-repair.pfv-3msgS-3fsgO want-1sgS*  
 'I wanted that Josef repaired the car.'
- b. yosef məkina-it-u-n ?ndi-t'əggin-at fəlləg-hu  
*Josef car-f-def-acc CM-repair.ipfv-3msgS-3fsgO want-1sgS*  
 'I wanted Josef to repair the car'

The above structure generates nonfinite complement clauses such as *?ndi-t'əggin* ('to repair'). This again makes the imperfective feature available to the C domain such that imperfective clause selecting predicates would target them. We have seen that the desiderative verbs select embedded clauses with imperfective aspectual specifications.

But, if we have a tense auxiliary appearing on top of the imperfective verb form, the agreement between the C and the imperfective is blocked. The complementizer appears in the perfective (finite) form.

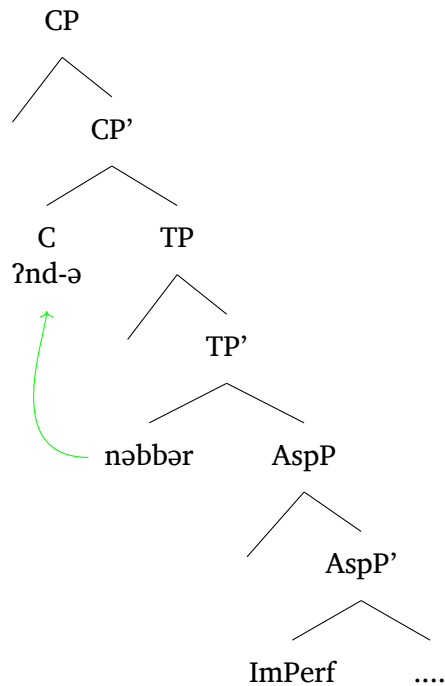
- (86) si-t'əggin ?ndə-nəbbər səmma-hu  
*CM-repair.ipfv CM-was heard-1sgS*  
 'I heard that he was repairing.'

Here, the embedded lexical verb is in the imperfective form. The complementizer doesn't appear in the imperfective. Due to the presence of a tense auxiliary, the complementizer appears in the perfective form.

In this case, the reason why the auxiliary appears in the perfective is clearly due to the features of the tense auxiliary. Given the overt projection of the tense auxiliary, the

tense feature is the highest feature in the embedded clause. As such, the agreement is between the C and the T. The aspect is embedded inside the TP that it lacks access to the C-domain.

Figure 8: C agrees with T



The agreement is always between the C head and the head of its complement. This agreement pattern fully explains why the longest selection is between a head and the head of its complement.

As the agreement is always between the C and its immediate complement, what becomes available to the selector predicate is the feature of the complement of the C head.

Once the feature of the complement of the C gets copied to the C, it satisfies the c-selectional requirements of the selector predicates. Certain classes of verbs select the C carrying the [Perf] feature. This is the case of the verb classes included under the PCU superclass.

(87) PCU + [<sub>C</sub> <sub>+fin</sub><sup>8</sup>]

<sup>8</sup>To simplify the analysis, and make the analysis more general, I equate the perfective feature with the finiteness and the imperfective with the nonfinite.

In the same manner, verbs subcategorized for non-finite/imperfective features would be able to select the C-carrying the [imPerf] feature. This is how the MAN and MOD verbs select the imperfective complement clauses.

(88) MAN/MOD + [<sub>C</sub> C<sub>[-fin]</sub>]

This is all we need to explain the selection of CTPs to the *ind*- complement clauses.

### 6.3.4 The selection of gerundives

Thus far, we have seen that the *?ndi* and *?ndə* complementizers are underlyingly unified. It is a single complementizer, surfacing in different forms on the surface due to the agreement relations C has with the finiteness domain.

This means that the underlying complementizer *?nd*- is able to take both finite and nonfinite complement clauses. In both cases, I proposed for it to appear in the CP layer.

The same hypothesis cannot be extended to the other complement clauses. There are a number of reasons why the nominalizer *mə* should not be taken as a C-head.

The negation morpheme, for example, can scope over the nominalizer, but never over the *?nd*- complementizer.

- (89) a. al-mə-t'əggən  
neg-CM-repair  
'al-mə-t'əggən-u'  
b. \*al-?ndə(i)-t'əggən  
neg-CM-repair

Under our current understanding of the verbal fseq, this suggests that the clause marker is not an instantiation of the C-head. It projects on a smaller, truncated functional layer, Wurmbrand and Lohninger (2020); Rizzi (1993); Wurmbrand (2003).

In contrast to the *?ndi* complementizer which projects on top of the complete TP layer (which includes the negation), the nominalizer appears on a lower, truncated part of the clause.

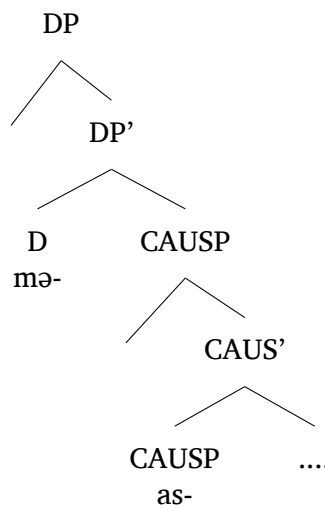
Based on this, we need to explicitly address where in the verbal fseq exactly the nominalizer head projects.

In (Workneh, 2016, 30), I have suggested that the nominalizer projects in the middle of the verbal fseq. The justification for this idea came from the fact that the nominalizer morpheme appears inside the negation marker, but outside of the causative morphemes.

- (90) mariam məkina-wa-n mə-as-t'əggən fəlləg-əčč  
 Mary car-3fsg.poss-acc CM-CAUS-repair want-3fsgS  
 'Mary wanted to have her car repaired.'

Here, the indirect causative item is embedded inside the nominalizer clause marker. This suggests that the nominalizer appears higher than the voice items. I have further demonstrated that the clauses headed by this morpheme are gerundive constructions. Based on this, I have proposed that the nominalizer item *mə* projects a nominalization head DP (nP) on top of the verbal spine.

Figure 9: The position of *mə*-



Since [Abney \(1987\)](#), having a nominal projection on top of the gerundives is the standard analysis.

If we agree with the idea that the gerundives are headed by the DP, the explanation for their selection of them is straightforward. The *mə* clauses are selected by verbs that subcategorize for a DP. As we have seen in [Table 5](#), this includes all the verb classes with the exception of *pretense* and *manipulative* verbs.

- (91) PCU/MOD/[Perm/Mod](#) + [<sub>D</sub>]

What this rule says is that all the PCU, MOD, *perception*, and *modal* verbs do subcategorize for DP. This is sufficient to explain the basic selection facts.

But, as I already noted above, the challenge for the subcategorization theory with regard to the gerundives is how the verbs are able to filter regular DPs which take nominal

complements from the gerundive DPs.

We have seen that not all transitive are able to select the gerundive complements. If we program our subcategorization frame with just the DP, we will make wrong predictions that all the transitive verbs would be able to combine with the gerundives.

(92) Verb<sub>trans</sub> + [ \_DP]

This rule predicts that the regular transitive verbs such as the *kill* type would also be able to combine with the gerundive DP so far as they are headed by the DP projection. But, that is not borne out. We have seen asymmetries within the transitive verbs. The relevant examples are repeated here.

- (93) a. Mary enjoyed the game.  
b. Mary enjoyed kissing John.

- (94) a. Mary kissed John.  
b. \*Mary kissed pleasing John.

The DP-argument-taking predicates then fall into two classes with regard to this: those verbs that are able to take all types (both vP and nP) of complement DPs, and those specific to nP-types of DPs.

- (95) DP-selecting transitive verbs:  
a. *Enjoy* type: license both verbal and nominal DP arguments  
b. *Kill* type: license only nominal DP arguments

The question is how can we formulate our rules such that the unlicensed combinations such as the combination of the *kill* class of verbs with gerundive DPs would be ruled out.

It is obvious that the complement of the verb, which has the category of DP, is not sufficient to differentiate these two different types of complements. Some information needs to pass from the lower layers to the DP layer to inform the selecting predicates that the complement is the right type. Once again, the Agree proposal presented above can resolve the problem.

More specifically, I proposed that the features of the sub-DP domain are able to pass to the DP layer via Agree relations.

Assume that the *kill* types of verbs subcategorize for the n-feature while the *enjoy* class do so just for the DP.

The sub-categorization of two types of transitive verbs.

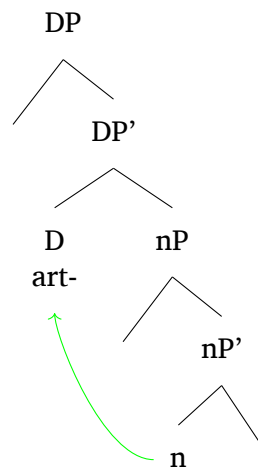
(96) Subcategorization of two types of transitive verbs

- a. enjoy + [<sub>D</sub>]
- b. kill + [<sub>n</sub>]

The *enjoy* types of verbs subcategorize for a D. These don't need to select among the nominal and verbal DP arguments. They are able to select both types.

But, for the *kill* class which targets only nominal DP arguments, the subcategorization is not to the DP per se. It is for the n-feature. This means that the *kill* verb selects the DP only when it contains the n-feature. The n-feature becomes available to the DP layer via the Agree relationships between the DP and nP projections.

Figure 10: D agrees with n



I believe there is an empirical motivation for this analysis. As we have used the complementizer agreement across languages as a motivation for the presence of agreement between the C and TP layers, here, I provide different empirical support for the DP-nP agreement.

The standard understanding of DP projections is that the head is realized by either definite or indefinite articles, [Abney \(1987\)](#). But, the articles that appear as instantiations of the DP often appear with lower nominal features such as gender and number, [Puskar \(2017\)](#); [Fedden and Corbett \(2017\)](#); [Kramer \(2009\)](#); [Schoorlemmer \(2009\)](#); [Mila and Giuliana \(1998\)](#). These features are not borne on the article itself, as they appear to project on their layers. For the number feature, for example, the NumP is assumed to be the actual place of projection. For the gender, in the same manner, the nP is considered the place of projection, [Matushansky \(2013\)](#); [Ritter \(1993\)](#); [Ferrari \(2005\)](#); [Picallo \(2007\)](#) because gender is an inherent property of the noun.



The presence of the gender feature on the articles (D) is then clear evidence for the agreement relationship between the D head and the n/N<sup>9</sup>.

The Agree relation between the D and the n is then able to pass the features of the n to the D head which will ultimately be able to constrain the combination of the lexical verbs.

This explains why some verbs select gerundive, as well as nominal DP, complements while other verb types select only nominal DPs.

### 6.3.5 The prospective *li*

The syntactic position of the *li* clause marker seems slightly higher than the *mə* clause marker because, as we have seen, it is able to scope over negation morphemes.

- (97) Li-ay-t'əggin fəlləg-ə  
CM-neg-repair want-3msgS  
'Didn't want to repair.'

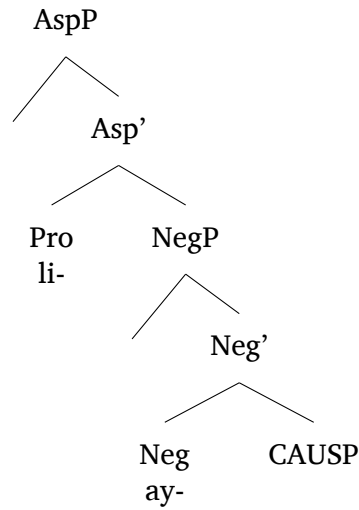
Some of the previous works also consider the morpheme as a grammatical aspect marker. It is therefore natural to assume the *li* morpheme as a realization of the AspP projection<sup>10</sup>.

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<sup>9</sup>Note that many kinds of functional projections are assumed to appear between the D and the np. That might seem to contradict the furthest selector generalization presented above. But, all the projections that are between the DP and nP layers are simply free riders—they appear as free adjuncts. There is no selection relationship between the Dp and the adjective or any other projection. As such, I consider the nP to be the proper structural complement of the DP.

<sup>10</sup>As the position of the *yə* complementizer is well established to be in the C-layer Workneh (2011), I am not going to discuss it here.

Figure 11: The position of *li*



This position correctly explains its position relative to other items such as negation markers and causatives. It appears higher (outside) of these items. It also explains why it appears inside the other C-level complementizers such as *?ndə*.

Most importantly, the evidence why the *li*, or the *mə*, items cannot appear on the C-level comes from their inability to appear on top of auxiliary verbs.

Unlike the *ind-* complementizer which ‘floats’ on top of the tense auxiliaries, they are unable to do so.

(98)

- a. t’əggin-o ?ndə-nəbbər
- b. \*t’əggin-o li-nəbbər
- c. \*t’əggin-o mə-nəbbər

In Amharic, morpheme floating applies from higher functional layers to the lower (semi)-lexical items. The *?ndə* complementizer appears on the auxiliary item means that it projects in a higher position than the auxiliary. The incapability of the other clause marker to appear on the auxiliary suggests that they merge in lower positions than the tense auxiliaries (TP). From this, one can understand that the *li* clause marker projects in lower domains.

The analysis I am going to present here, however, does not need a reference to the exact position of the clause marker. Given the Agree proposal, the exact position of the clause marker, either it is on C or lower is irrelevant to the selection.

As we have seen, all the verbs that the *li* clause appears on belong to the MAN and MOD classes. These verbs select the imperfective forms of the verbs.

Given the idea that the selection doesn't target the clause markers themselves, but rather the features in the TP domain, the proposal presented in (88) can be extended to explain the selection of *li* clauses.

What that proposal says is that verbs falling to the MAN and MOD classes select the imperfective (nonfinite). The features become available from the lower AspP/TP to the CP domain via Agree. Given the *li* clause marker always projects over the imperfective aspect, we don't need any special rule to explain the selection.

What we rather need to explain is why some classes of verbs within the MAN and MOD super-classes fail to combine with the *li*- clauses.

Given the proposal that the clause markers are irrelevant to the selection, and that the verbs embedded under the *li*- complementizer appear in the imperfective, the failure of some verb classes such as *aspectual*, *pretense*, *manipulative* and *permission* to combine with the *li* clauses is unexpected.

We have seen that the MOD/MAN verbs subcategorize for the imperfective feature. That is how they combine with the *?ndi* complementizer. It carries the imperfective feature which the underlying complementizer receives via Agree.

Now, to explain why some of the verbs fail to combine with the *li* clauses even if the verbs are embedded under the *li* clause are imperfective, what we need to assume is that the agreement between the topmost projection of the *li* clause fails to trigger Agree with the lower verbal domains.

We can assume the AspP that the *li* appears doesn't trigger agreement. Given the lower position of the AspP which the *li* appears on, even if it triggers Agree, the result is not going to be the transfer of the imperfective aspect to the higher layer. As we can see in the structure in fig. 11, the complement of the *li* complementizer is the negation. Even if we assume an Agree relationship between the AspP and NegP, the negation feature is irrelevant to selector verbs. The verbs are sensitive to the aspect features.

The verbs are sensitive to the aspectual features.

Given that the *li* clause marker itself is an aspect marker, what we need to say here is that verbs are directly selected by it without any need to get the aspect feature via Agreement. As such, the verbs which combine with the *li* clause are exactly those that select the prospective aspect.

(99)    Des/Inte/Mod + [<sub>Asp</sub><sub>pro</sub>]

The *desiderative*, *intentional*, and *modal* verbs are able to combine with the *prospective*

aspect. No other verb is able to combine with the *li* clause because they do not contain the relevant features such as the Perf/Imperf and T features. The Asp head is filled with the prospective aspect.

## 7 Conclusion

In this paper, I have argued that the seemingly nonlocal selectional relationships between complement taking predicates and lower verbal domains can be explained by assuming an Agree relationship between the C head and the relevant feature. I specifically have shown that the so called PCU verbs select the perfective verbs and the MOD/MAN verbs are able to select the imperfective due to the fact that those aspectual features are passed to the C layer via the Agree operation between the C and the AspP. I have shown that the presence of two forms, the *?ndi* and *?nda* for the same underlying complementizer, as evidence for the presence of agreement relation between the AspP and the C head.

A similar type of agreement mechanism is also used to pass the lower features of the gerundives and infinitive (*li-*) clauses to the higher clausal domains to constrain the types of verbs that are compatible with the respective clause type.

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