Competition for agreement and case – a study on the causee and indirect objects of Amharic

Workneh, Desalegn Belaynew
UNIVERSITY OF TROMSØ

Abstract. In this paper, I argue that agreement and case are assigned in different ways across various causee and other internal arguments. I show that agreement is a relativized system where the presence of one argument DP_x higher than the other DP_y inhibits the relation of the latter with the verb. Case, on the other hand, is argued to be insensitive to the presence of intervening argument DPs. Case is a fixed relationship between the case assigning head and the DP in its specifier. I explain this distinction by assuming different orders of syntactic operations. Case is assigned early in the syntactic derivation – probably just after Merge. But, Agree relations are established pretty late in the derivation. As such, other syntactic derivations such as Movement (topicalization) affect the nature of Agree relations between two syntactic objects.

1 Introduction[1]

Even though there are very few systematic investigations, the properties of causee arguments in causative constructions are fascinating. First, unlike prototypical arguments, causee arguments are always optional. In many languages which mark their causatives morphologically, such as Hindi, Japanese, Oromo, or Amharic, the overt presence of the causee is consistently optional. Secondly, causee arguments in many languages display properties of both arguments and adjuncts. While the instrumental case they usually receive and their optionality puts them on par with prototypical adjuncts, their agentive semantics suggests that they are proper arguments. Causee arguments also have similarities with indirect objects. In languages such as Japanese and Tigrinya, for example, the causee arguments act as prototypical indirect objects by receiving the dative case.

The causee arguments in Amharic behave much in line with proper arguments. Unlike in most languages, causee arguments in Amharic can come with the accusative case[2]. What is particularly interesting about the accusative case is not that the arguments come up with uncommon case marking for the causee arguments per se, but rather the effect of the case marking on the verbal agreement.

In this paper, I will attempt to investigate the syntactic properties of causee arguments in Amharic clauses. Their similarities with indirect objects of triadic verbs are so striking, that I will entertain the possibility that the analysis proposed by Baker (2012) for the indirect objects can be extended to the causee arguments as well.

I will show that Baker's recent analysis is on the right track, especially for the case marking, but is insufficient to capture all the agreement facts. I will argue that the syntactic (relative) position of the arguments is crucial for the agreement of the internal and causee arguments. As

1. **Glosses:**
3 = third person, ACC = accusative, BEN = benefactive, CAUS = indirect causative, caus = direct causative, DEF = definite, DO = direct object, ERG = ergative, F = feminine, IO = indirect object, M = masculine, NOM = nominative, OBJ = object, PERF = perfective, PL = plural, PROG = progressive, SG = singular, SUBJ = subjunctive, TOP = topic.

2. In some other languages, such as Malayalam, for example, the case marking of the causee makes a clear-cut distinction between transitive and intransitive verbs. In the causativization of intransitive verbs, the causee seems to function as an object. In transitive verbs, on the other hand, the causee functions as an adjunct by receiving the instrumental case.

such, Relativized Minimality captures the facts better.

But before getting into the details of how causee arguments behave in Amharic, I will flesh out some general properties of causative and applicative constructions in the language. To that end, I will first describe the basic patterns of morphological causativization. Relying on the currently available literature, I will develop a simple sketch of how the causative and applicative constructions fit into the clausal fseq. Then, finally, I will return to the main purpose of the paper – that is, how the causee and other internal arguments compete for agreement and case.

2 Setting the ground: the structure of the lower verbal fseq

2.1 The causatives

Amharic has two causative prefixes, one for external and one for internal causation.

2.1.1 The internal causative

The internal causative marker *a* (also called *direct causative*) is a transitivizer element. It transforms intransitive verbs to transitive. The internal causative marker *a* is one of the most productive morphemes in the language. Its distribution is mostly straightforward. It occurs on unaccusative (intransitive) verbs and turns them to causative/transitive.

Here are some examples:

(1) wət't'a → a-wət't'a
went out → took out

(2) mət't'a → a-mət't'a
came(int) → brought(tr)

(3) k'əllət'ə → a-k'əllət'ə
melt(int) → melt(tr)

2.1.2 The external causative

The causative marker *as-* gives a sense of indirect causing – the external argument (the agent) causes or forces somebody else to do some event (action) on the patient. The distribution of the external causative marker

is more varied than the internal causative marker. It occurs on causative (transitive) and unaccusative (intransitive) stems.

(4) as-wət't'-a
CAUS-go
'make go out'

(5) as-mət't'-a
CAUS-come-3MSGSUBJ
'make (sb) to come/bring'

(6) as-gəddələ
CAUS-kill
'made (sb) to kill/be killed'

To see the semantic difference between the two causative markers, consider the derivations of the two morphemes on a single verb such as *mət't'a* ('came').

(7) Yosef mət't'-a
Josef come-3MSGSUBJ
'Josef came.'

(8) Yosef dəbdabe-u-n a-mət't'-a
Josef letter-DEF-ACC caus-come-3MSGSUBJ
'Josef brought the letter.'

(9) Yosef dəbdabe-u-n as-mət't'-a
Josef letter-DEF-ACC CAUS-come-3MSGSUBJ
'Josef had someone bring the letter.'

A plain intransitive verb heads the first sentence in (7). When the internal causative marker *a* attaches to the verb in (8), the verb functions as transitive. The causative introduces one more argument into the derivation, and the role of the highest (subject) argument is the effector/agent of the event denoted by the verb.

The verb in (9) is different from the one in (8) because the latter is marked by the external causative *as-*. On the surface, the external causative marker does not seem to introduce any additional argument further from the internal causativizer. We still have the external argument ('Josef') and the internal argument *dəbdabe-u* ('the letter'). But, from the meaning of the sentences, it is clear that the latter one has one

more implicit argument. The implicit argument functions as an intermediate between the theme ('the book') and the causer argument ('Josef'). This argument is known as causee argument in the literature[3].

The causee argument can be implied, as in the above example, or overly projected, as in the following sentence.

(10) Yosef bə-təmari-očč-u dəbdabe-u-n as-mət'ť-a
Josef by-student-PL-DEF letter-DEF-ACC CAUS-come-3MSGSUBJ
'Josef had the letter brought by the students.'

Even though causativization is one of the most extensively investigated areas of syntax, there is still no consensus on how it works in across languages. One school of thought is to derive causativization within the lexicon (lexical internal derivations). This approach is less common nowadays, and I will not discuss it. A rather similar yet different approach is to put causativization either in the syntax, or in a special place between the proper syntax and the lexicon. This is the strategy introduced in Hale & Keyser (1993). They introduce different feature assigning heads in the L-syntax (a syntax-like process in the lexicon; as opposed to the S-syntax, which is syntax proper), such as CAUSE, DO, or BECOME, to derive intransitive clauses into transitive or suppress the transitive/causative to derive their intransitive counterparts. They have shown that the English de-adjectival verb *thin* is headed by BE and BECOME when inchoative, and CAUSE when transitive.

(11) a. The gravy thinned.
b. The cook thinned the gravy.

Amberber (1996) has taken the idea of L/S-syntax and applied it to the Amharic causatives.

To do so, first, he groups Amharic verbs into two classes – unaccusatives and causatives. He then argues that the direct causative marker *a* transforms the unaccusative verbs into a transitive by attaching to them.

He also argues that the internal causative *a-* merges in the L-syntax while the external causative *as-* in the S-syntax.

The current standard approach is rather to derive causatives in the narrow syntax. Recent works, such as Kratzer (1996); Chomsky (2001); Harley (2008); Ramchand (2008) and many others, on the other hand, argued that causativization proceeds in the narrow syntax.

3. There is confusion in terminology in the literature. Some people use the term *causee* to mean the intermediate argument, while others use it to mean the patient/theme (the internal argument of the verb). I will preserve the term *causee* for the intermediate argument, and use *patient* or *caused* for the internal argument.

Chomsky (2001) follows a similar analysis, but with a slight twist. For him, little v is the source of causativization, and at the same time, it is also the source of the accusative case assignment. He proposed that the accusative case marking is done by phi-complete v (he marks it as v*). In cases where v is not phi-complete, it will not assign accusative case to the object, leading to defective case assignment, as in passives, unaccusatives, and anticausatives. He suggested that in passives and unaccusatives, v is defective, and the direct object (patient) receives the nominative case from T.

(12) a. John sank the boat (v, NOM–ACC)
b. The boat sank (v, NOM)
c. The boat was sank (by John) (v, NOM)

Consider the sentence below.

(13) Aster Yosef-n ɨyyə-a-mət't'-aččw nəw
Aster Josef-ACC PROG-caus-come-3FSGSUBJ-3MSGOBJ is
'Aster is bringing Josef.' (causing/forcing him to come)

Based on a modified version of Chomsky's little v, as in (Demeke 2003), the verbal fseq of (13) would look as follows:

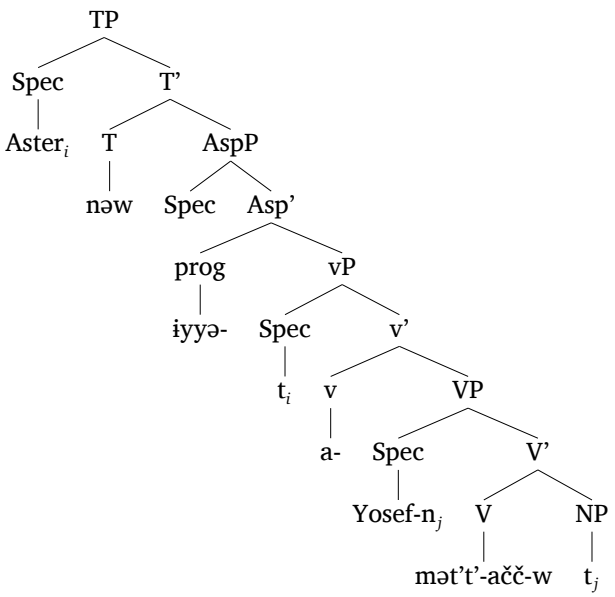

Figure 1: VP fseq

Grammatical aspect (AspP) is independent of theta role and case assignment. The aspect morphemes also appear outside of causative

morphemes. For that, aspect is assumed to project in higher positions than the voice features. In the same manner, tense is represented by independent items such as the copula, which occurs at the end of the whole VP[4].

The most external subject (the causer) has the nominative case (morphologically unmarked). By now, it is standard to assume that the Tense head (T) assigns the nominative case to the subjects (Chomsky 2001). For that, we need to assume that the causer argument raises to the TP once it has been introduced by the vP.

This gives us the basic pattern of projections from the higher to the lower verbal domains. There are, however, still issues that need further analysis. First, the idea of little v has been used in various senses in different works, it is thus not clear which of the arguments exactly projects it. It is not clear from the literature whether little v and Voice are the same projections with different designations or different projections. In Kratzer's and Chomsky's works, it seems that the two projections are the same — a projection where the prototypical agent subject merges. In other works, these projections have been connected to other notions. Sometimes, for instance, applicatives and their projections (ApplP) have been used in place of little v (Kim 2011). That is, all the three projections such as VoiceP, ApplP, and vP have been confusingly used to accomplish similar tasks by different authors.

Having a single position such as the vP for merging of every type of external argument is also problematic when a number of them appear in a clause. For that, I assume a more elaborate causative functional sequences as presented in Pylkkänen (2008), Kim (2011) and Workneh (2019).

2.2 Applicatives

The syntax of applicatives is pretty complex, I will not be going into details here. Instead, I focus on the most relevant points for the current purpose.

The applied arguments are of two types in Amharic. The first type is similar to the indirect objects of English. In this case, the indirect object can be indexed by the applicative morpheme on the verb.

4. Hence, if we follow Kayne's (1994) style of Antisymmetric derivation, a further raising of the whole AspP will be necessary to get the position of the copula right. One can also use Brody's (2003) system of linearization to get the position of the functional items right.

(14) Aster lə-Yosef dəbdabe lakk-əčč-ll-ət
Aster for-Josef letter send-3FSGSUBJ-BEN-3MSGOBJ
'Aster sent a letter to Josef.'

Here, the applied argument is the same as regular indirect objects in other languages. The difference is only the presence of a benefactive marker on the verb. The relationship is less productive as it is restricted to triadic verbs. The benefactive marker morpheme is also optional.

The second type is similar to the Bantu languages, where an applied argument can be productively added to almost any transitive verb.

(15) Aster lə-Yosef makina at't'əb-əčč-ll-ət
Aster for-Josef car wash-3FSGSUBJ-BEN-3MSGOBJ
'Aster washed a car for Josef.'

The two systems might appear distinct, but they are systematically related. Many studies have noticed that they have underlying uniformities and a unified syntactic structure can be stipulated for both types of systems (McGinnis & Gerdts 2004; Lomashvili 2011). Therefore, I assume the following type of simplified hierarchy for the verbal domain. A more refined structure of the Voice and CausP has been presented in Workneh (2019), but for the current purpose, a simplified version of it is sufficient.

(16) **Lower verbal fseq**
[$Caus_2$P [$Caus_1$P [ApplP]]]

In this approach, Voice is the projection where the external argument merges, while Cause projections are specifically preserved for causers and causee arguments. The ApplP hosts the applicative features and the associated arguments.

If we have a sentence as *Mary sent John a letter*, *Mary* merges in Voice projection while the recipient middle argument *John* merges in ApplP.

When we add causer and causee arguments, the relationship can be exemplified as follows.

(17) Mariam Yosef-n makina-it-u-n as-at't'əb-əčč-w
Mary Josef-ACC car-F-DEF-ACC CAUS-wash-3FSGSUBJ-3MSGOBJ
'Mary made Josef wash the car.'

The external argument *Mary* is the causer. It is the argument of the highest causative, which is the indirect causative in Amharic. *Josef* is the causee – the argument influenced by the causer and the actual effector

of the eventuality coded by the verb. In line with Workneh (2019), I assume this argument to merge in the lower CausP. The theme argument is unarguably the argument of the verb. As such, it merges with the vP(VP).

This is a more refined and better system, for it eschews confusion between the little v and Voice heads. In this system, the little v is simply taken as the layer for the verbalization of roots. Separation of the Voice from the causative, when it is possible, and from the little v makes the analysis more precise because not so many features are packed into a single head (Borer 2005; Pylkkänen 2008; Ramchand 2008).

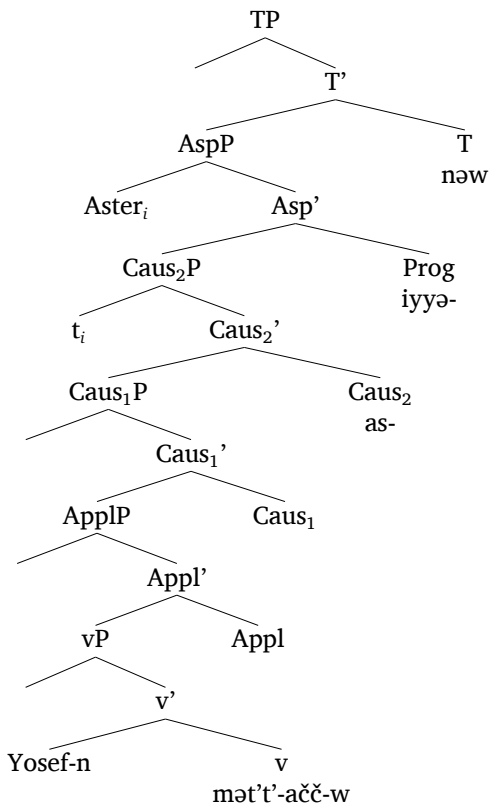

Figure 2: Verbal functional sequence of Amharic

3 The position of the causee and applied arguments

In the sections above, I have attempted to fit causatives into the basic architecture of the verbal fseq. In this section, we will see how the causee arguments fit in the above general architecture.

What does the standard generative syntax say about the position of causee arguments?

I will start from what Ramchand (2011) calls the "traditional" analysis of intermediate agents (causee arguments). According to the traditional assumption, verbs merge with their thematic values. The causative morpheme then adds one further argument on the thematic values of the verb. They do so via the modification/identification of the events:

Causative morpheme: E < Agent, Caused-Event >

When an intransitive verb like *laugh*, for example, combines with the causative morpheme, the argument of the causative event identifies the event of the embedded verb, and the single argument of the unaccusative verb is marked as a direct object.

(18) lɨj-u sak'k'-ə
child-DEF laughed-3MSGSUBJ
'The boy laughed.' (Amharic)

(19) Yosef lɨj-u-n as-sak'k'-ə-w
Josef child-DEF-ACC CAUS-laugh-3MSGSUBJ-3MSGOBJ
'Josef made the boy laugh.' (Amharic)

(20) bacca hãs-aa
child laugh-PERF.M
'The child laughed.' (Hindi, Ramchand 2015: p. 251)

(21) Anjum-ne bacce-ko hãs-vaa-yaa
Anjum-ERG child-ACC laugh-vaa-PERF.M
'Anjum made the child laugh.' (Hindi, Ramchand 2015)

In the examples (18) and (20), the external argument is the only participant. This argument appears as an internal argument when a causative morpheme appears with the verb.

Given that the experiencer receives the accusative case and triggers object agreement, one might assume that it appears in the standard object position. This assumption can be tenable for languages such as Hindi because the causee argument does not appear as a proper argument. As Ramchand (2015: 258) noted, "[T]he agent/causer argument introduced by the causative morpheme is linked to the subject, and any leftover argument must be demoted (here, the agent of the embedded verb) and realized as a *-se* marked adjunct".

Once the two important argument positions, the subject and the object, are satisfied, any leftover arguments are demoted to adjunct positions. That would be the fate of one of the arguments. This story could also be extended to Amharic because one of the arguments of the transitive verb can be marked by the instrumental marker and arguably function as an adjunct. [5]

(22) Yosef lɨj-u-n bə-məmhɨr-it-u
Josef child-DEF-ACC by-teacher-F-DEF
as-gərrəf-ə-w
CAUS-whip-3MSGSUBJ-3MSGOBJ
'Josef had the boy whipped by the (female) teacher.'

The problem with Amharic, however, is that the causee does not have to be instrumental marked and does not have to be optional. Unlike the causee arguments in Hindi and Japanese (Harley 2008), the causee in Amharic can properly appear like all other arguments, receiving the accusative case and triggering the object agreement on the verb.

(23) Yosef məmhɨr-it-u-n lɨj-u-n
Josef teacher-F-DEF-ACC child-DEF-ACC
as-gərrəf-ə-at
CAUS-whip-3MSGSUBJ-3FSGOBJ
'Josef made the (female) teacher whip the boy.'

Now, the question is: if our argument structure allows only external and internal arguments (which is presumably the reason why demotion happens in Hindi causatives), what is the position of the causee argument in Amharic causatives?

As the above example clearly shows, the causee argument can appear with the theme argument – both receiving structural cases. We therefore need separate positions for the theme and causee arguments to project. The same goes for the applied arguments. They can appear with the theme and causee arguments. As such, they also require their own positions.

The most straightforward solution is to assume the causee and applied arguments to appear in the specifiers of the low Caus_1P and ApplP projections. The high causative is a position for the external argument.

5. Ramchand & Tungseth (2006) argued against the adjunction analysis.

4 The similarities of causee and applied arguments

There is a striking similarity between causee arguments and indirect objects of triadic verbs.

1. Both the indirect object and the causee can be case marked by a preposition (imparting the instrumental to the causative, (24), and the genitive to the IO (25)[6]). Indirect objects and causee are the only arguments that receive case by prepositional marking. Compare the following sentences:

(24) Yosef dəbdabe-u-n bə-məmhɨr-it-u
Josef letter-DEF-ACC by-teacher-F-DEF
as-nəbbəb-ə-w
CAUS-read-3MSGSUBJ-3MSGOBJ
'Josef get the letter read by the (female) teacher.'

(25) Yosef dəbdabe-u-n lə-məmhɨr-it-u lakk-ə-w
Josef letter-DEF-ACC for-teacher-F-DEF send-3MSGSUBJ-3MSGOBJ
'Josef send the letter to the (female) teacher.'

2. When both arguments are marked by the prepositional case markers, their normal position is after the theme argument (cf (24) and (25) versus (5)).
3. When they are marked by the preposition, they do not block the theme argument from agreeing with the verb (compare with (7)).
4. Both the cause and the indirect object can be marked by the regular accusative case marker ((26) and (27)), in addition to the prepositional ones.

(26) Yosef məmhɨr-it-u-n dəbdabe-u-n
Josef teacher-F-DEF-ACC letter-DEF-ACC
as-nəbbəb-ə-at/*əw
CAUS-read-3MSGSUBJ-3FSGOBJ/3MSGOBJ
'Josef made the (female) teacher read the letter.'

6. Even if the genitive and the instrumental case markers have a different effect on the agreement of the arguments, as the genitive case marked indirect object can trigger agreement on the verb while the instrumental case marked causee cannot, both of them are considered prepositions.

(27) Yosef məmhiṙ-it-u-n dəbdabe-u-n lakk-ə-lat(*əw)
Josef teacher-F-DEF-ACC letter-DEF-ACC lakk-3MSGSUBJ-3FSGOBJ
'Josef sent the (female) teacher the letter.'

5. When they are marked by the accusative case, the preferred position for both classes of arguments is before the theme ((26) and (27)).
6. When they are marked by the accusative case, they trigger object agreement on the verb, provided no other argument blocks them ((26) and (27)).
7. When they are marked by the accusative case, both classes of arguments block the agreement of the theme argument ((26) and (27)).
8. The theme argument can precede both of them (object raising is possible in both cases) without affecting the agreement paradigm much ((28) and (29)).

(28) Yosef dəbdabe-u-n məmhiṙ-it-u-n
Josef letter-DEF-ACC teacher-F-DEF-ACC
as-nəbbəb-ə-at/*w
CAUS-read-3MSGSUBJ-3FSGOBJ/3MSGOBJ
'Josef made the (female) teacher read the letter.'

(29) Yosef dəbdabw-u-n məmhiṙ-it-u-n
Josef letter-DEF-ACC teacher-F-DEF-ACC
lakk-ə-ll-at/*w
send-3MSGSUBJ-BEN-3FSGOBJ/3MSGOBJ
'Josef sent the (female) teacher the letter.'

All these similarities cannot be due to mere coincidence. There must be something that those arguments share to display such consistent resemblance. The next natural question is how we can understand or explain the shared/unified attributes of those arguments.

Given this uniformity, and that Baker analyzed the indirect objects in the language, it would be interesting if his analysis could accommodate the causee arguments as well. A direct application of Baker's analysis would be to assume that the causee arguments merge within a null PP. But, that cannot be the whole story because we know that the causee arguments appear in the accusative form as well.

At this point, note that even if Baker presents the indirect object merge inside the VP projection, in line with Larson (1988), he also

suggests an alternative position in Spec-ApplP[7]. As already mentioned, Pylkkänen's (2008) research supports this higher position for middle arguments. Her theory is especially interesting; unlike all the previous approaches, it predicts distinct syntactic positions for middle and causee arguments. Assuming these distinct projections is especially necessary for Amharic, as they still can co-occur in the same VP, even if the two arguments are similar in their syntactic properties.

(30) Aster lɨj-it-u-n dəbdabe-u-n lə-Yosef
Aster child-F-DEF-ACC letter-DEF-ACC for-Josef
as-lakk-əčč-at
CAUS-send-3FSGSUBJ-3FSGOBJ
'Aster made the girl send the letter to Josef.'

In this example, *Aster* is the external argument; *dəbdabewun* ('the letter') is the theme; *lɨj-it-u* ('the girl') is the causee while *Yosef* is the indirect object. This means that both indirect objects and causee arguments can appear in the same clause. If that is so, we need two separate positions, one for each type of argument to project. That is why the Larsonian type of analysis cannot be sufficient and why we need an elaborate system of projections.

5 Causee as an oblique argument

Amharic has a class of arguments which display quirky properties in agreement and case assignment. They are the affectees/experiencer arguments of unaccusative verbs as *t'əffa* ('disappear') and psych verbs as *təmməmə* ('get sick'). They are quirky due to displaying the properties of objects even if they are supposed to act like regular subjects (as they are the sole arguments of the predicates).

(31) Aster-n əmməm-at
Aster-ACC sick-3FSGOBJ
'Aster got sick.'

If we take experiencer argument *Aster* in the above sentence, it seems the subject is the sole argument of the sentence, and it also appears in a position where prototypical subjects appear. The agreement and case assignment, however, show that the NP is rather more object-like. It

7. He suggested Spec-ApplP as an alternative position for the indirect objects in response to the question why only indirect objects (middle arguments) tend to be oblique arguments. He speculated that only ApplP might support null-headed PPs.

is marked by the accusative case and triggers object agreement on the verb. Observing this fact, Amberber (1996) argued that the argument is actually the object of the sentence where the external argument is hidden from the overt syntax (following Pesetsky 1995, Amberber calls it *Ambient causer*).

Baker (2012: 53) furthermore observed that the goal arguments of triadic verbs, such as *lakkə* ('send'), *sət't'ə* ('give'), or *nəggərə* ('tell'), also behave in a similar fashion. He then challenged Amberber's analysis and argued that these arguments cannot be like regular objects as they obligatorily trigger agreement and optionally receive the accusative case (the exact reverse of the regular objects in the language).

> The affectee argument is not like the agent argument of a normal transitive verb in that it triggers object agreement, not subject agreement, and in that it (optionally) bears the accusative case. At the same time, it is not like the theme argument of a normal transitive verb in that object agreement with it is obligatory (not optional), and the accusative case is optional (not obligatory).

From this, he concludes that these arguments are oblique, just like Icelandic dative subjects. He then proposed the existence of a null P projection on these arguments as the main culprit for the mixed property these arguments display. To block exactly these arguments from the subject agreement and the nominative case and enable object agreement and the accusative case, he makes the following claims:

- Null headed PPs cannot satisfy the EPP feature of T
- The EPP satisfaction of T is dependent on agreement (i.e., an NP that cannot satisfy EPP of T cannot agree with T)
- The NP arguments inside the PP cannot move out of it
- F, the projection responsible for the object agreement, has no EPP feature

If these goal/affectee arguments are headed by null PP, which cannot satisfy EPP of T, these arguments cannot raise to T and build agreement with it. This assumption effectively blocks the possibility of subject agreement on the verb and the nominative case with T. As the FP (the projection that the arguments merge in, also the source of object agreement) is assumed to have no EPP feature, raising of the argument does not happen. As the PP cannot satisfy the EPP feature of the T, a pro argument merges in SpecTP, leaving the argument NP in the lower position to agree only with F.

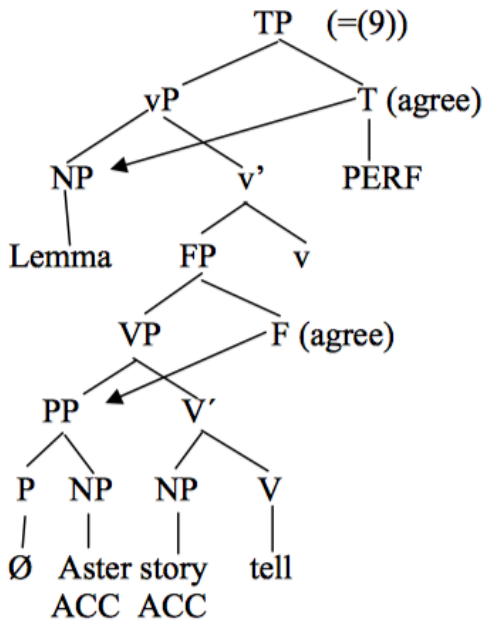

Figure 3: Object agreement according to Baker (2012: p: 50)

As shown in the tree structure in 3, the goal argument *Aster* is headed by null PP. Hence, it can neither agree nor move to T. It is, however, close enough to agree with F, the projection responsible for the object agreement (Baker assumes F to be distinct from v dut to the observation that non-agentive verbs can have object agreement in Amharic).

Then, the question is: can Baker's analysis of the goal and affectee arguments directly capture the causee argument? Or, in other words, can causee arguments be considered oblique arguments?

When we compare the agreement patterns of the causee and applied arguments, the patterns seem to fit better with Baker's (2015) analysis of the case in Sakha. The reason is the relativized nature of the agreement patterns.

In the following examples, whenever the causee merges into the derivation, neither the theme nor the middle argument (the indirect object) can trigger agreement on the verb:

(32) Aster dəbdabe-u-n lə-Yosef as-lakk-əčč-ll-ət
Aster letter-DEF-ACC for-Josef CAUS-send-3FSGSUBJ-BEN-3MSGOBJ
'Aster had the letter sent to Josef.'

(33) Aster dəbdabe-u-n lə-Yosef as-lakk-əčč-w
Aster letter-DEF-ACC for-Josef CAUS-send-3FSGSUBJ-3MSGOBJ
'Aster had the letter sent to Josef.'

In (32), the indirect object is the one that agrees with the verb. In (33), the theme argument is the one that controls the agreement.

However, the theme and the indirect object are unable to agree with the verb once a causee argument appears in the clause.

(34) Aster lɨj-it-u-n dəbdabe lə-Yosef
Aster child-F-DEF-ACC letter for-Josef
as-lakk-əčč-at/*w/(*ll-ət)
CAUS-send-3FSGSUBJ-3FSGOBJ/3MSGOBJ/BEN-3MSGOBJ
'Aster made the girl send a letter to Josef.'

In this sentence, the agreement morpheme indexing the theme and the indirect object is illicit.

This shows that the internal arguments, the direct object (DO) and the indirect object (IO), can agree with the verb only so far as no overt causee argument is available in the clause.

This competition-based agreement style seems to undermine Baker's analysis of indirect objects as oblique arguments. These examples show that it is not the internal syntax of the arguments themselves (the null PP idea) that determines their agreement. Rather, the presence or absence of other higher DP arguments decides the agreement relations. If there is a causee argument in the derivation, it tends to trigger agreement on the verb while blocking all other arguments. If the causee is not in the clause, the other arguments could agree with the verb.

Note, however, that any argument enters the competition only to the extent that it appears in a structural case. If any of the arguments are marked by an inherent case such as PPs, on the other hand, that argument will not be able to agree with the verb at all. Consider the following example:

(35) Aster bə-lɨj-it-u dəbdabe-u-n lə-Yosef
Aster by-child-F-DEF letter-DEF-ACC for-Josef
as-lakk-əčč-w/ll-(ət/*at)
CAUS-send-3FSGSUBJ-3MSGOBJ/BEN-3MSGOBJ/3FSGOBJ
'Aster made the girl send the letter to Josef.'

Whenever the causee is marked by a prepositional item, it cannot trigger agreement on the verb. In this case, the two remaining arguments agree with the verb. This, on the other hand, seems to support Baker's hypothesis that prepositions can undermine the agreement of the arguments. The problem is that Baker's null PP is designed to allow object agreement while blocking subject agreement by failing to satisfy the needs of the EPP. If the middle arguments (affectee and goal) do not

trigger subject agreement because of the failure of the null-headed PP to satisfy the EPP of the T, then we expect the PP marked causee to trigger object agreement. This is, however, impossible, as the above example, (35), shows. So we need an explanation of why the instrumental causee fails to agree with the verb while the accusative case marked one is able to agree.

In the next section, I propose Relativized Minimality as an explanation for the competition-based agreement pattern of the internal arguments.

6 Relativized Minimality as an explanation to agreement

We have seen that the causee argument outranks the other internal arguments and agrees with the verb. We have also seen that the relative position of the theme argument and the indirect argument does not affect the verbal agreement. Either of the two internal arguments could trigger verbal agreement, regardless of their position. The question is then why the relative position of the causee argument to the other arguments seems to affect the agreement, while the relative position of the two internal arguments does not.

To solve this problem, I suggest that the following two factors are the reason for this effect.

(36) a. the underlying (default) syntactic configuration
b. topicalization

The role of locality effects on the syntactic configurations is well-known. Higher elements dominate lower elements in the syntactic hierarchy.

As we have seen in (16), causatives appear in higher positions than applicatives. Given the idea that causee arguments are arguments of causatives, and the indirect objects are the arguments of applicative features, the causee arguments appear higher in the syntactic hierarchy than the indirect objects. This by itself is sufficient to explain why causee argument dominates the indirect arguments and triggers agreement with the verb.

But, before we see how exactly the syntactic position determines the dominance of the causee on the agreement relation, I need to establish that the verb in Amharic resides on the AspP layer due to verbal incorporation.

Consider the following example:

(37) Aster lɨj-it-u-n dəbdabe lə-Yosef
Aster child-F-DEF-ACC letter for-Josef
ɨyyə-as-lakk-əčč-at/*w/(*ll-ət)
PROG-CAUS-send-3FSGSUBJ-3FSGOBJ/3MSGOBJ/BEN-3MSGOBJ
nəw
is
'Aster was making the girl send a letter to Josef.'

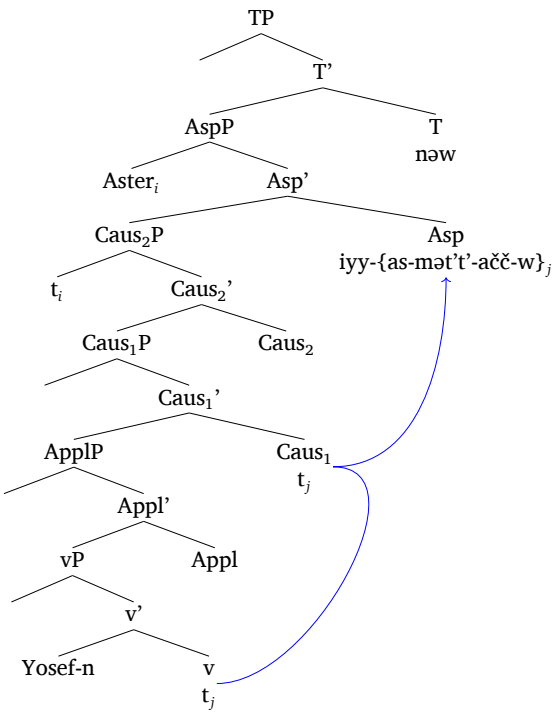

Figure 4: Verbal incorporation

Since the functional items such as the causative and the aspect markers appear on the verb, as noted above, I assume that the functional items attach to the verb due to head movement (Baker 1988). As shown in the tree structure above, I specifically assume that the verb moves at least to the AspP head.

Further, we have to assume that the verbal incorporation proceeds before the agreement relationship is established. That is important because the hierarchical relationship of the arguments works only when the agreement relationship is established from top to down (from the verb to the arguments).

Having said that, when we return to the main issue, it is important to notice that the verb can carry an agreement morpheme only for a single object DP. This turns out to be a language-internal restriction. Taking

morphology at face value[8], this means that the verb can agree only with a single non-subject argument.

The question is then why the causee argument always agrees with the verb while the others do not. This can be easily answered by considering the relative hierarchy of the arguments in light of general economy conditions such as Relativized Minimality (Rizzi 1990). Relativized Minimality (later reinterpreted as Shortest Move condition in Chomsky 1993) as a general economy condition states that the relationship between items gets disrupted when an intervener item exists in between the two items. The theory is mostly developed around movement: the relationship between a moved item and its trace gets disrupted when there is an intervener. But, the general concept is the same here too. The Agree relationship between the verb and the indirect or direct object DPs gets disrupted when another DP intervenes.

Consider the structure below.

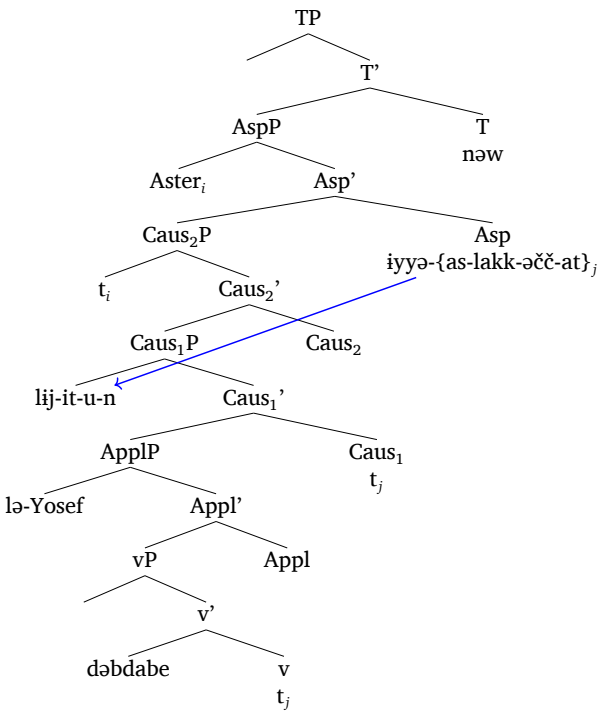

Figure 5: The verb agrees with the causee

The causee argument is projected higher than the direct and indirect objects. As such, the economy condition (Relativized Minimality) forces the verb to probe to the highest (closest) DP. Since the causee on the spec

8. The alternative is to assume that the morphemes are deleted later. But, we have no evidence for the morphological deletion of the object agreement markers. Therefore, the null hypothesis is to assume that the objects do not agree with the verb at all.

of the CausP, is the closest argument to it, it agrees with it. The lower arguments would fail to serve as goals to the verbal probe. This way, the syntactic structure can fully explain why the causee argument always controls the agreement at the cost of the other internal arguments.

What the standard syntactic structure cannot explain is why either of the internal arguments appear to trigger agreement whenever there is no causee argument. Any of the two internal arguments could agree with the verb wherever their surface position is.

To explain this free alternation, we need another mechanism to create dominance. Therefore, I suggest that topicalization is why any one of them could agree, blocking the other. The topicalized argument always dominates the non-topicalized arguments at LF, even if their surface structure could be in the reverse order (Polinsky & Potsdam 2001). To that end, first, I will establish that it is indeed the topicalized argument that triggers the agreement with the verb. Then, I will combine the topicalized argument dominating the other argument at LF with the syntactic locality to derive all the required outcomes in the agreement of objects.

Topicalization is usually attributed to the subject NP. Topic and subject are even taken as the same notion. As Shibatani (1991) noted, both in the philosophical and some linguistic traditions, subjects are taken to be the topic of the clause. As (Chafe 1976: p: 43) noted "the subject is what we are talking about". As a direct reflection of the long-standing tradition to associate the subject with topics, some generativists have argued for close proximity of subjecthood in the fseq with the topichood (Rizzi 1997).

Objects are rarely taken to be topical items. But, the crucial question here is what topicalization is in the first place. I take Shibatani's description of topic as correct.

> The grammatical topic functions as a powerful, cohesive device that relates an event to the preceding event so that the new event is presented as a further development of the preceding event by way of sharing the topic with it.
>
> Shibatani (1991: p: 101)

The idea here is that topic is a notion that connects one event to the next when there is a series of events. The notion that transfers from the first sentence to the next, keeping the flow of the topic constant (without topic-shift), can then be considered the topic.

We can test this phenomenon by using the ambiguous pronoun, *ɨssu* which can be translated as 'he' or 'it'.

(38) Yosef lə-Aster dəbdabe lakk-ə. ɨssu-mm
Josef for-Aster letter sent-3MSGSUBJ. He/it-TOP
guwadəgnoččwan asdənnək'-ə
her.friends surprise-3MSGSUBJ
'Josef sent a letter to Aster. It/he surprised her friends.'

(39) Yosef lə-Aster dəbdabe-u-n lakk-ə-w. ɨssu-mm
Josef for-Aster letter-DEF-ACC send-3MSGSUBJ-3MSGOBJ. He/it-TOP
guwadəgnoččwan asdənnək-ə
her.friends surprise-3MSGSUBJ
'Josef sent the letter to Aster. It/he surprised her friends.'

There are events in each of these sentences. The first sentence of each of the two examples has the event of *sending a letter*, and the second sentences of the examples contain the event of *surprising her friends*.

Now, the point is what the pronoun *ɨssu-mm* (it/he-TOP) refers to. In each of the examples, there are three candidates for the antecedence of the pronoun:

- the external argument, *Yosef*
- the internal argument, *the letter*
- the event of sending itself

It turns out that in both examples, the event (of sending) is the most salient antecedent, while the external argument is the least (almost unavailable) one. When it comes to the appropriateness of the internal argument as antecedent of the topicalized pronoun, the two examples have a clear distinction. While the direct object is almost unable to corefer with the pronoun in (38), it is easily available in (39).

The same can be said about the indirect object:

(40) aster lə-məmhɨr-u$_j$ dəbdabe$_i$ lakk$_h$-əčč-ll-ət. ɨssu-mm$_{h/j/??i}$
Aster for-teacher-DEF letter send-3FSG-BEN-3MSG. He/it-TOP
təmari-oččč-u-n asassəbə
student-PL-DEF-ACC bothered
'Aster sent a letter to the teacher. It/he bothered the students.'

(41) aster lə-məmhɨr-u$_j$ dəbdabe$_i$ lakk$_h$-əčč. ɨssu-mm$_{h/??j/i}$
Aster for-teacher-DEF letter send-3FSG. He/it-TOP
təmari-oččč-u-n asassəbə
student-PL-DEF-ACC bothered
'Aster sent a letter to the teacher. It/he bothered the students.'

Even if the event is still the most salient topic, most appropriate to co-index with the pronoun, agreeing arguments can also be marginally available for co-referring with the pronoun. As the indices indicate, the indirect object is available to function as the topic of the next sentence more saliently in (40) than in (41). It is more appropriate for the indirect object to transfer as the subject of the next sentence (event) whenever it agrees with the verb of the first sentence.

Considering that the topic argument of a sentence is the one saliently available to antecede a pronoun of a following sentence (Caramazza & Gupta 1979), and that "pronouns require that their referents be topical", (Kehler 2004), the co-indexation facts from the above examples show that the object agreeing with the verb is the one in the topic position[9].

Indeed, the movement of any of the objects to higher positions for topic (emphasis) has been a known fact about Amharic internal arguments. Tesfay (2010), for example, has noted that "objects may go up in the tree structure to show some kind of emphasis".

This shows that the topicalized objects move to a higher position, either on the surface or at LF. That kind of analysis is not new. Previous works have suggested a similar kind of object shift as IP-internal topicalization. Anderssen & Bentzen (2012), for example, have argued that the object shift in Norwegian verbs is a type of IP-internal topicalization. Similarly, I propose that a Topic projection exists on top of the CausP, which functions as the landing site for the topicalized object.

Consider the following example:

(42) Aster dəbdabe-u-n lə-Yosef lakk-əčč-w
Aster letter-DEF-ACC for-Josef send-3FSGSUBJ-3MSGOBJ
'Aster sent the letter to Josef.'

Here, it is only the direct object that agrees with the verb. It also appears on the left side of the indirect object. This is a case of overtly topicalized direct object, which has shifted across the indirect object on the surface.

Since the DO has moved to a topic position across the IO, it is the former that appears closer to the verb. Hence, the agreement indexes the former, not the latter.

9. At this point, one might argue that the agreement markers are pronominal and, hence, induce prominence to the objects. The idea is plausible. But, as Baker has rejected the pronominal (anaphora) possibility of object agreement markers in Amharic, I will not worry about it here.

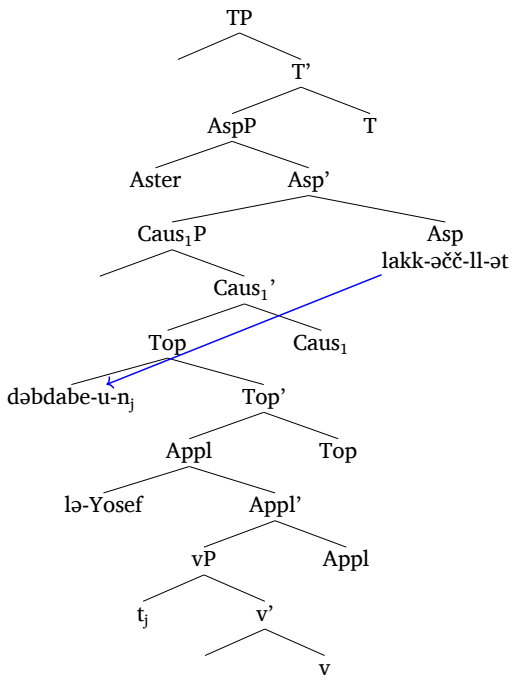

Figure 6: The DO agrees with the verb

The exact opposite is also possible. In the following example, it is the indirect object that appears topicalized. As such, the agreement morpheme indexes it.

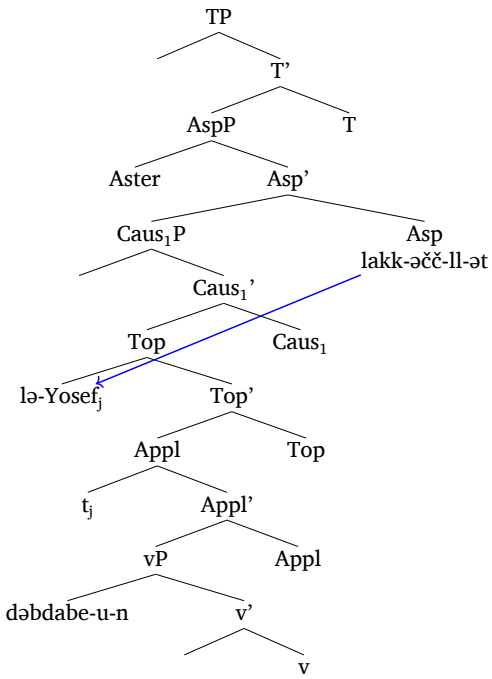

Figure 7: The IO agrees with the verb

(43) Aster lə-Yosef dəbdabe-u-n lakk-əčč-ll-ət
Aster for-Josef letter-DEF-ACC send-3FSGSUBJ-BEN-3MSGOBJ
'Aster sent the letter to Josef.'

This means that the Relativized Minimality proposed for the causee argument can easily capture the normal agreement facts of the middle argument and the theme argument.

The Relativized Minimality proposal, however, runs into a problem when we consider the situations where the theme argument agrees with the verb, blocking the middle and causee arguments.

(44) Yosef bə-məmhiṙ-it-u dəbdabe-u-n
Josef by-teacher-F-DEF letter-DEF-ACC
as-nəbəb-ə-w/*at
CAUS-read-3MSGSUBJ-3MSGOBJ/3FSGOBJ
'Josef got the letter read by the (female) teacher.'

In (44), the causee argument is overtly projected. Still, only the theme argument can agree. Here, the reason why the causee fails to agree with the verb is straightforward. The preposition blocks the causee from agreeing with the verb, which can be easily explained using phase theory. In a number of works, prepositions are assumed to introduce phase boundaries (Rezac 2008; Harwood 2013; Larson & Hornstein 2013; Bošković 2014). Having a phase boundary on top of the PP would be sufficient to block any possible interaction, including agreement, between the PP-internal items such as the causee DP and the outside domain of the PP.

But, the following is a slightly different case.

(45) Yosef lə-məmhiṙ-it-u dəbdabe-u-n
Josef for-teacher-F-DEF letter-DEF-ACC
lakk-ə-w/*at
send-3MSGSUBJ-3MSGOBJ/3FSGOBJ
'Josef sent the letter to the (female) teacher.'

Here, the indirect objects appear with the dative marker *lə*, which is, by assumption, a structural case. Still, the direct object can agree with the verb even if the indirect object seems to appear higher (to the left) of it. This is unexpected if we assume topicalization to proceed on the surface only. To solve this, I suggest that this apparently reversed situation is the result of the topicalization process that the theme argument

is undergoing at LF[10]. The topicalization moves the theme argument to a higher position at LF, regardless of the surface position, enabling the theme to block the middle agreement and trigger object agreement.

One related issue that follows the LF-topicalization hypothesis is why the theme happens to raise to a higher position (topicalization) only when the other arguments are case marked by either prepositions or the genitive case. In other words, why topicalization of the theme is impossible when the causee and the middle argument are in the accusative case, as presented in (46) and (47).

(46) Yosef məmhɨr-it-u-n dəbdabe-u-n
Josef teacher-F-DEF-ACC letter-DEF-ACC
as-nəbəb-ə-at/*w
CAUS-read-3MSGSUBJ/3FSGOBJ
'Josef made the (female) teacher read the letter.'

(47) Yosef məmhɨr-it-u-n dəbdabe-u-n
Yosef teacher-F-DEF-ACC letter-DEF-ACC
lakk-ə-ll-at/*w
send-3MSGSUBJ-BEN-3FSGOBJ/3MSGOBJ
'Josef sent the (female) teacher the letter.'

The one in (46) is simpler to explain. As the structures given above already suggest, the topicalization never moves the direct object higher than the causee. To the extent that the causee is marked by a structural case, it always comes out as the winner.

The one in (47) is quite surprising, though, because unlike the cases we saw so far, the direct object is unable to agree with the verb when the indirect object comes with a structural case. The LF-topicalization hypothesis incorrectly predicts that the direct object would agree with the verb.

I claim that topicalization at LF (any movement, for that matter) still obeys the Relativized Minimality. In the topicalization we saw above, we were raising the accusative marked argument across the genitive marked arguments or the other way around. If we consider a more radical variant of the Relativized Minimality developed in Starke (2001), this raising of

10. An alternative analysis would be to assume the preposition marked arguments to merge in a lower position than the theme argument. That is, to assume that the merging position of the arguments varies in accordance with their case marking. But, I am not entertaining such analysis for at least two reasons. First, I believe the topicalization of the object is real, an independent fact. Secondly, I find Baker's argument on the higher position of the middle arguments convincing. Hence, there is no need to stipulate that the middle argument merges lower than the theme whenever it comes with the dative case.

the genitive marked argument across the accusative, or the other way around, would be permitted. Because the argument carries at least one additional feature, which the higher argument doesn't have:

$$[\mathrm{DP}_{Causee} + \text{instrumental}]...[\mathrm{DP}_{IO} + \text{dative }]...[\mathrm{DP}_{DO} + \text{accusative}]$$

In this kind of feature, composition, we do not expect any form of blocking. Hence, raising would be licit.

But, whenever all the arguments are marked by the accusative case, the case composition of the arguments puts them into competition. The higher arguments block the lower arguments, making the LF raising of the theme argument illicit, as in (47).

7 Case

As to the case assignment, there are two major views on how it works. I call them the fixed view and the relativized view. The fixed view is the mainstream view of case assignment where a specific fixed functional head is taken as a source for a certain case. In the earlier stages of P & P (for instance, Chomsky 1991), the nominative case was assumed to be assigned by the IP via the spec-head relationship between the case-assigning head (the I) and the subject. The case assigning heads have been evolving to T, AgrO, and little v projections at different times. Still, in all the history of the early and latter P & P, the mainstream GB maintains that specific heads are associated with specific Case values. The nominative is assigned by TP/IP; the accusative by vP/VP.

The second view, while less-known, mainly motivated by Burzio's Generalization, maintains that Case assignment is not associated with specific heads, but rather with a relativized process that the nominative case can be assigned by either vP, in case of unaccusatives, or TP in case of causatives (Sigurdsson 2000; Marantz 2001). Another version of the relativized/position-based case assignment is the one presented in Baker (2015). According to Baker, at least in some languages, the relative position of the argument is what determines the case, not the exact position where the argument appears. Baker's study further specified that languages parametrically determine the types of case assignment mechanisms. He showed that the case marking in Amharic works on a fixed position basis while the one in Sakha works on relativized basis.

All the facts regarding the case in Amharic confirm his analysis. Case assignment of the internal arguments is not similar to agreement. As I illustrated above, the agreement of one of the arguments is highly dependent on the positions and structures of the other arguments in the derivation. Higher arguments block the agreements of lower arguments.

This kind of competition does not work for case. Case assignment is rather dependent on the internal property of the DPs themselves and the exact position they appear in. One of the DP-internal factors is the specificity of the DP. The direct object receives the accusative case only when it is specific (definite). Indefinite objects cannot be case marked.

(48) *Yosef yəhon-ə-n təmari gərəf-ə(w)
Josef one-3MSG-ACC student whip-3MSGSUBJ(3MSGOBJ)
'Josef whipped a student.' (nonspecific)

I assume that the cases are assigned by the functional layers that these arguments inhabit. The functional projections themselves, such as the vP/VP, the Caus$_2$P, CausP, and AppP assign case to their respective arguments. The theme receives case from V/v, the middle argument from Appl, and the causee from Caus.

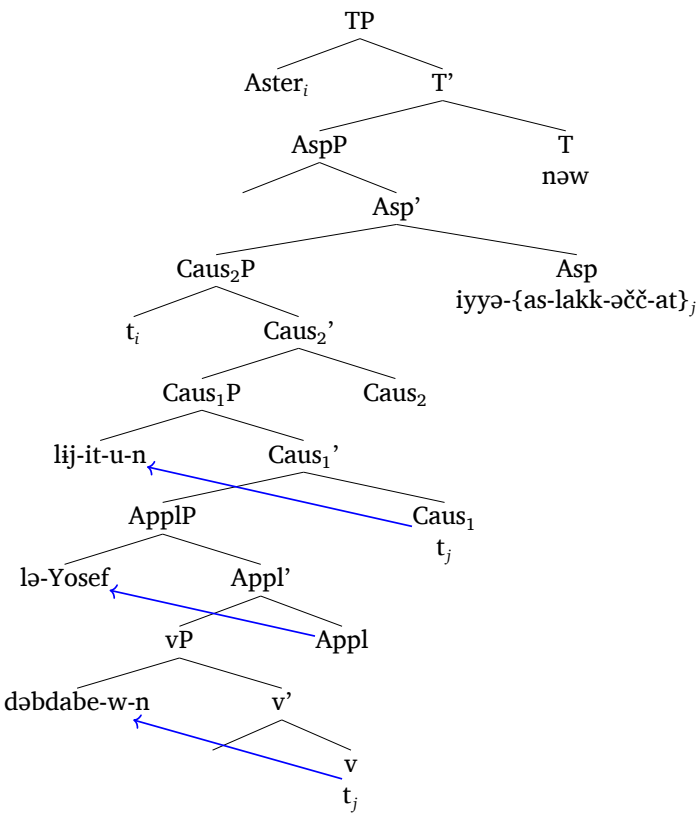

Figure 8: Case assignment

(49) Aster lɨj-it-u-n lə-Yosef dəbdabe-u-n
Aster child-F-DEF-ACC for-Josef letter-DEF-ACC
as-lakk-əčč-at
CAUS-send-3FSGSUBJ-3FSGOBJ
'Aster made the girl send the letter to Josef.'

The accusative case is assigned by two different functional features: the Caus and the vP. The genitive case is assigned by the Appl head, while the nominative case is assigned by the T. This shows that the case assignment system is different from the agreement system. For case, the movement of the arguments or their relative position from the other argument DPs does not make a difference. To confirm this, we can, for example, move the theme argument to a higher position than the applied argument (and, of course, by demoting the causee).

(50) Aster dəbdabe-u-n bə-lɨj-it-u lə-Yosef
Aster letter-DEF-ACC child-F-DEF-ACC for-Josef
as-lakk-əčč-w
CAUS-send-3FSGSUBJ-3MSGOBJ
'Aster had the letter sent to Josef by the girl.'

This process necessarily shifts the verbal agreement to theme. But, the case still remains the same for both of the DPs. This shows that topicalization or relative position of an argument against another argument does not affect the type of case it receives. The order of syntactic operations can explain this.

(51) **Order of operations**
Case assignment → Topicalization → Agreement

The property of the verbal agreement is affected by the topicalization of the objects because agreement relation is established after the movement (topicalization) of the DPs. But, the case is an earlier relation. As such, movement does not affect it.

8 Conclusion

In the above section, I have attempted to derive the case and object agreement phenomena among the cause and indirect arguments of Amharic VP. I argued that introducing the causee argument into the derivation challenges Baker's (2012) recent analysis of the middle and theme arguments as headed by null PP projection. I have also attempted to capture the agreement and case facts using the usual locality constraints such as Relativized Minimality.

I have argued that case assignment and agreement are two distinct types of operations constrained by different kinds of rules. Agree is a relativized phenomenon where the presence of a higher argument determines the fate of the lower argument. I have proposed that the agreement phenomenon can be determined by the core syntactic structure as well as the nature of topicalization that the objects might undergo. The causee argument appears in higher positions than the IP-internal topic position. Because of its higher position, it always outranks the other arguments and triggers object agreement (so far as it is not marked by an inherent case). The situation with the other internal arguments depends on topicalization. The topicalized object controls the agreement.

Case, on the other hand, is determined by spec-head relations. No other intervening items shift the outcome of case assignment.

I attributed this distinction between the two types of relations to the timing (order) of the syntactic operation. Case is an early operation. As such, it cannot be influenced by latter operations such as movement (topicalization). Agree, on the other hand, is a late operation. The outcomes are impacted by operations that precede it, such as movement.

References

Amberber, Mengistu. 1996. *Transitivity alternations, event-types and light verbs*. Montreal, Canada: McGill University dissertation.

Anderssen, Merete & Kristine Bentzen. 2012. Norwegian object shift as IP-internal topicalization. *Tromsø Working Papers on Language and Linguistics: Nordlyd* 39(1). 1–23. `https://doi.org/10.7557/12.2285`. `http://www.ub.uit.no/baser/nordlyd/`.

Baker, Mark. 1988. *Incorporation: a theory of grammatical function changing*. Chicago: University of Chicago Press.

Baker, Mark. 2012. "Obliqueness" as a component of argument structure in Amharic. In Maria Cristina Cuervo & Yves Roberge (eds.), *The end of argument structure?*, vol. 38 (Syntax and Semantics), 43–74. Bingley, U.K.: Emerald.

Baker, Mark. 2015. *Case: its principles and its parameters*. Vol. 146 (Cambridge Studies in Linguistics). Cambridge: Cambridge University Press.

Borer, Hagit. 2005. *Structuring sense: volume I: in name only*. Oxford; New York: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199263905.001.0001.

Bošković, Zeljko. 2014. Now I'm a phase, now I'm not a phase: on the variability of phases with extraction and ellipsis. *Linguistic Inquiry* 45(1). 27–89. https://doi.org/10.1162/LING_a_00148. http://www.mitpressjournals.org/doi/abs/10.1162/LING_a_00148.

Brody, Michael. 2003. *Towards an elegant syntax*. Vol. 8 (Minimalist Investigations in Linguistic Theory). London; New York: Routledge.

Caramazza, Alfonso & Shalini Gupta. 1979. The roles of topicalization, parallel function and verb semantics in the interpretation of pronouns. *Linguistics* 17(5-6). 497–518. https://doi.org/10.1515/ling.1979.17.5-6.497. http://www.degruyter.com/view/j/ling.1979.17.issue-5-6/ling.1979.17.5-6.497/ling.1979.17.5-6.497.xml.

Chafe, Wallace. 1976. *Givenness, contrastiveness, definiteness, subjects, topics, and point of view in subject and topic subject and topic*. NY: Acadamic Press.

Chomsky, Noam. 1991. *Some notes on economy of derivation and representation principles and parameters in comparative grammar*. Cambridge: MIT Press.

Chomsky, Noam. 1993. A minimalist program for linguistic theory. In Kenneth Hale & Samuel Jay Keyser (eds.), *The view from building 20—essays in linguistics in honor of Sylvain Bromberger*, vol. 24 (Current Studies in Linguistics), 1–52. Cambridge, Mass.; London: The MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In Michael J. Kenstowicz (ed.), *Ken Hale: a life in language*, vol. 36 (Current Studies in Linguistics), 1–52. Cambridge, Mass.; London: The MIT Press.

Demeke, Girma Awgichew. 2003. *The clausal syntax of Ethio-Semitic*. Tromsø: University of Tromsø dissertation.

Hale, Kenneth & Samuel Jay Keyser (eds.). 1993. *The view from building 20—essays in linguistics in honor of Sylvain Bromberger*. Vol. 24 (Current Studies in Linguistics). Cambridge, Mass.; London: The MIT Press.

Harley, Heidi. 2008. On the causative construction. In Shigeru Miyagawa & Mamoru Saito (eds.), *Handbook of Japanese lingusitics*, 20–53. Oxford: Oxford University Press. https://ling.auf.net/lingbuzz/000433%20(draft%20version).

Harwood, Will. 2013. *Phased and confused: celebrating the uniqueness of progressive aspect under a phase-based analysis*. https://ling.auf.net/lingbuzz/001663.

Kayne, Richard S. 1994. *The antisymmetry of syntax*. Vol. 25 (Linguistic Inquiry Monographs). Cambridge, Mass.; London: MIT Press.

Kehler, Andrew. 2004. Discourse topics, sentence topics, and coherence. *Theoretical Linguistics* 30(2-3). 227–240. https://doi.org/10.1515/thli.2004.30.2-3.227.

Kim, Kyumin. 2011. *External argument introducers*. Toronto: University of Toronto dissertation.

Kratzer, Angelika. 1996. Severing the external argument from its verb. In Johan Rooryck & Laurie Ann Zaring (eds.), *Phrase structure and the lexicon*, vol. 33 (Studies in Natural Language and Linguistic Theory), 109–138. Dordrecht; Boston: Kluwer Academic Publishers.

Larson, Bradley & Norbert Hornstein. 2013. A note on p-stranding and adjunct extraction from nominals. *Linguistic Inquiry* 44(4). 669–674. https://doi.org/10.1162/LING_a_00143. http://www.mitpressjournals.org/doi/abs/10.1162/LING_a_00143.

Larson, Richard K. 1988. On the double object construction. *Linguistic Inquiry* 19(3). 335–391. http://www.jstor.org/stable/25164901.

Lomashvili, Leila (ed.). 2011. *Complex predicates: the syntax-morphology interface*. Vol. 174 (Linguistik Aktuell/Linguistics Today). Amsterdam: John Benjamins Publishing Company.

Marantz, Alec. 2001. Words. Ms. MIT. http://babel.ucsc.edu/~hank/mrg.readings/Marantz_words.pdf.

McGinnis, Martha & Donna B. Gerdts. 2004. A phase-theoretic analysis of Kinyarwanda multiple applicatives. In Sophie Burelle & Stanca Somesfalean (eds.), *Proceedings of the 2003 CLA annual conference*, 154–165. Département de linguistique et de didactique des langues, Université du Québec à Montréal.

Pesetsky, David. 1995. *Zero syntax: experiencers and cascades*. Vol. 27 (Current Studies in Linguistics). Cambridge, Mass.; London: MIT Press.

Polinsky, Maria & Eric Potsdam. 2001. Long-distance agreement and topic in Tsez. *Natural Language & Linguistic Theory* 19(3). 583–646. https://doi.org/10.1023/A:1010757806504.

Pylkkänen, Liina. 2008. *Introducing arguments*. Vol. 49 (Linguistic Inquiry Monographs). Cambridge, Mass.; London: MIT Press.

Ramchand, Gillian. 2008. *Verb meaning and the lexicon: a first phase syntax*. Vol. 116 (Cambridge Studies in Linguistics). Cambridge; UK: Cambridge University Press.

Ramchand, Gillian. 2011. Licensing of instrumental case in Hindi/Urdu causatives. *Nordlyd* 38. 49. https://doi.org/10.7557/12.2230. http://dx.doi.org/10.7557/12.2230.

Ramchand, Gillian. 2015. Causal chains and instrumental case in hindi/urdu. In Bridget Copley & Fabienne Martin (eds.), *Causation in grammatical structures*, vol. 52 (Oxford Studies in Theoretical Linguistics), 245–279. Oxford; New York: Oxford University Press.

Ramchand, Gillian & Mai Tungseth. 2006. Aspect and verbal prepositions. *Tromsø Working Papers on Language and Linguistics: Nordlyd* 33(2). https://doi.org/10.7557/12.84. http://www.ub.uit.no/baser/nordlyd/.

Rezac, Milan. 2008. Phi-agree and theta-related case. In Daniel Harbour, David Adger & Susana Béjar (eds.), *Phi theory: phi-features across modules and interfaces*, vol. 16 (Oxford Studies in Theoretical Linguistics), 83–129. Oxford; New York: Oxford University Press.

Rizzi, Luigi. 1990. *Relativized minimality*. Cambridge, MA: The MIT Press.

Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.), *Elements of grammar: handbook in generative syntax*, vol. 1 (Kluwer International Handbook of Lingusitics), 281–281. Dordrecht; Boston: Kluwer Academic Publishers.

Shibatani, Masayoshi. 1991. Grammaticization of topic into subject. In Elizabeth Closs Traugott & Bernd Heine (eds.), *Approaches to grammaticalization II – focus on the types of grammatical markers*, vol. 19:2 (Typological Studies in Language), 93–134. Amsterdam; Philadelphia: John Benjamins Publishing Company.

Sigurdsson, Halldor Armann. 2000. *The locus of case and agreement*. https://ling.auf.net/lingbuzz/002807.

Starke, Michal. 2001. *Move dissolves to merge: a theory of locality*. Université de Genève dissertation. https://ling.auf.net/lingbuzz/000002.

Tesfay, Tewolde Y. 2010. Applicatives in the context of Ethiopian and Eritrean Semitic languages (EES). *Rivista di Grammatica Generativa* 35. http://157.138.8.12/jspui/handle/11707/60.

Workneh, Desalegn B. 2019. *The voice system of Amharic*. Tromsø: University of Tromsø dissertation.