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

Desalegn Belaynew Workneh March 16, 2022

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 would inhibit the relation of the latter with the verb. Case, on the other hand, is argued to be insensitive to the presence of intervening arguments DP. Case is a fixed relationship between the case assigning head and the DP in its specifier. I explained this distinctions 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 derivation such as Movement (topicalization) affect the nature of Agree relations between two syntactic objects.

1 Introduction¹

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

¹**Glosses:** DO = Direct Object, IO = Indirect Object. 3 = third person, acc = accusative, ben = benefactive, CAUS = indirect causative, caus = direct causative, def = definite, f = feminine, m = masculine, O = Object, pl = plural, prog = progressive, S = Subject, sg = singular, top = topic.

The causee arguments in Amharic behave much in line with proper arguments. Unlike most languages, causee arguments in Amharic can come with accusative case². What is specially interesting about the accusative case is not the fact that the arguments come up with uncommon case marking for the causee arguments per se, rather the effect of the case marking on the verbal agreements.

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 is especially pretty striking that I will entrain the possibility that the analysis proposed by Baker (2012) for the indirect objects can be extended to the causee arguments as well.

I will that Baker's recent analysis is on the right track, specially for the case markings, 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 such, Relativized Minimality captures the facts better.

But, before getting into the details on how causee arguments behave in the language, I will flesh out some general properties of causative and applicative constructions in the language. For that end, I will first describe the basic patterns of morphological causativization. Relying on the currently availably literature, I will then develop a simple sketch of how the causative and applicative constructions fit into the clausal fseq. And, 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 each standing for external and internal causation.

2.1.1 The internal causative

The internal causative marker *a* (also called *direct causative*) is a transitivizer element. It transforms intransitive 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 turn them to causative/transitive.

Here some examples.

(1) wət't'a \rightarrow a-wət't'a

²In 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 object. In transitive verbs, on the other hand, the causee functions as an adjunct by receiving instrumental case.

```
went out \rightarrow took out
```

- (2) $mət't'a \rightarrow a-mət't'a$ $came(int) \rightarrow brought(tr)$
- (3) k'əllət'ə \rightarrow a-k'əllət'ə $melt(int) \rightarrow melt(tr)$

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) as well as unaccusative (intransitive) stems.

- (4) as-wət't'a

 CAUS-go out

 'make go out'
- (5) as-mət't'a

 CAUS-came

 'make (sb) to come/bring'
- (6) as-gəddələ

 CAUS-kill

 'made (sb) to kill/be killed'

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

- (7) yosef mət't'a

 Josef came

 'Josef came.'
- (8) yosef dəbdabe-u-n a-mət't'a

 Josef letter-def-acc caus-came

 'Josef brought the letter.'
- (9) yosef dəbdabe-u-n as-mət't'aJosef letter-def-acc CAUS-came'Josef have someone bring the letter.'

The first sentence in (7) is headed by a plain intransitive verb. When the internal causative marker a attaches on 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 effector/agent of the event denoted by the verb.

The verb in (9) is different from the one in (8) because of the fact that the latter is marked by the external causative *as*-. From the surface, the external causative marker doesn't seem to introduce additional argument further from the internal causativizer. We still have the external argument 'Josef' and the internal argument *dəbdabe-u*. But, from the meaning of the sentences, it is clear that the latter one has one more implicit argument. The implicit argument functions as intermediate between the theme (the book) and the causer argument ('Josef'). This argument is what is known as causee argument in the literature³.

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

(10) yosef bə-təmari-očč-u dəbdabe-u-n as-mət't'a *Josef by-student-pl-*def letter-def-acc CAUS-came 'Josef have 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 causativization works in human languages. One school of thought is to derive causativization within the lexicon (lexical internal derivations). This approach is less common now days that I will not discuss it. A rather similar but, 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 (syntax-like process in the lexicon; as opposed to the S-syntax with is syntax proper) such as CAUSE, DO, BECOME to derive intransitive clauses into transitive, or suppress the transitive/causative to derive the intransitive counterparts. They have shown that the English de-adjective 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- unaccusative and causative

³There is a confusion on 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.

classes. He then argues that the direct causative marker *a* transforms the unaccusative verbs into transitive by attaching on them.

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

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

Kratzer's work specifically turn out be pretty influential in the analysis of causatives. Chomsky (2001) follows a similar analysis; but a slight twist. For him, little v the source of causativization, and at the same time, it is also the source of accusative case assignment. He suggested 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 be 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 that the direct object (patient) receives nominative case from T.

(12) John sank the boat (v, Nom–acc)

The boat sank (v, Nom)

The boat was sank (by John) (v, Nom)

Consider the sentence

(13) Aster yosef-n iyyə-a-mət't'-ačč-iw nəw *Aster Josef-*acc prog-caus-come-3fsgS-3msgO is 'Aster is bringing Josef.' (causing/forcing him to come)

Based on Chomsky conception of the little v, the big functional projection of Amharic VP (Demeke, 2003), the structure of the VP fseq for a sentence as (13), would look like as follows:

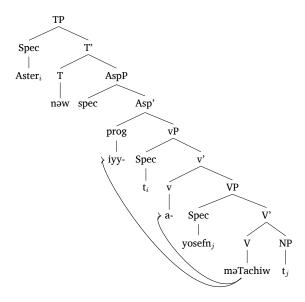


Figure 1: VP fseq according to the standard theory

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 in independent items such as the copula which occurs at the end of the whole VP⁴.

The most external subject (the causer) has nominative case (morphologically unmarked). By now, it is standard to assume that the nominative case of the subjects is assigned by the Tense head (T) (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 varies senses in different works that it is not clear which of the arguments exactly projects on it. Whether little v and Voice are the same projections with different designations, or different projections, it is not clear from the literature. In Kratzer's and Chomsky's works, it seems that the two projections actually are the same— a projection where the prototypical agent subject merges in. In other works these projections have been connected to other notions. In some other works, applicatives and their projections (ApplP), for instance, have been used in place of little v

⁴Hence, if we have to follow the 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. We can also assume Brody's Brody (2003) system of linearization to get the position of the functional items right.

(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 the 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 proposed in Pylkkänen (2008) & Kim (2011).

2.2 Applicatives

The syntax of applicatives is pretty complex. But, I am not going to the details here. I simply focus on the most relevant points for the current purpose.

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

(14) Aster lə-yosef dəbdabe lakk-əčč-ll-ət

*Aster for-Josef letter send-3fsgS-ben-3msgO

'Aster sent a letter to Josef'

The applied argument here is the same with regular indirect objects in other languages. The difference here is only the presence of benefactive marker on the verb. The relationship is less productive. It is restricted to triadic verbs. The benefactive marker morpheme is also optional.

The second types are the ones 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-ačč-ll-ət

*Aster for-Josef car wash-3fsgS-ben-3msgO

'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 that a unified syntactic structure can be stipulated for both types of systems Lomaschvili (2011); McGinnis and Gerdts (2004). I, therefore, 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: [Caus₂P [[Caus₁P [ApplP]]]] According to this framework, 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.

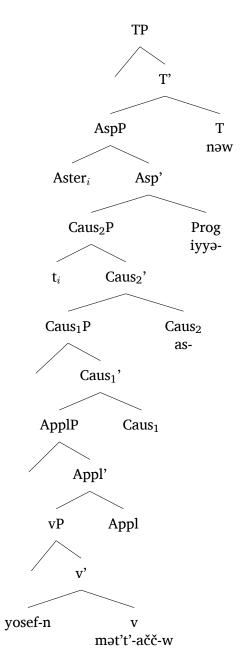
(17) mariam yosef-n makina-it-u-n as-at't'əb-əčč-w *Mary Josef-*acc car-f-def-acc CAUS-wash-3fsgS-3msgO

'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, (Ramchand, 2008; Borer, 2005; Pylkkänen, 2008).

Figure 2: Verbal functional sequence of Amharic



3 The position of the causee & applied arguments

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

general architecture.

What is 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 introduces one further arguments on the thematic values of the verbs. 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 direct object.

- (18) lij-u sak'k'-ə (Amharic) child-def laughed-3msgS
 'The boy laughed.'
- (19) yosef lij-u-n as-sak'k'-ə-w (Amharic)

 **Josef child-def-acc CAUS-laugh-3msgS-3msgO*

 'Josef make the boy laugh.'
- (20) bacca hãs-aa (Hindi, Ramchand (2008), p:55) *child laugh-perf.m* 'The child laughed.'
- (21) Anjum-ne bacce-ko hãs-vaa-yaa (Hindi, Ramchand (2008)) *Anjum-erg child-acc laugh-vaa-perf.m*'Anjum made the child laugh.'

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

Given experiencer receives accusative case and triggers object agreement, one might assume that it appear in the standard object position. This assumption can be tenable for languages such as Hindi because the causee argument doesn't appear as proper argument. As Ramchand noted, "[T]he Agent/Causer argument introduced by the causative morpheme is linked to the subject, and any left over 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 left-over argument are demoted to adjunct position. That would be the fate of one of the arguments. This story of demoting extra arguments to adjunct position also

could 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 lij-u-n bə-məmhir-it-u as-gərrəf-ə-w *Josef child*-def-acc (by-teacher-f-def) CAUS-whip-3msgS-3msgO 'Josef have the boy whipped by the female teacher.'

The problem with Amharic, however, is the fact that the causee doesn't have to be instrumental marked, and doesn't 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 məmhir-it-u-n lij-u-n as-gərrəf-ə-at Josef teacher-f-def child-def-acc CAUS-whip-3msgS-3fsgO 'Josef make the (female) teacher whip the boy.'

Now, the questions 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 also appear with the theme argument—both receiving structural cases. We then need separate positions for the theme and causee arguments to project. The same goes with 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.

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 instrumental for the causative, (24) and genitive⁶ for the IO, (25)). Of course, indirect objects and causee are the only arguments that receive case by prepositional marking.

⁵Ramchand and Tungseth (2006) argued against the adjunction analysis-

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

Compare the following sentences.

- (24) yosef dəbdabe-u-n bə-məmhɨr-it-u as-nəbbəb-ə-w *Josef letter*-def-acc by-teacher-f-def CAUS-read-3msgS-3msgO

 'Josef get the letter read by the (female) teacher.'
- yosef dəbdabe-u-n lə-məmhir-it-u lakk-ə-w

 Josef letter-def-acc for-teacher-f-def send-3msgS-3msgO

 '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 ((24) and (25); compare with 5).
- 3. When they are marked by the preposition, they don't 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 məmhir-it-u-n dəbdabe-u-n as-nəbbəb-ə-at/*əw *Josef teacher*-f-def-acc letter-def-acc CAUS-read-3msgS-3fsgO/3msgO 'Josef make the (female) teacher read the letter.'
 - (27) yosef məmhir-it-u-n dəbdabe-u-n lakk-ə-lat(*əw)

 Josef teacher-f-def-acc letter-def-acc lakk-3msgS-3fsgO

 'Josef send the (female) teacher a 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, given that no other argument is blocking, they necessarily trigger object agreement on the verb ((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 much affecting the agreement paradigm ((28) and (29)).
 - (28) yosef dəbdabe-u-n məmhir-it-u-n as-nəbbəb-ə-at/*w *Josef letter*-def-acc teacher-f-def-acc CAUS-read-3msgS-3fsgO/3msgO

 'Josef make the (female) teacher read the letter.'
 - (29) yosef dəbdabw-u-n məmhir-it-u-n lakk-ə-ll-at/*w

 Josef letter-def-acc teacher-f-def-acc send-3msgS-ben-3fsgO/3msgO

 'Josef send the (female) teacher a letter.'

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

Given this uniformity, and that Baker has done an analysis of the indirect objects in the language, it would be interesting if his analysis can 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 the whole story because we know that the causee arguments appear in accusative form as well.

It is also important to notice that Baker himself suggested Spec-ApplP as alternative position for the indirect objects even if he ultimately adopted the standard Larsonain Larson (1988) VP internal position for them. Note at this point that even if Baker is presenting the indirect object merge inside the VP projection, in line with (Larson, 1988), he also suggests an alternative position in Spec-ApplP⁷. As I have already mentioned, Pylkkänen's (Pylkkänen, 2008) research support this higher position for middle arguments . Her theory is specially interesting; unlike all the previous approaches, because predicts distinct syntactic positions for middle and causee arguments. Assuming distinct projections for causee arguments and middle arguments is specially 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 lij-it-u-n dəbdabe-u-n lə-yosef as-lakk-əčč-at

*Aster child-f-def-acc letter-def-acc for-Josef CAUS-send-3fsgS-3fsgO

'Aster made the girl send the letter to Josef.'

In this example, *Aster* is the external argument; *dəbdabewun* ('the letter') is the theme; *lij-it-u* ('the girl') is the causee while *yosef* is the indirect object. This means that both indirect objects and causee arguments are able to appear in the same clause. If that is so, then, we need two separate positions for each type of argument to project. That is why the Larsonian type of analysis cannot be sufficient; and that 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'affa* ('disappear') and psych verbs as *tammama* ('get sick'). They are quirky because

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

they display the properties of objects even if they are supposed to act like regular subjects (as they are the sole arguments of the predicates).

(31) Astern-n amməm-at

Aster-acc sick-3fsgO

'Aster get sick.'

Looking at from the surface, if we take experiencer argument *Aster* in the above sentence, it seems the subject of the sentence as it is the sole argument in the sentence, as well as it appears in a position where prototypical subjects appear in. The agreement and case assignment however shows that the NP is rather more object-like. It is accusative case marked, 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 (Amberber calls it *Ambient causer*, following (Pesetsky, 1995)).

Baker (2012) further observed that the goal arguments of triadic verbs as *lakka* ('send'), *sat't'a* ('give'), *naggara* ('tell') etc also behave in a similar fashion. He then challenged Amberber's analysis and argue that these arguments can not 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 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 accusative case is optional (not obligatory)".

From this, he then conclude that these arguments are oblique arguments 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 exactly block these arguments from subject agreement and nominative case, and enable object agreement and accusative case, he makes the following claims:

- · Null headed PPs can not satisfy EPP feature of T
- EPP satisfaction of T is dependent on agreement (ie, an NP that can not satisfy EPP of T can not agree with T)
- The NP arguments inside the PP can not move out of it
- FP 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 nominative case with T. As the FP (the projection that the arguments merge in, also the source of object

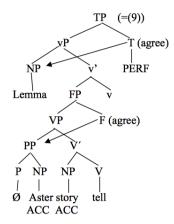


Figure 3: Object agreement according to Baker (2012, p: 50)

agreement) is assume to have no EPP feature, raising of the argument doesn't happen. As the PP can not 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.

As shown in the tree structure, 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 which is responsible for the object agreement (Baker assumes F to be distinct from v from 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 as oblique arguments?

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

Consider the following examples.

Whenever the causee merges into the derivation, neither the theme not the middle argument (the indirect object) is able to trigger agreement on the verb. Compare the following sentences.

- (32) Aster dəbdabe-u-n lə-yosef as-lakk-əčč-ll-ət

 Aster letter-def-acc for-Josef CAUS-send-3fsgS-ben-3msgO

 'Aster have the letter sent for Josef.'
- (33) Aster dəbdabe-u-n lə-yosef as-lakk-əčč-iw

 Aster letter-def-acc for-Josef CAUS-send-3fsgS-3msgO

 'Aster have the letter sent for 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.

The theme and the indirect object, however, are unable to agree with the verb once a causee argument appear in the clause.

(34) Aster lij-it-u-n dəbdabe lə-yosef as-lakk-əčč-at/*iw/*ll-ət

*Aster child-f-def-acc letter for-Josef CAUS-send-3fsgS-3fsgO/3msgO/3msgO.ben)

'Aster made the girl send a letter to Josef.'

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

This shows that the internal arguments (the DO and the IO) is able to agree with the verbs 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 really the internal syntax of the arguments (the null PP idea) themselves that determines their agreement. It is rather presence or absence of other higher DP arguments that determine the agreement relations. If there is a causee argument in the derivation, it tend 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 fare into the competition only to the point that it appears in 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-lij-it-u dəbdabe-u-n lə-yosef as-lakk-əčč-iw/ll-ət/*ll-at

*Aster by-child-f-def letter-def-acc for-Josef CAUS-send-3fsgS-3msgO/ben-3fsgO

'Aster make the girl sent the letter for Josef.'

Whenever the causee is marked by a prepositional item, the causee is unable to 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. But, 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 reason why the middle arguments (affectee and goal) do not trigger subject agreement is 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. We then need explanation why the instrumental causee is failing to agree with the verb while the accusative case marked one is able to agree.

In the following subsection, I am going to propose Relativized Minimality as an explanation for the competition-based agreement pattern of the internal arguments.

6 Relativized Minimality as 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 doesn't have effect on the verbal agreement. Either of the two internal argument could trigger verbal agreement, regardless of their position. The question is then why the relative position of the causee argument in relative 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 reason for this effect.

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

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

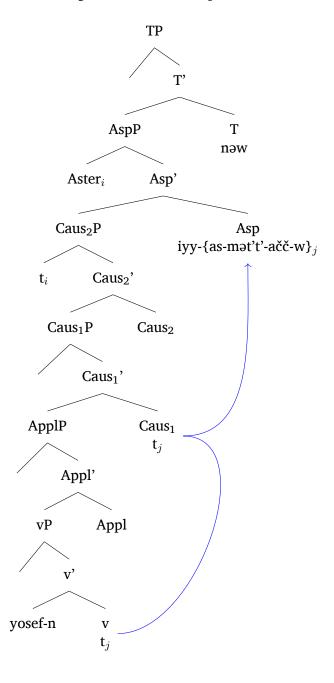
As we have seen in (16), causatives appear in higher positions than applicatives. Given the ideas that causee arguments are arguments of causatives, and the indirect objects are the arguments of applicative features, this means that the causee arguments appear higher in the syntactic hierarchy than the 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 lij-it-u-n dəbdabe lə-yosef iyyə-as-lakk-əčč-at/*iw/*ll-ət nəw Aster child-f-def-acc letter for-Josef prog-CAUS-send-3fsgS-3fsgO/3msgO/3msgO.ben) is 'Aster 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 I noted above, I assume that the functional items attach to the verb due to head movement, Baker (1988). As shown in the above tree structure, I specifically assume that the verb moves at least to the AspP head.

We have to further assume that the verbal incorporation proceeds before the agreement relationship are 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 main issue, it is important to notice that the verb can carry an agreement morpheme only for a single object DP. This turn out to be a language internal restriction. Taking the morphology on the surface value⁸, this means that the verb is able to agree only with a single non-subject argument.

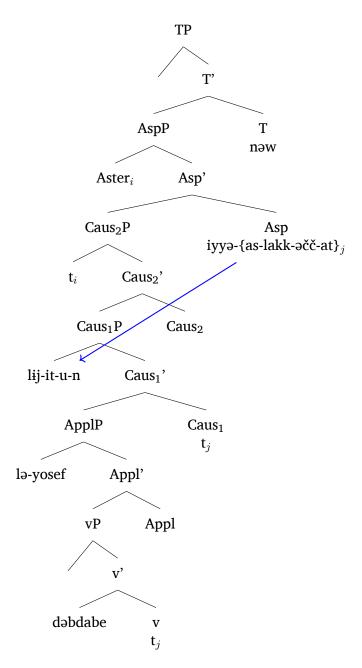
Having said that, then the question is is then why does the causee argument is always agreeing with the verb while the others are not. This question can be easily answered by the syntactic means.

This question can be answered by considering the relative hierarchy of the arguments and 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 items exists in between the two items. The theory is mostly developed around movement: where 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 there is another DP intervening.

Consider the following structure.

⁸The 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.

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. As the causee argument, which appears on the spec 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 then 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 not causee argument. Wherever their surface position is, any of the two internal arguments could agree with the verb.

To explain this free-alternation, we need some other mechanism of creating a dominance. I therefore suggest that topicalization is reason 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 and Potsdam (2001). For that end, first, I will establish the fact that it is indeed the topicalized argument that triggers the agreement with the verb. I will then 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 and one notion. As Shibatani (1991) noted, both in the philosophical and linguistic tradition, subjects are taken as a mere synonymy or equated with the topic; "the subject is what we are talking about" (Chafe, 1976, p. 43). And, as direct reflection of the long-standing tradition to associate subject with topics, generativists have argued for close proximity of subjecthood in the fseq with the topic-hood, (Luigi, 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 is correct:

The grammatical topic functions as a powerful cohesive device that relates an event to the preceding event in such a way 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 the notion that connects one event to the next event when there are 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 as the topic.

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

(38) yosef lə-Aster dəbdabe lakk-ə. issu-mm guwadəgnoččwan asdənək'-ə *Josef for-Aster letter sent-3*msgS. *He/it-top her.friends surprise-3*msgS 'Josef sent a letter to Aster. It/he surprised her friends.'

(39) yosef lə-Aster dəbdabe-u-n lakk-ə-w. issu-mm guwadəgnoččwan asdənək-ə Josef for-Aster letter-def-acc send-3msgS-3msgO. He/it-top her.friends surprise-3msgS '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 example 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 does the pronoun *issu-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 of the 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 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. Look at the following sentences.

- (40) aster lə-məmhir- \mathbf{u}_j dəbdabe $_i$ lak $_h$ -əčč-lət. issu-mm $_h/j/??i$ təmariwəččun asasəbə Aster for-teacher-def letter send-3fsg-3msg.ben. He/it-top students bothered 'Aster send a letter to the teacher. It/he bothered the students.'
- (41) aster $la-mamhir-u_j$ dabdabe $_i$ $lakk_h$ -ačč. issu- $m_h/??j/i$ tamari-očč-u-n asasaba Aster for-teacher-def letter send-3fsg. He/it-top student-pl-def-acc bother 'Aster send 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 marks 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 is in agreement with the verb of the first sentence.

Given the topic is the notion that connects the events of the two consecutive sentences, hence, taking the topic argument be the one saliently available to antecede a pronoun in the next sentence, Caramazza and Gupta (1979), and that "pronouns require that their referents be topical." Kehler (2004), the co-indexation facts from the above examples shows that the object agreeing with the verb is the one in topic position⁹.

⁹At this point, one might argue that the agreement markers are pronominal; and, hence, induce prominence to the objects. The idea is plausible one. But, as Baker has rejected the pronominal (anaphora)

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 moves to a higher position, either on the surface or at LF. Th kind of analysis indeed not new. Previous works have suggest a similar kind of object shift as IP-internal topicalization. Anderssen and Bentzen (2012), for example, have argued that the object shift in Norwegian verb is a type of IP-internal topicalization. In exactly the same manner, here, I propose that a Topic projection does exist on top of the CausP which functions as the landing site for the topicalized object.

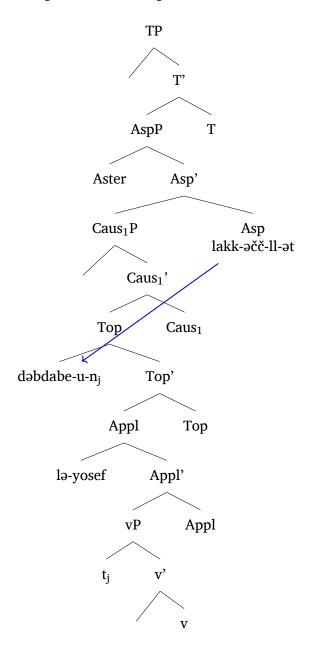
Consider the following example.

(42) Aster dəbdabe-u-n lə-yosef lakk-əčč-iw Aster letter-def-acc for-Josef send-3fsgS-3msgO 'Aster send the letter for Josef.'

Here, it is only the direct object that is agreeing with the verb. It also appear 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.

possibility of object agreement markers in Amharic, I will not be worried about it in here. Look at footnote 14.

Figure 6: The DO agrees with the verb

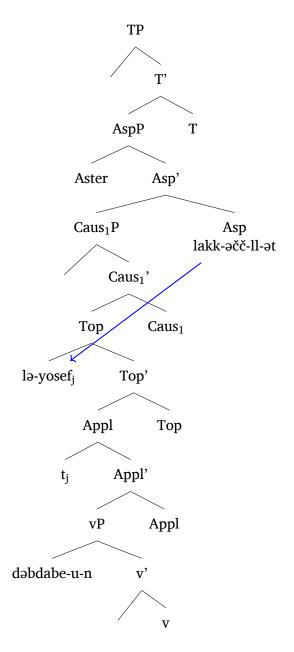


Since the DO has moved to a topic position across the IO, it is the former that appears closer to the verb. Hence, the agreement indexed the former, not the latter.

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.

(43) Aster lə-yosef dəbdabe-u-n lakk-əčč-ll-ət Aster for-Josef letter-def-acc send-3fsgS-ben-3fsgO 'Aster send the letter for Josef.'

Figure 7: The IO agrees with the verb



That means, the relativized minimality story proposed for the causee argument then

can easily capture the normal agreement facts of the middle argument and the theme argument.

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

```
(44) yosef bə-məmhir-it-u dəbdabe-u-n as-nəbəb-ə-w(*at)

Josef letter-def-acc By-teacher-f-def CAUS-read-3msgS-3msgO (*3fsgO)

'Josef get the letter read by the (female) teacher.'
```

In (44) case, the causee argument is overtly projected. Still, only the theme argument is able to agree. Here, the reason why the causee fails to agree with the verb is straightforward. The reason why the preposition blocks the causee from agreeing with the verb can easily be explained using phase theory. In a number of works, prepositions are assumed to introduce phase boundaries Larson and Hornstein (2013); Bošković (2014); Rezac (2008); Harwood (2013). 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-məmhɨr-it-u dəbdabe-u-n lakk-ə-w(*at)

Josef letter-def-acc for-teacher-f-def send-3msgS-3msgO (*3fsgO)

'Josef send the letter to the (female) teacher.'

Here, the indirect objects is appearing with a genitive case, which is, by assumption, a structural case. Still, the direct object is able to 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 LF¹⁰. The topicalization moves the theme argument to 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 theme happen to raise to higher position (topicalization), only when the other arguments are case marked by either prepositions or genitive case. In other words, why is topicalization

¹⁰An alternative analysis would be to assume the preposition marked arguments to merge in lower position than the theme argument. That is, to assume that the merging position of the arguments vary in accordance with their case marking. But, I am not entertaining such analysis for two main 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 is convincing. Hence, there is no need stipulate that the middle argument merges lower than the theme whenever it comes with dative case.

of the theme, impossible when the causee and the middle argument are in accusative case, as presented in (46) and (47).

- (46) yosef məmhir-it-u-n dəbdabe-u-n as-nəbəb-ə-at(*əw)

 Josef teacher-f-def-acc letter-def-acc CAUS-read-3msgS-3fsgO

 'Josef make the (female) teacher read the letter.'
- (47) yosef məmhir-it-u-n dəbdabe-u-n lakk-ə-lat (*əw) yosef teacher-f-def-acc letter-def-acc lakk-3msgS-3fsgO 'Josef send the (female) teacher a 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. In that case, to the extent that the causee is marked by a structural case, it always comes out winner.

But, the one in (47) is quite surprising 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 TF-topicalization hypothesis makes a wrong predication that the direct object would agree with the verb.

I claim that topicalization at LF (any kind of movement for that matter) still obeys the relativized Minimality. In the topicalization we saw above, we were raising accusative marked argument across genitive marked arguments; or the other way around. If we consider a more radical variant of the Relativized Minimality developed in Stark's (2001), this raising of genitive marked argument across the accusative, or the other way around, would be permitted. Because the argument has carried at least one additional feature that the higher arguments do no have. $[\mathrm{DP}_C ausee + \mathrm{instrumental}]...[\mathrm{DP}_I O + \mathrm{dative}]...[\mathrm{DP}_D O + \mathrm{Accusative}]$ In this kind of feature, composition, we don't expect any form of blocking. Hence, raising would be licit.

But, whenever all the arguments are marked by 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 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 kinds of case. In the earlier stages of P & P, Chomsky (1991), for instance, nominative case was assumed to be assigned by the IP via 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. But, 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. Nominative is assigned by TP/IP; accusative is by vP/VP. A fixed head is responsible for a specific Case value.

The second, while less-known, mainly motivated by Burzio's Generalization, maintains that Case assignment is not associated with specific heads; rather a relativized process that nominative case can be assigned by either vP, in case of unaccusatives, or TP in case of causatives, Marantz (2001); Sigurdsson (2000). 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 mechanism. He has shown that the case marking in Amharic works on fixed position basis while the one in Sakha works on relativized basis.

All the facts regard case in Amharic confirm his analysis. Case assignment of the internal arguments is not similar to agreement. As I have 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. But, this kind of competition doesn't work for case. Case assignment is rather dependent on the internal property of the DPs themselves, and the exact position they appear on. One of the DP-internal factors is the specificity of the DP. The direct object receives accusative case only when it is specific (definite). Indefinite objects cannot be case marked.

```
(48) *yosef yəhon-ə-n təmari gərəf-ə(w)

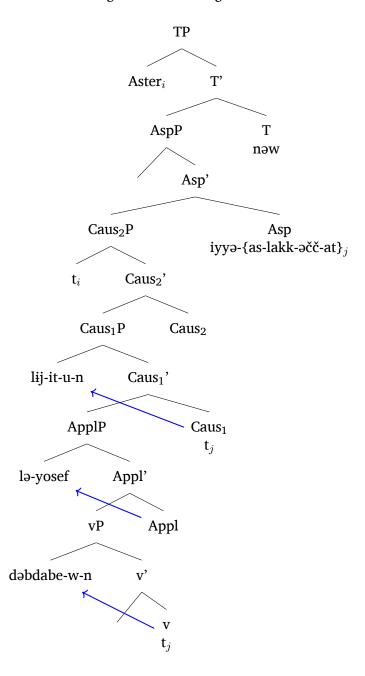
Josef one-3msg-acc student whip-3msgS(3msgO)

'Josef whipped a student.' (nonspecific)
```

I assume that the cases are assumed by each of the functional layers where these argument inhabit. The functional projections themselves such as the vP/VP, the Caus₂P, 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.

(49) Aster lij-it-u-n lə-yosef dəbdabe-u-n as-lakk-əčč-at
Aster child-f-def-acc for-Josef letter-def-acc CAUS-send-3fsgS-3fsgO
'Aster made the girl send the letter for Josef.'

Figure 8: Case assignment



The accusative case is assigned by two different functional features such as the Caus and the vP. The genitive case is assigned by the Appl head; and 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 arguments DPs doesn't 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 as-lakk-əčč-w
Aster letter-def-acc child-f-def-acc for-Josef CAUS-send-3fsgS-3msgO
'Aster made the letter send for 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 doesn't affect the types of case it receives. This can be explained by the order of syntactic operations:

(51) Order of operations Case assignment \rightarrow Topicalization \rightarrow Agreement

The property of the verbal agreement is affected by topicalization of the objects because agreement relation is established after the movement (topicalization) of the DPs. But, case is an earlier relation. As such, movement doesn't 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 phenomena where the presence of a higher argument determines the fate of the lower argument. I have proposed that agreement phenomena 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 on spec-head relations. No other intervening items shift the outcome of the case.

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 operations. The outcomes are impacted by operations that precedes it, such as movement.

References

- Amberber, M., 1996. Transitivity alternations, event-types and light verbs. Ph.D. thesis, McGill University, Montreal, Canada.
- Anderssen, M., Bentzen, K., 2012. Norwegian object shift as ip-internal topicalization. Tromsø Working Papers on Language and Linguistics: Nordlyd 39, 1–23. URL http://www.ub.uit.no/baser/nordlyd/.
- Baker, M., 2012. "obliqueness" as a component of argument structure in amharic. In: Cuervo, M. C., Roberge, Y. (Eds.), The end of argument structure?, vol. 38 of Syntax and Semantics. Emerald, Bingley, U.K., pp. 43–74.
- Baker, M., 2015. Case: Its Principles and Its Parameters, vol. 146 of Cambridge Studies in Linguistics. Cambridge University Press, Cambridge.
- Baker, M. C., 1988. Incorporation: a theory of grammatical function changing. University of Chicago Press, Chicago.
- Borer, H., 2005. Structuring Sense: Volume I: In Name Only. Oxford University Press, Oxford; New York.
- Bošković, Z., 2014. Now i'm a phase, now i'm not a phase: On the variability of phases with extraction and ellipsis. Linguistic Inquiry 45, 27–89. URL http://www.mitpressjournals.org/doi/abs/10.1162/LING_a_00148.
- Brody, M., 2003. Towards an elegant syntax, vol. 8 of Minimalist Investigations in Linguistic Theory. Routledge, London; New York.
- Caramazza, A., Gupta, S., 1979. The roles of topicalization, parallel function and verb semantics in the interpretation of pronouns. Linguistics 17, 497–518. URL 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, W., 1976. Givenness, Contrastiveness, Definiteness, Subjects, Topics, and Point of View in Subject and Topic Subject and topic. NY: Acadamic press.
- Chomsky, N., 1991. Some Notes on Economy of Derivation and Representation Principles and Parameters in comparative grammar. MIT Press, Cambridge.
- Chomsky, N., 1993. A minimalist program for linguistic theory. In: Hale and Keyser (1993), pp. 1–52.
- Chomsky, N., 2001. Derivation by phase. In: Kenstowicz, M. J. (Ed.), Ken Hale: A Life in Language, vol. 36 of Current Studies in Linguistics. The MIT Press, Cambridge, Mass.; London, pp. 1–52.
- Demeke, G. A., 2003. The clausal syntax of ethio-semitic. Ph.D. thesis, University of Tromsø, Tromsø.

- Hale, K., Keyser, S. J. (Eds.), 1993. The View from Building 20—Essays in Linguistics in Honor of Sylvain Bromberger, vol. 24 of Current Studies in Linguistics. The MIT Press, Cambridge, Mass.; London.
- Harley, H., 2008. On the causative construction. In: Miyagawa, S., Saito, M. (Eds.), Handbook of Japanese Linguistics. Oxford University Press, Oxford, pp. 20–53. URL https://ling.auf.net/lingbuzz/000433(draftversion).
- Harwood, W., 2013. Phased and confused: celebrating the uniqueness of progressive aspect under a phase-based analysis. https://ling.auf.net/lingbuzz/001663.
- Kayne, R. S., 1994. The antisymmetry of syntax, vol. 25 of Linguistic Inquiry Monographs. MIT Press, Cambridge, Mass.; London.
- Kehler, A., 2004. Discourse topics, sentence topics, and coherence. Theoretical Linguistics 30, 227–240.
- Kim, K., 2011. External Argument Introducers. Ph.D. thesis, University of Toronto, Toronto.
- Kratzer, A., 1996. Severing the external argument from its verb. In: Rooryck, J., Zaring, L. A. (Eds.), Phrase structure and the lexicon, vol. 33 of Studies in Natural Language and Linguistic Theory. Kluwer Academic Publishers, Dordrecht; Boston, pp. 109–138.
- Larson, B., Hornstein, N., 2013. A note on p-stranding and adjunct extraction from nominals. Linguistic Inquiry 44, 669–674. URL http://www.mitpressjournals.org/doi/abs/10.1162/LING_a_00143.
- Larson, R., 1988. On the double object construction. Linguistic inquiry 19, 335–391. URL http://www.jstor.org/stable/25164901.
- Lomaschvili, L. (Ed.), 2011. Complex predicates the syntax-morphology interface, vol. 174 of Linguistik Aktuell/Linguistics Today. John Benjamins Publishing Company, Amsterdam.
- Luigi, R., 1997. The fine structure of the left periphery. In: Haegeman, L. M. V. (Ed.), Elements of grammar: handbook in generative syntax, vol. 1 of Kluwer International Handbook of Linguistics. Kluwer Academic Publishers, Dordrecht; Boston, pp. 281–281.
- Marantz, A., 2001. Words. In: Ms. MIT. URL http://babel.ucsc.edu/~hank/mrg.readings/Marantz_words.pdf.
- McGinnis, M., Gerdts, D. B., 2004. A phase-theoretic analysis of kinyarwanda multiple applicatives. In: Burelle, S., Somesfalean, S. (Eds.), Proceedings of the 2003 CLA Annual Conference.
- Pesetsky, D., 1995. Zero syntax: experiencers and cascades, vol. 27 of Current Studies in Linguistics. MIT Press, Cambridge, Mass.; London.

- Polinsky, M., Potsdam, E., 2001. Long-distance agreement and topic in tsez. Natural Language & Linguistic Theory 19, 583–646.
- Pylkkänen, L., 2008. Introducing arguments, vol. 49 of Linguistic Inquiry Monographs. MIT Press, Cambridge, Mass.; London.
- Ramchand, G., 2008. Verb meaning and the lexicon: A first phase syntax, vol. 116 of Cambridge Studies in Linguistics. Cambridge University Press, Cambridge; UK.
- Ramchand, G., 2011. Licensing of instrumental case in hindi/urdu causatives. Nordlyd 38, 49. URL http://dx.doi.org/10.7557/12.2230.
- Ramchand, G., Tungseth, M., 2006. Aspect and verbal prepositions. Tromsø Working Papers on Language and Linguistics: Nordlyd 33. URL http://www.ub.uit.no/baser/nordlyd/.
- Rezac, M., 2008. Phi-agree and theta-related case. In: Harbour, D., Adger, D., Béjar, S. (Eds.), Phi theory: phi-features across modules and interfaces, vol. 16 of Oxford Studies In Theoretical Linguistics. Oxford University Press, Oxford; New York, pp. 83–129.
- Rizzi, L., 1990. Relativized Minimality. The MIT Press, Cambridge, MA.
- Shibatani, M., 1991. Grammaticization of topic into subject. In: Traugott, E. C., Heine, B. (Eds.), Approaches to Grammaticalization II —Focus on the Types of grammatical markers, vol. 19:2 of Typological Studies in Language. John Benjamins Publishing Company, Amsterdam; Philadelphia, p. 93–134.
- Sigurdsson, H. A., 2000. The locus of case and agreement. https://ling.auf.net/lingbuzz/002807.
- Starke, M., 2001. Move dissolves to merge: A theory of locality. Ph.D. thesis, Université de Genève. URL https://ling.auf.net/lingbuzz/000002.
- Tesfay, T., 2010. Applicatives in the context of ethiopian and eritrean semitic languages (ees). Rivista di Grammatica Generativa 35. URL http://157.138.8.12/jspui/handle/11707/60.
- Workneh, D. B., 2019. The voice system of Amharic. Ph.D. thesis, University of Tromsø, Tromsø.