

# 1 Selection, agreement and case in the verbal nouns

## 1.1 Gerundives and their selector predicates

Would the ultimate cause be their indecomposable LCS (lexical semantics) or a decomposable argument structure or a totally independent syntactic factor, there is no doubt that different verbs take different kinds of embedded clauses.

Not all kinds of verbs select clausal complements; and not all types of complements are clausal. The gerundives, as I have argued on independent grounds, are a mix of both clausal and nominal properties. Due to their clausal properties, they are standardly treated alongside other clausal complements. For that reason, it is necessary how they fare with other standard complement clauses. It is also useful to see what types of predicates select them, and what type don't.

Complement clause selecting predicates have been studied in the some typological studies. One of the most important works in the study of complement clauses at the cross linguistic level is Noonan (1985), also published as ?. In that study, Noonan have demonstrated that complement selecting predicates are grouped into 14 semantic classes.

Contra to the 14 classes Noonan identified, Demissie has only 5 classes—intention, aspectual, cognitive, communication and emotive.

With the exception of the *emotive* verbs, all the other classes of verbs developed by Demissie are covered in Noonan's typology. As will see in the latter sections, the reason why the *emotives* are not under Noonan's radar is because he doesn't consider clausal complements functioning as subjects. This verb class is relevant on the subject clauses, not on complement clauses. For that reason, Noonan doesn't include them under his typology. I will also treat them separately. For the other classes: what Demissie calls *verbs of intention* are the *desideratives* and *communication* verbs of Demissie are named *utterance* in Noonan and the *cognitives* of Demissie are the same with the *knowledge* verbs of Noonan.

Table 1: Classes of CATPs

NO	Noonan	Demissie	Examples
1	Utterance	communication	tell, describe, explain, report, say
2	Propositional attitude	— <sup>1</sup>	think, believe, suppose, assume, doubt, deny
3	Pretense	—	imagine, pretend, make believe, fool, trick
4	Commentative(factive)	—	regret, be sorry, be sad, be important
5	Knowledge(semifactive)	cognitive	know, discover, realize, find out, understand
6	Fearing	—	be afraid, fear, worry, be anxious
7	Desiderative	desiderative	want, wish, desire, hope, like, plan, decide <sup>2</sup>
8	Manipulative	—	force, persuade, command, request, let, ask <sup>3</sup>
9	Modal	—	can, must, ought, must, should, may
10	Achievement	—	manage, dare, happen, get to, try, fail
11	Phasal(aspectual)	aspectual	begin, start, continue, finish
12	Immediate perception	—	see, hear, watch, feel
13	Negative	—	'won't' (Fijian)
14	Conjunctive	—	'and then' (Lango)

<sup>1</sup> Some of the predicates of the propositional attitude are included in his cognitive class. Demissie is not wrong in unifying the two because they behave the same syntactically. But, to be consistent with Noonan and other works which put them as a separate class, I will keep them separate

<sup>2</sup> Demissie has included a larger classes of verbs here: intention, permission and request verbs are included here. I will put them in a separate class because they behave slightly different in some cases.

<sup>3</sup> Request and permission verbs are included in this group in Noonan's paper. *ask* has been included in the *utterance* class too.

Noonan's study is interesting for its exhaustivity. There are, however, some classes of predicates in Noonan's list which are irrelevant for Amharic. This is expected given Noonan collected his data from a large number of languages; not all languages would include all the classes. Demissie (1977) also has done an investigation on the classes of verbs in Amharic. Comparing the two studies, the Amharic linguist has a smaller set of verbs while the topologist collected a detailed classes of verbs from an array of languages.

Some classes of verbs which are not immediately relevant to the Amharic are Noonan's *fear*, *negative*, *conjunctive*, *modal* predicates. Noonan's *fear* verbs are best be incorporated to the grander class of psyche predicates. For the *conjunctive*, Noonan's example is from Lango; a verb which indicates *and then*. I couldn't come up with a similar verb in Amharic. *Modals* and *negative* also seem to fall to the functional categories in Amharic.

Another modification to make is on the *pretense* verbs. They behave the same with the manipulative predicates; and their meaning is not different from them either. Therefore, I will unify them under the manipulative class.

*Permission* (promise) and *request* verbs are grouped under the manipulatives in Noonan's typology. These verbs might seem the same with the manipulatives. They, however, have some distinct properties; as we will see in latter sections. I will therefore, keep them in a separate class. I also included indirect perception predicates into the list because they do actually take complement clauses.

For a more general grouping, I will use Givón (2001) classification of these same predicates into three major classes– the CPU, Modality and Manipulative classes.

Putting the above modifications into effect, we now have the following classes of verbs.

Table 2: Verb classes

Govon's classes	No	Modified Noonan
PCU	1	Communication (utterance)
	2	Propositional Attitude
	3	Factives
	4	Indirect Perception
	5	Semifactives (cognitive)
MOD	5	Desiderative
	6	Achievement
	7	Aspectual
	8	Immediate Perception
MAN	9	Manipulative
	10	Permission
	11	Request

The question we want to ask at this point is which of these predicates select the verbal nouns; and, if they do so, why? And, could the facts on the selection of the verbal noun have ramifications to the theory of selection at large? To understand how selection works, it best to put the verbal nouns under the context of other types of complement clauses. Comparing them with other types of complement clauses might give a better insight than looking at them separately. We will come back to this problem in the latter section. For now, since our focus is on the verbal nouns, it suffices to list down the class of verbs which select the verbal nouns.

Let us start form the nomings. To check which of the predicates select the noming gerundives, I am going to put a frame sentence:

- (1) (Yosef) [Mariam wädä-bet-wa mä-hed-wa]-n...  
*Yosef [Mary to-house-her CM-went-3fsPoss]-acc...*  
 'Josef ...Mary going to her house'

Table 3: Selection of Noming gerundives

[Mariam wädä-bet-wa mä-hed-wa]-n	✓ gäläs'ä (communication: 'explain')
	✓ gämmätä (propositional: 'guess')
	✓ räsa(factive: 'forget')
	✓ säma (indirect perception: 'hear')
	✓ tärräda (cognitive: 'recognize')
	✓ fällägä-äw (desiderative: 'want')
	* asakka (achievement: 'achieve')
	* makkärä (aspectual: 'try')
	* ayä (direct perception: 'saw')
* azzäzä (manipulative: 'command')	
✓ fäk'k'ädä (Il-at)/källäkälä (permission: 'permit/prohibit')	
* lämmänä-at (request: 'beg')	

The above example are all made by putting independent lexical subjects in the embedded clause. All the PCU verbs are compatible with the nomings with the lexical subject. From the rest of the

verbal classes, only the desideratives and permission verbs seem compatible with the nomings. Should the incompatibilities be explained by selection or the distribution of PRO, we have to look for clues from the PRO subject nomings too. If a verb class is not able to take the nomings both in their Lex DP and PRO form, then, the explanation should be done selectional restriction. If the PRO subject nomings are allowed, however, the reason why they are incompatible could be due to the subjects.

To avoid redundancies, I will just put the summary of the results; the full paradigm will be presented in an Appendix.

Predicates incompatible with the PRO subject gerundives:

- communication
- propositional
- indirect perception
- cognitive
- achievement
- direct perception
- manipulatives
- permission

- (2) \*Mariam [wädä-bet-wa (lä)-mä-hed] gäläs'äç/gämätäç/sämaç/tärrädaç/asakaç  
*Mary [to-house-3fsPoss (lä)-CM-go] explained/guessed/heard/recognized*  
 'Mary explained/guessed/heard/recognized/achieved to go (going) to her house'

Compatible predicates:

- factives
- desideratives
- aspectuals
- request

- (3) Mariam [wädä-bet-wa mä-hed] räsaç/fällägäç/jämmäräç/t'äyäk'äç  
*Mary [to-house-3fsPoss CM-go] forget/want/start/request*  
 'Mary forget/want/start/request going to her house'

Table 4: Nomings: summary of the selection

Classes	Lex DP	PRO
Communication	✓	*
Propositional	✓	*
Factives	✓	✓
Indirect Perception	✓	*
Cognitive	✓	*
Desiderative	✓	✓
Achievements	*	*
Aspectual	*	✓
Direct Perception	*	*
Manipulative	*	*
Permission	✓	*
Request	*	✓

From the table, it is clear that all the CPU verbs select the verbal nouns. Most of the verb classes, however, force lexical subjects. Given the current understanding of the distribution of the PRO, this is expected because these verbs are CP selecting verbs. As we will see later, they select finite complement clauses. In the earlier generative theory, the impossibility of binding an anaphor or any sort of relationship across a full clausal boundary was well recognized. Chomsky 1973 has a principle called Tensed Clause Condition (TSC) which prohibits rules applying from across finite clauses. In the current Minimalism framework, this probably could be captured by the Phase Impenetrability Condition (PIC). We will see the details when we discuss control structures.

What is rather surprising is the selection of the factive predicates. They are one of the CP taking class of predicates; well known in the literature; also confirmed within Amharic, (Demissie 1977).

- (4) Mariam tinant    ïndä-hed-äç    räs-a  
*Mary yesterday COMP-left-3msS forget-3msS*  
 ‘He forget that Mary left yesterday’

Still, they manage to select the noming gerundive with the PRO subject. This is unexpected. They are similar to the desiderative in their flexibility of selection. It is well known in the literature that the desiderative are truly flexible class of predicates. Here too, they select both the PRO and the DP subject nomings. But, little has been reported on the factive predicates. We might then treat the two classes of predicates together. One strategy commonly applied to analyze the desideratives is the restructuring analysis, from Rizzi and others. It might be possible to extend the analysis to the factive predicates too. We still need to look further in other types of complements if their multi-selectional property will persist; or is restricted to the verbal nouns.

*Aspectuals* indeed select noming gerundives. But, they are strict control verbs. For that reason, they avoid the DP subject gerundives.

From the data we have so far, request verbs like *request, ask, beg, plead, pray, appeal* seem to behave like the aspectual verbs. They are fine with the PRO subject, but not with the gerundives having a disjoint subject from the matrix clause.

- (5) \*Mariam mä-hed-wa-n lämmän-ä/s'alläy-ä/t'äyäk'-ä  
 Mary CM-went-3fsPoss-acc plead-3msS/pray-3msS/request-3msS  
 'He requested/begged/prayed Mary going to her home'

But, the true picture could emerge only when we consider the passing gerundives too. We cannot conclude, at this point, that request verbs are control verbs like aspectuals. Permission verbs, on the other hand, seem quite the opposite of the control verbs—and similar to the CPU verbs.

*Direct perception, manipulative* and *achievement* verbs never select the noming gerundives. If we have to explain why some verbs select the nomings and others not, we have to compare these four classes against the other many.

Before concluding that the restrictions come from selection, or other factors, it gives sense to look at how these predicates fare with the passing gerundives. To avoid redundancy, I have presented here the summary of the selection of the two types of gerundives from the above classes of predicates. A full paradigm is presented in the Appendix.

Table 5: Selection of verbal nouns

Govon's classes	No	Modified Noonan	Nomings		Possings	
			Lex	PRO	Lex	PRO
PCU	1	Communication (utterance)	✓	*	✓	*
	2	Propositional Attitude	✓	*	✓	*
	3	Factives	✓	✓	✓	*
	4	Indirect Perception	✓	*	✓	*
	5	Semifactives (cognitive)	✓	*	✓	*
MOD	6	Desiderative	✓	✓	✓	*
	7	Achievement	*	*	*	*
	8	Aspectual	*	✓	*	*
	9	Immediate Perception	*	*	*	*
MAN	10	Manipulative	*	*	*	*
	11	Permission	✓	*	✓	*
	12	Request	*	*	*	*

Comparing the two types of verbal nouns, the selection is exactly the same when they have disjoint subjects between the gerundive and the matrix predicate. *Manipulative, request, aspectual* verbs don't select both kinds of verbal nouns. All the rest are compatible compatible with the verbal nouns having a disjoint subject of their own. That means, all the 9 classes of verbs couldn't be OC. They are either non-control or optional control predicates.

Due to the case incompatibility, possings couldn't have PRO subjects. Control is impossible with the genitive subject since the main clause in Amharic cannot take genitive subject. Therefore, the only comparison we could make is between the Lex DP situations. And, both classes of gerundives are exactly the same. Therefore, all the conclusions we made in the nomings, in the above sections, are all valid to the whole of the gerundives.

- (a) *PCU* verbs, except *factives*, select them only when they have disjoint subjects
- (b) *Aspectual* verbs select them only when they have coindexed subjects

- (c) *Request* and *manipulative* predicates never select gerundives
- (d) *Desiderative* and *factive* verbs select them in both situations: Lex DP or PRO
- (e) *Achievement*, *direct perception*, *manipulative* and *request* predicates don't select the verbal nouns at all

All in all, from about 12 classes of verbs purported to take clausal complements, 4 of them don't select them at all—*achievement*, *immediate perception*, *manipulative* and *request*. 8 of them select the verbal nouns. All the PCU verbs communication, propositional attitude, factive, indirect perception, cognitive, some Modality verbs such as *aspectual* and *desiderative*, and one class of Manipulative verbs such as the *permission* class select them. Most of the verb classes select the verbal nouns, however, doesn't mean that they have the same manner of interaction with the verbal nouns. A number of properties of the verbal nouns are indeed affected by the selector predicates or the clauses they introduce. Of these effects, the agreement of the nominal head with its arguments, the case assigned to the whole of the verbal noun, as well as to the individual arguments of the verbal noun, agreement as well as the meaning of the verbal noun as a whole seems to be most swayed by the kind of predicates the verbal nouns are embedded in.

The crucial question is then what determines the selection, ultimately? should it be a categorial selection in which, say the manipulatives, don't take certain syntactic categories in which the verbal nouns happen to belong to. Or, should it be explained on semantic basis. What make two predicates, say *allow* in one hand, and *request* on the other hand, to take verbal or not to take verbal nouns as their complements. What is the correct way of modeling the selectional restrictions? should it be semantic reason or syntactic reason for the verb *request* to fail to take the verbal nouns while its counterpart, the *allow* verb does so happily.

These are not trivial questions. A huge work has been devoted to the question of selection since 1950's; and turn out to be one of the thorny areas of linguistics science. There is a large body of work specifically targeting the selection of the verbs to their DP (nominal) complements. From Chomsky (1965), to Grimshaw (1979, 1981) to Pesetsky (1985, 1991), Emonds (2000, 2007), they attempt to discover one major reason why a certain verb tend to take a certain type of complement, but the other type. For its complexity and gravity of the matter, studying the relationship between the verbal nouns (gerundives) and their selector predicates won't proffer a sufficient conclusive evidence to determine the source of selection. It is imperative to look how selection works in broader context. For that reason, I will not attempt to solve the selection problem at this point. We will come back to the problem with full force in a separate chapter.

For now, let us proceed on how agreement and case assignment works within Amharic gerundives.

## 1.2 Agreement and Case in gerundives

### 1.2.1 Re-classifying the classes

In the above sections, we have seen 12 classes of verbs; and their selection relationship with the verbal nouns. We have seen that out 9 classes of verbs do select the verbal nouns. The classes we have seen above are built, basically, on semantic notions. These semantic notions, the typologists contend, have ramifications on how these verbs behave in the syntax. That being something to be proven, theoretical linguistics has been more or less ignorant of those semantic

classes. Rather, what has played an important role in the linguistics literature, is whether the verbs take corefering or non-corefering arguments. That is, whether the verb is a control verb or not. To shift the our gear towards the theoretical focus, thus, the above 12 classes of verbs could be re-grouped into control, non-control and optional control. That is, the relationship between the selector predicates and the subject of the embedded clauses in general, and the verbal nouns in particular, could be expressed in either of the three ways:

- a. Obligatory Control (OC<sup>1</sup>): eg. *mokärä* ('try')
- b. Obligatory Non-Control (ONC): eg. *sämna* ('hear')
- c. Optional Control ≈ Non-Obligatory Control (NOC): eg. *fälägä* ('want')

### 1.2.2 OC verbs

The subject of the embedded clause is always co-referential to an argument in the matrix clause. OC don't allow a non-co-referential subject in the embedded clause. The cause of the co-referential between the embedded argument and that of the matrix is generally unclear—and the explanations are usually theory internal. In the early generative grammar, exact copies of arguments were assumed to present in both of the clauses except that the lower copy gets deleted at PF (with a process called Equi-NP Deletion). Latter, a slightly different kind of pronoun is assumed to the embedded clause —PRO— semantically co-indexed with an argument of the matrix clause. The Movement theories of control, on the other hand, assume the lower silent argument to be nothing, but a trace.

By now, the standard theory on the OC control verbs comes from Williams 1980 where he explains the properties of these verbs in terms of PRO. He puts OC verbs as those verbs which don't allow arbitrary reference to the PRO. He compared them with the other class—Non-obligatory control class.

- (6) a. John persuaded Mary<sub>i</sub> [PRO<sub>i</sub> to shave herself<sub>i</sub> ] — OC
- b. John<sub>i</sub> thinks that [PRO<sub>i/arb</sub> shaving] is important — NOC

A class of verbs in Amharic which force co-referential subjects are *aspectual* and *manipulative* verb classes. The aspectual verb classes are typical subject control verbs. It is the subject of the matrix predicate which gets co-indexed with the silent argument of the embedded clause.

Aspectual verbs:

- *mokärä* = 'try/attempt'
- *jämärä* = 'begin'
- *k'ät'älä* = 'continue'
- *ak'omä* = 'stop'
- *fäs'ämä* = 'accomplish'
- *č'äräsä* = 'finish'
- *at'änak'äk'ä* = 'complete'

<sup>1</sup>Note that the Obligatory Control has recently been used in a different sense in Hornstein 1999; here, I am rather using the original notion developed in Williams 1980



- *ak'umarät'ä* = 'interrupt'

i

- (7) Yosef mäkinayt-u-n mä-t'ägän mokärä/k'ät'ä/fäs'amä/ak'omä  
*Josef car.fem-Def-acc MÄ-maintain tried/continue/complete/stop*  
 'Josef tried/continued/completed/stopped maintaining the car'
- (8) \*Yosef mäkinayt-u-n Mariam mä-t'ägän (-wa-n)  
*Josef car.fem-Def-acc Mary MÄ-maintain (-3fs.Poss-acc)*  
 mokärä/k'ät'ä/fäs'amä/ak'omä  
*tried/continue/complete/stop*  
 'Josef tried/continued/completed/stopped Mary maintaining the car'

As the ungrammaticality of the above example shows, the embedded clauses of these verbs do not take an independent subjects of their own. This shows that as largely reported in a number of languages, verbs like *mokärä* ('try') are obligatory control in Amharic too.

Note however that the literature is not unanimous on the status of the aspectual verbs as control verbs. While a larger number of works include them under the class of control verbs [Landau \(1999, 2004\)](#), [San Martin \(2004\)](#), other works, [Postal \(1974\)](#) grouped them with raising verbs. Recognizing the fact that these verbs, in many languages, display mono-clausal properties in many languages, some researchers take them as heads of functional heads [Fukuda \(2012\)](#); still others consider them as restructuring verbs, [Cinque \(1999\)](#), [Wurmbrand \(2003\)](#).

Another class of verbs treated as OC are what I called *manipulative* verbs.

- (9) Mariam mäkinayt-u-n indi-at'b Yosef-n asgädäd-äč-iw  
*Mary car-Def-acc COMP-wash Josef-acc force-3fs-3msO*  
 'Mary forced Josef to wash the car'

### 1.2.3 ONC verbs

Obligatory non-control verbs don't allow a co-reference between the subject of the embedded clauses and that of the matrix. The matrix and the embedded predicates assign theta roles to independent arguments. There is no co-indexation of any sort between the arguments of the two clauses.

Verbs of perception and cognition fall into this class.

- *taganažabä* = 'realize'
- *täřädda* = 'understand, notice'
- *astawalä* = 'comprehend, observe'
- *sařna* = 'hear'
- *tamalakatä* = 'see, observe'
- *ayä* = 'see'

- (10) Yosef mäkinayt-u-n Mariam mä't'ägän-wa-n ayä/tämäläkkätä/sämma/tärädda  
*Josef car-Def-acc Mary maintain-3fs.Poss-acc saw/observed/heard/noticed*  
 'Josef saw/observed/heard/noticed Mary's maintaining the car'
- (11) Yosef<sub>i</sub> mäkinayt-u-n mä-t'ägän-u-n<sub>\*i/j</sub> ayä/tämäläkkätä/sämma/tärädda  
*Josef car.fem-acc-Def MÄ-maintain-3ms.Poss-acc saw/observed/heard/noticed*  
 'Josef saw/observed/heard/noticed his (\*himself) maintaining the car'

All the verbs of communication fall into this class.

- tänaggarä- 'tell'
- asradda 'inform'
- gallas'- 'describe'
- abassar- 'tell good news'
- aradda 'break the bad news'
- lamman- 'beg-request'
- makkar- 'advise'
- t'ayyak'- 'ask'

- (12) Josef yä-Mariam-n mäkinayt-u-n mä-t'ägän asrädd-a-ñ  
*Josef of-Mary-acc car.Fem-Def-acc maintaining inform-3msS-1sO*  
 'Yosef informed me Mary's maintaining of the car'

Communication verbs are different from the perception and the cognitive classes for they seem to allow PRO subjects—or, a PRO like empty subject—under restricted syntactic conditions. They allow PRO like empty subject whenever the gerundive (the verbal noun) agrees with the matrix subject.

- (13) Yosef mäkinayt-u-n mä't'ägän-u-n asrädd-a-ñ  
*Josef car.fem-Def-acc maintain-3msPoss-acc inform-3msS-1sO*  
 'Josef informed me (his) maintaining of the car'

There is no guarantee that what we have in the above sentence, ?? is a PRO because the agreement could carry the features of the subject; hence, a pro subject could be assumed to exist in the embedded clause. It is also possible that the silent argument is a PRO. We will come back to this in the latter sections.

#### 1.2.4 NOC verbs

Between the OC and ONC verbs, there exists another class of verbs which allow both corefering and non-corefering arguments in the embedded clause.

These are verb which allow alternation of the coreferential and non-coreferential arguments with no additional syntactic-semantic constraints on the embedded clauses. They seem to equally select clauses with both corefering (PRO) and lexical subjects.

(14) Yosef mäkinayt-u-n Mariam mät'ägän-wa-n yï-mäfat'äl  
*Josef car-Def-Acc Mary maintain-3fsS-Acc 3msS-prefer-aux*  
 'Josef prefers Mary maintaining the car'

(15) Yosef<sub>i</sub> mäkinayt-u-n PRO<sub>i/\*j</sub> mät'ägän yï-mäfat'äl  
*Josef car-Def-Acc maintain 3msS-prefer-aux*  
 'Josef prefers maintaining the car'

Desideratives are the typical non-obligatory verbs. Contra to the communicatives which allow coindexed subjects in restricted contexts, desideratives allow lexical subject in restricted conditions—only if the gerundive clause is case marked. One can also see that object agreement on the matrix verb is obligatory unlike all the cases we have seen above.

- fällägä (want, look for)
- assäbä (intend)
- tämääññä (wish)
- guwaguwa (eager to)—no Lex
- gomäjjä (desire) –no lex
- käjjälä (desire) –no lex
- wäddädä (like) –
- ak'k'ädä (plan) – ??lex
- wässänä (decide) – ?? lex
- fäk'k'ädä (permit, allow)

(16) Yosef mäkinayt-u-n mä-t'ägän fälläg-ä  
*Josef car-acc-Def MÄ-maintain want-3msS*  
 'Josef wants to maintain the car'

(17) Yosef mäkinayt-u-n Mariam mä-t'ägän-wa-n fälläg-ä-w  
*Josef car-Def-acc Mary MÄ-maintain-3fs.Poss-Acc want-3msS-3msO*  
 'Josef wanted Mary's maintaining the car'

Propositional attitude verbs also fall into this category.

- awwäk'ä (know)
- amman- 'believe'

But, if the matrix verb is an ambivalent verb in terms of control—like *märät'äl* ('prefer'), *fäk'ädä* ('permit') and *wässänä* ('decide')—both the overt and the PRO subjects are licit in case the gerundive agree with the subject.

(18) Yosef mäkinayt-u-n Mariam mä-t'ägän-wa-n märät'-ä  
*Josef car-Def-Acc Mariam CM-repair-3fsP-acc want-3msS*  
 'Josef prefers Mary's repairing the car'

- (19) Yosef mäkinayit-u-n mä-t'ägän-u-n mārät'-ä  
*Josef car-Def-Acc CM-repair-3msP-acc want-3msS*  
 'Josef prefers repairing of the car'

As one can easily see, the above two sentences are not distinct in any other property except the asymmetry of the PRO and lexical subjects. They license both PRO and lexical subjects within the same syntactic conditions.

In the original classification in Williams 1980, the term "non-obligatory control" was used in a slightly different sense: William made a distinction between where the PRO could have an arbitrary references, and where arbitrary reading is invariable.

- (20) John<sub>i</sub> thinks that [PRO<sub>i/arb</sub> shaving] is important — NOC

In this sense, the focus is on what controls the PRO. The controller could be a linguistically available DP; or a generic referent, [Carnie \(2013\)](#) correctly described as "someone". But, if we look into the property of the verb *think*, it also allows a full overt lexical subjects.

- (21) John thinks that Mary is shaving herself

As such, the non-obligatoriness of the controls works at two different levels: first, it allows the arbitrary controller to the PRO, plus, it allows independent lexical subjects to the clause. The first function is a form of control provided that the arbitrary control is still a form of control; but, the second function is a non-control function. The two notions are independent; but they are sometimes taken as the same thing. ?? for example use the phrase "optional control" to mean the second notion where alternation between the lexical subject and PRO is attested. (? , 277) on the other hand, uses the same notion to refer to William's notion of non-obligatory control.

Since arbitrary control has limited distribution (occurs mostly in generic clauses), the focus in the following sections is on the second type of ambivalence of verbs—to take controlled or uncontrolled arguments. In that sense, my use of the term "non-obligatory control" is different from William's—rather the same to Emond's & San Martin's "optional Control". What I call non-obligatory control in here are mainly verbs which flex between control (taking co-referring arguments) and non-control structures. This type of versatility of the verbs to take different kinds of clauses (controlled and non-controlled clauses) is sometimes taken as a restructuring phenomena. My use of the term is similar to Pires' recent (2006) treatment of similar, flexible verbs in English and Portuguese. It is also similar to Landau's (1999) classification of OC verbs into Exhaustive and Partial Control verbs. What he calls Exhaustive control verbs are similar to what I call OC in here; and that of his Partial control are what I am calling NOC<sup>2</sup>. The tests are different; he doesn't classify the verbs by judging whether they allow full lexical DPs or not as I do. He uses other tests which I will explain in the latter sections. But the results are more or less similar—he puts aspectuals and modals into the exhaustive control class, and the rest of the verbs (desiderative, propositional, request etc) into the partial control class

<sup>2</sup>He takes both as a sub-class of OC verbs.

### 1.2.5 Summary

Table 6: Summary

	Selecting		Non-selecting
OC	NOC	NC	
Aspectuals	Factives Desideratives	Communication propositional attitude Indirect perception Cognitive Permission	Achievement manipulative Request

### 1.3 Agreement and case in OC verbs

Table 7: Aspectual verbs

N <sub>o</sub>	Matrix S	Matrix V	inf S	inf	Example
1	Nom	V-AgrS-	PRO	pro-CM-AgrS.P-acc	✓ Yosef mäkinay-it-u-n lä-mä-t'ägän mökkär-ä Josef car-fem-def-acc LÄ-CM-maintain try-3msS
2	Nom	V-(AgrS-O)	(gen)Nom	pro-CM-(AgrS.P-acc)	* Yosef (yä)Mariam(-n) mäkinay-it-u-n lä-mä-t'ägän-(wa-n) Josef (of)Mary(-acc) car-fem-def-acc LÄ-CM-maintain-(3
3	Nom	V-AgrS-O	PRO	CM-AgrS.P-acc	✓ Yosef mäkinay-it-u-n mä-t'ägän-u-n mökkär-ä-w Josef car-fem-def-acc CM-maintain-def-acc try-3msS-3m
4	Nom	V-AgrS-O	PRO	pro-CM-AgrS.P-acc	* Yosef mäkinay-it-u-n lä-mä-t'ägän-u-n mökkär-ä-w Yosef car-fem-def-acc LÄ-CM-maintain-def-acc try-3msS-
5	Nom	V-AgrS-O	PRO	pro- CM-	✓ Yosef mäkinayitun lä-mä-t'ägän mökkär-ä-at Josef car-fem-def-acc LÄ-CM-maintain try-3msS-3fsO

The first two sentences are not much of an interest. The first sentence is a regular OC control verb with the a nominative subject controlling the PRO subject of the gerundive. The example in the 2<sup>th</sup> row come out ungrammatical because the embedded clause contains an overt lexical subject.

My objective in here to observe how agreement interacts with the clause structure of the verbal nouns; and, look a possibility if it could shade some light on their structures.

In standard clause, the verb agrees with the subject as well as the object. The object also carries a clitic like element which is usually analyzed as an object agreement marker. The object agreement marker is differential; in the sense that it appears only when the object is specific (definite).

(22) Yosef lij-u-n-n sam-ä-w  
Josef child-Def-acc kiss-3msS-3msO  
'Josef kissed the boy'

(23) Yosef lij sam-ä-w

The verbal noun in example 3 behaves like a typical DP we have in (22). The main verb 'try'

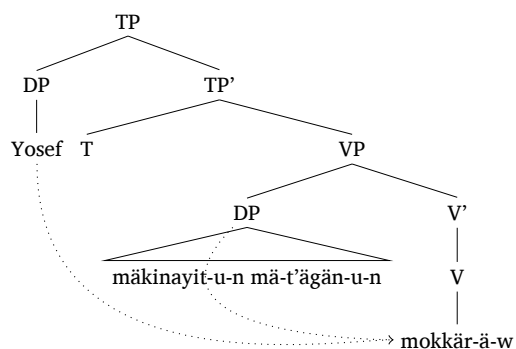
is inflected not only to subject agreement but also to object agreement. This is because the verbal noun itself seems marked by the definite marker ‘u’. The ‘u’ item in the above example is always ambiguous between the 3s possessive agreement and the definite article. Therefore, it is necessary to diagonize it. A simple way of diagonizing it is changing the number of the subject. The possessive agreement on the plural and feminine subjects has a distinct form from the definite article.

- (24) *lijochu mäkinaytun mä-t’ägän-u-n mokär-u-ut*  
*children.def car.fem.def.acc MÄ-maintain-Def-acc try-3plS-3msO*  
 ‘The children tried (it) the maintaining of the car’

As this example shows, the changing of the subject to plural doesn’t change the form of the marker. If it were a possessive agreement, it would appear as *aččäw*. As such, we can safely conclude that the marker is the actual definite article. There is no possessive agreement on the verbal nouns—confirming the position of the subject to be higher up (outside of the verbal noun).

-

As I have already mentioned above, the accusative case marking is also correlated with the definiteness marker. It marks only definite (specific) arguments. Note also that the object agreement marker is masculine because it is tracking the nominal; not the object of the embedded clause. As such the accusative case has appeared on the verbal noun. All this clearly show that the verbal nouns indeed are indeed DPs.



In any event, the whole structure suggests a case where the definite article is overtly marked; presenting the verbal nouns as typical DPs. In this kind of structure, the agreement and the case assignment make it clear that the verbal noun is just a typical DP object.

In the probe-goal system of agreement (and case assignment), an important question would be the relationship between the nominal head and the inflectional elements. That is, how does exactly the Agree between the object and the verbal nouns happens. Note that the direct object of the verbal noun is also carrying the same types of elements as the nominal head. are these also part of the higher verbal inflection or the internal predicate?

First, it is very easy to tell that the article and the case markers of the internal argument have nothing to do with the matrix predicate. This becomes clear when we turn the internal object into a non-definite DP.

- (25) mäkkinä mät'ägän-u-n mokkär-ä-w  
*car maintain-Def-acc try-3msS-3msO*  
 'he tried the maintaining of a car'

In this sentence, the internal argument is indefinite. Still, the verbal noun is able to have the same inflectional elements as above. This shows, the inflectional materials appearing on the internal argument and those on the verbal noun are independent of each other. Hence, there is no reason to assume that the case assignment of the internal object has anything to do with the matrix predicate. This means that, the verbal noun, while it seems nominal by its own, is able to assign accusative case to its own internal argument. It seems then that the verbal noun is both assigner and receiver of case to its internal argument and from the matrix predicate, respectively. That is, being typical gerundive heads, containing the properties of both nominal and verbal categories, the verbal noun is able to both assign and receive case at the same time. While both assigning and receiving case at the same time might not be problematic conceptually, it however blurs the traditional categories of elements into case receivers and case assigners (nouns and verbs respectively). In addition, since it endows both capabilities into the verbal noun, it undermines an unwelcoming effect to the attempts to explain the gerundive property of them in structural terms. There is however alternative way of thinking about the case assignment of the verbal nouns. It is to assume that the verbal noun, the head itself, doesn't receive accusative case from the matrix predicate directly. Rather, it is the whole DP on top which receives the accusative case of the matrix predicate. Then, the accusative case and the definite article appear on it via an indirect means. There are reasons to believe that this latter assumption is on the right track. We will see the evidences when dealing with the NOC verbs.

Going back to the table 7, the agreement pattern in 4 suggests accusative marking of the gerundive is illicit if the gerundive is marked by the prepositional element 'lä'. This prefix, as already mentioned, has been compared with the English infinitive marker *to* in some of the earlier works mainly because it has the sense of 'purpose' just like the English 'to'. It seems to appear only a restricted classes of verbs. From the ON(aspectual) class, verbs like *try*, *begin* are compatible with it: while other aspectual verbs which show the completion of the event (*finish*, *complete*) seem incompatible. In any event, why the presence of the prefix makes the agreement pattern illicit is not clear to me.

As all the examples in the table show, the prefix is fine whenever the verbal noun is not marked with the definite article. From this, one reasonable suggestion would be to take the prefix as a true infinitive marker. Given the strong verbal property of infinitive markers, then, it gives sense if it cannot be prefixed on a strongly nominalized verbal noun where the definite article is overtly marked. This would indirect suggest the verbal nouns are at different levels of nominalization when they are marked by the definite article. Having the definite articles seems to make the verbal nouns more nominal; as such making them incompatible with the infinitive marker. If this assumption is right, then, the verbal nouns might not contain the full DP whenever they lack the overt definite marker. There are indeed reasons to think that the *lä* prefix is a perfective form fo the prospective aspect marker *li*. These two elements, I have argued on an independent grounds, are the same item with different aspectual forms. Take the base element to be *l*. This same element appears as *li* when prefixed on imperfective verbal bases and as *lä* whenever prefixed on perfective verbal base. If this is correct, we can say that the prefix is a prospective aspect marker. Note that a similar observation has been made to the English infinitive marker *to* (contra to the bare infinitive) in (Quirk 1985, 1206)(Gelderen 2004, 180).

- (26) a. I saw him cross the road  
 b. \*I see him cross the road  
 c. I see him to cross the road

The infinitive without *to* to denote the event is complete. As such, it is not compatible with the present verb *see*. The infinitive with *to* on the other hand, can denote an event not completed; eminent to happen.

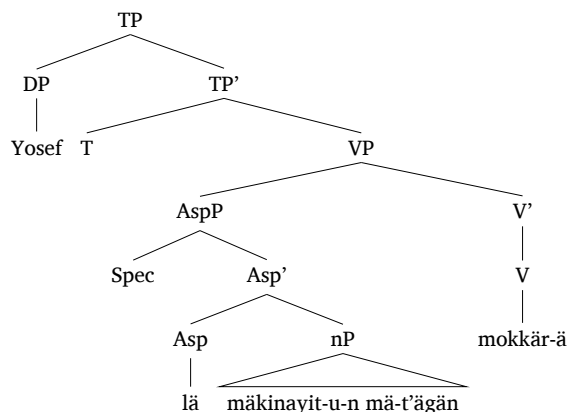
The situation is similar in Amharic. Those verbal nouns with the *lä/i* prefix suggest the event is eminent. The prospective use of the *li* is already well-known, Yimam (1999). But, the two elements were not considered the same. If my argument that the elements are the same, then, the facts known about the *li* are transferable to the *lä*. That is indeed the case. Just like the English infinitive, the *lä* element cannot be compatible with the completed events. That is why it is not compatible with the aspectual predicates which show the completion of the event.

- (27) Yosef mäkinaytun lä-mä-t'ägän makkär-ä  
*Josef car.fem.def. acc LÄ-MÄ-maintain tried-3msS*  
 'Josef tried to maintain the car'

- (28) \*Yosef mäkinaytun lä-mä-t'ägän fäs'am-ä  
*Josef car.fem.def.acc LÄ-MÄ-maintain finish-3msS*  
 'Josef finished to maintain the car'

- (29) a. John started to wash the car  
 b. ??John finished to wash the car

Because of these reasons, I take the element as a prospective aspect marker, taking the verbal nouns as its complement.



Since the verbal nouns are topped by the aspectual marker, then, agreement and case assignment from the matrix predicate is blocked. This is a case where the aspectual verb *makkärä* taking an infinitive complement, rather than a DP complement. It now cannot assign case to its complement because it is not headed by a DP. For the question how the aspectual marker end up prefixing on the verbal nouns, we will come back in latter question. For now, it suffices to say that the failure of the case marking on the verbal nouns prefixed by the aspectual marker is due to the deep embeddedness of the DP inside the AspP or complete absence of the DP in



this context. Whether the verbal nouns project a DP in the absence of an overtly marked definiteness marker is a question of utmost importance. We will come back to it when discussing the gerundive projection.

Going back to the table once again, the last sentence (5) illustrates another interesting fact about object agreement. We have seen that whenever the gerundive is prefixed by the prepositional element, a direct relation between the matrix verb and the gerundive clause breaks. The gerundive clause can no longer function as direction object—as both the object agreement and case marking suggest. But, with the prepositional prefix, another kind of agreement is possible—that is, the matrix verb can agree with the object of the verbal noun (gerundive) clause. *-at* which is suffixed on the matrix verb is 3fs object agreement morpheme referring to the object of the embedded clause, ‘the car’. This agreement is possible even if the prepositional element is not available so far as two conditions are satisfied:

- (i) the matrix verb doesn’t agree with the whole gerundive clause
- (ii) the gerundive clause doesn’t have overt lexical subject

The second requirement is satisfied by default; given the OC verbs we are dealing with here. The first one, however, is a puzzling issue. First, if the whole verbal noun projection is embedded inside the AspP, which we assume to be responsible for blocking of the case assignment to the verbal noun—why is suddenly fine for the object in the verbal noun to trigger agreement with the matrix predicate? Second, why is the object agreement asymmetrical to the agreement of the nominal. that is, why is the complementarity between the verbal noun head and the object of the verbal noun in agreeing with the main predicate?

The second problem, the complementarity of the verbal noun and the object to trigger object agreement is similar to the situation with the double object agreement. In di-transitive verbs like *give*, only one of the arguments triggers agreement at a time. It seems then that the verb has just a single slot for object agreement in this language. I analyzed this before as a form of competition to match reach the verbal projection. The highest of the objects agrees with the verb outranking the other object. The situation is the same in here. The object of the verbal noun can agree with the matrix verb only if the verbal noun itself fails to agree with the verb. In addition, the agreement marker on the verb gives a sense of topic to the object agreeing. It seems that the agreeing element is a topicalized element. Applying the analysis I offered to the double object agreement before, it then possible to assume that the internal object is somehow in a higher position in cases where it agrees. That is the reason why it manages to agree with the verb while the head of the verbal noun itself fails. Since the presence of Asp project is irrelevant in this case, as the object agreement is possible even in the absence of the aspectual prefix, one possibility is to assume that the object raises to doesn’t go to or across the AspP. The alternative approach is to assume the position of the object to be higher than the AspP itself.

The first approach faces a challenge immediately because, we have already claimed that the AspP is able to block the agreement of the verb into the nP. If that is the case, then, the agreement of the object to the matrix predicate should also be blocked, the proposal in the above section predicts. Therefore, I take the second approach to be correct. That is, the object agrees with the verb after it raised to the VP layer, probably SpecvP. The evidence from the double objects also supports this analysis. That is, in the double object constructions, the focused (agreeing) DP seems higher up in the SpecvP.

## 1.4 Agreement and Case in NOC

Table 8: Desideratives = NOC

No	Matrix S	inf S	inf	Matrix V	Example
6	Nom	PRO	CM-	V-AgrS-O	✓Yosef mäkinayitun (lä)-mä-t'ägän fällägä
7	Nom	PRO	CM-AgrS.P-Acc	V-AgrS	*Yosef mäkinayitun mät'ägän-u-n fällägä
8	Nom	PRO	CM-AgrS.P-Acc	V-AgrS-O	✓Yosef mäkinayitun mät'ägän-u-n fällägä-w
9	Nom	Nom	CM-AgrS.P-acc	V-AgrS-O	✓Yosef Mariam mäkinayitun mät'ägän-wa-n fällägä-w
10	Nom	Nom	CM-AgrS.P-acc	V-AgrS-	* Yosef Mariam mäkinayitun mät'ägän-wa-n fällägä
11	Nom	Nom	CM-AgrS.P-	V-AgrS-O	* Yosef Mariam mäkinayitun mät'ägän-wa fällägä-w
12	Nom	Nom	CM-	V-AgrS-O	* Yosef Mariam mäkinayitun mät'ägän fällägä-w
13	Nom	gen-N-acc	CM-AgrS.P-acc	V-AgrS-O	?✓Yosef yä-Mariam-n mäkinayitun mät'ägän-wa-n fällägä-w
14	Nom	gen-N-acc	CM-	V-AgrS-O	✓Yosef yä-Mariam-n mäkinayitun mät'ägän fällägä-w

It is clear that the agreement and case assignment of the NOC verbs is more complex than the OC verbs. This is due to varies alternatives these predicates allow. They allow both lexical and PRO subjects. The lexical subject alternative itself allows nominative as well as genitive marked subjects—each of which coming with their own agreement styles.

The last three examples ( rows 6<sup>th</sup>— 8<sup>th</sup>) shows the embedded clause taking a PRO subject. The agreement and the case marking pattern again follows the somehow similar pattern with each other and the examples we have seen in the above sections.

Hence, they are comparable to the cases we discussed in the above section. The sentence in the 6<sup>th</sup> is the correspondent of the 1<sup>th</sup> of table 7. The sentence in 8<sup>th</sup> row is again the same type of sentence as in 3<sup>th</sup> of table 1. The example in 7 is meant to show that object agreement on the matrix verb is obligatory if the verbal noun is marked by the definite article and the accusative case. All in all, whenever the NOC verbs take the PRO subject, the agreement and case assignment system of the NOC verbs is exactly the same with OC verbs. This suggests the clause structure of these clauses is similar except that the NOC class have a second alternative to take overt subjects. I will therefore no discuss the agreement and case of the verbal noun when they come with PRO subject. I assume to be the same with the OC case we have seen above. I will focus on the examples where a lexical subject is overtly marked.

The 15<sup>th</sup> row shows the subjects of the both the verbal noun and the matrix verb appearing in nominative case. What is interesting about this example is that the subject appears in nominative while the head of the nominal clause is in accusative. The accusative case assigned by the matrix predicate, somehow, misses the subject and hits on the verbal noun. This the case across all Noming gerundives.

The next three examples, from 10–12 are meant to show that the object agreement, the possessive markers and the accusative markers are correlated. If any of the agreement features are left out, whether on the matrix or the gerundive, the sentence becomes unacceptable. The possessive agreement in these examples is playing the roles that the definite articles has played in the OC verbs. The relationship between the definite article and possessive markers is a bit complex in Amharic. The definite article looks very much the 3ms possessive marker in form. The possessive agreement markers seems also to have a definite interpretation by themselves. This is true of regular DPs, as in the gerundives in here.

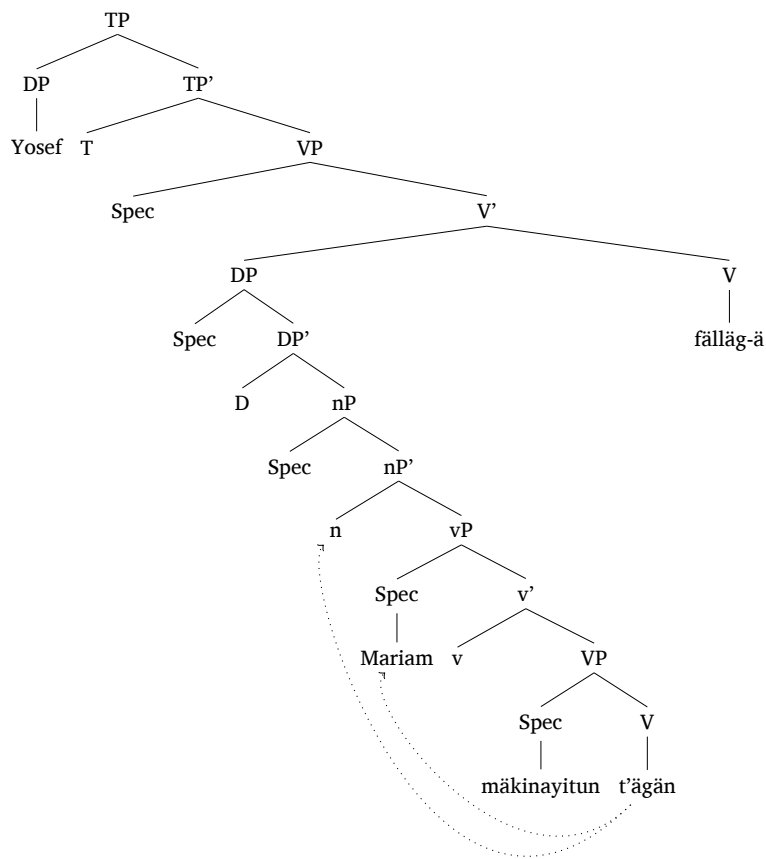
addis beyt-u = his house or the house

bet-ačāw tāk'atälä = their house: the meaning can hardly be an indefinite.

Note also that the accusative marker always follows the definite DPs. The fact that it appears with the possessives confirms the definiteness of the nominal with these possessives (even if the definite article is not overtly marked). Observing these facts, I have noted before that the possessives have an internal definiteness component. As such, the possessive agreement markers in 15 contain the definiteness element in them. That is why the accusative case is appearing on them.

For the possessive agreement, the definiteness and accusative cases, in my masters thesis, I have argued that the relationship is established via upward probing. Adjectives and other modifiers carry the definite article by agreeing with the D head which merges into the derivation with null element. The definite article appears on them as a result of the Agree between those modifiers and the null D head. Applying the logic to the possessor DPs, I have argued that the definite article fails to appear on them because they are internally definite that they don't probe to the D projection. The same proposal could be applied in here.

The whole gerundive projection is inside the DP projection. This is evident from the property of the case marker. The definiteness marker, however, doesn't inflect overtly. This, I take it to mean that the D doesn't lexicalize due to the failure of the probe. The possessive marked verbal noun doesn't probe because the possessive is internally valued for definiteness.



The probing of the predicate to the internal subject suffixes the genitive agreement on the verb. At the same time, the its agreement with the nominalizer projection, *np* prefixes the nominal head *mä* on the verb. This gives us the verbal complex *mä-t'ägän-wa*. Note, the process is so far purely internal to the gerundive clause.

Note that the source of the possessive agreement is the internal subject. We have seen in the OC predicates that the PRO subject doesn't trigger agreement with the verbal noun. Rather, the verbal noun gets the definite article. NOC verbs allow lexical subjects in the nominal clause. In this case, if the subject is in nominative case, agreement between the subject and the verb is obligatory. The agreement markers don't appear like the standard subject-verb agreement form. I interpret the obligatoriness of the agreement to mean that the subject of the verbal noun is a true subject. The possessive form of the agreement, on the other hand, is a sign that verb has been nominalized by the time the subject merges. Based on these and the like evidences, I have claimed that the noming gerundives are less nominal than the passing gerundives. I have also argued that the distinction between the two types of gerundives could be explained by assuming different merging positions for the nominalizer head; *mä*.

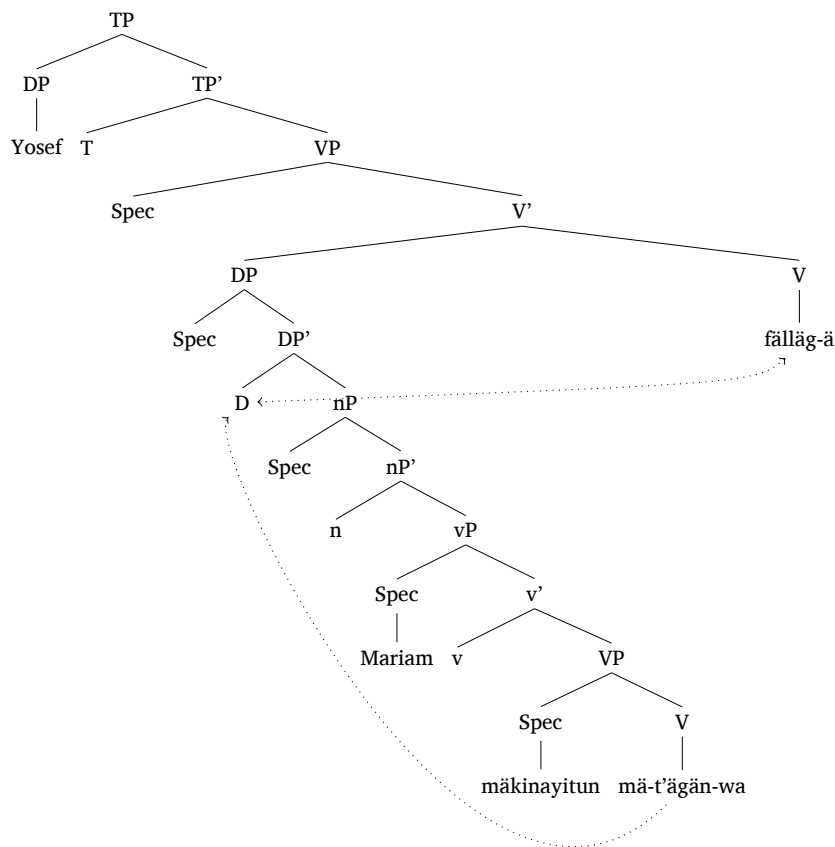
There are two important issue at this point. One is why and how the possessive agreement could block the lexicalization of the definite article. The other is about the position of the accusative

case marker. Given that the accusative case marker is assigned from the matrix verb into the whole nominal clause, why does it appear on the verb; why not on the highest items like the subject.

Given the framework I developed in [Workneh \(2011\)](#), both of the problems can be straightforwardly explained using the upward probing.

The definite article fails to lexicalize when there are possessive agreement markers because they blocked the agreement between the verbal noun and the null D head. That is, given the upward probing, which is motivated by having unvalued (or lack of) the definiteness feature, one approach to solve the problem is to assume that the verbal noun cannot probe to the D since the possessive agreement markers themselves can satisfy (check) it. An alternative approach is to allow the probing of the verbal noun to the D; but, assume that the definite article is incorporated (unified) into the genitive agreement unit; given its affinity with the possessive feature. Both approaches work fine. But, I take the latter one to be right for the reason to be clear immediately.

Regarding the position of the accusative case marker, in that thesis, I have argued that the case is assigned to the DP projection. Once the case is assigned to the DP projection, the definite article and the case features form a cluster (unit). The accusative case then follows wherever the definite article appears in. There is a lot of evidence for the two elements forming some kind of unity. They appear together on adjectives, relative clauses, and all sorts of positions in the DP. That theory, I contend, still works for the verbal noun. In the above structure, the main predicate of the matrix assigns the accusative case to the DP projection. Then, when the verbal noun probes to the DP, it gets not only the definite article but also the case marker.



The steps are as important as the relations. The matrix verb has to assign the case to the DP before the probing of the verbal noun. We won't be able to have the accusative case on the verbal noun, otherwise. The accusative case which formed a unit with the definiteness feature then lexicalizes on the verbal noun when the verbal noun agrees with the D. Assigning the accusative case to the DP, the matrix verb has to also agree with the DP. This correctly generates the grammatical sentence we have in the example: *Yosef Mariam makinayitun mat'agan-wa-n fallag-ä-w*. We also have a Reflex Agree type of process between the matrix verb and the DP. If either of the agreement or the case assignment failed, the sentence will be ungrammatical, as the example in row 10 of the table 8 shows.

The last two examples are typical cases of possessing gerundives. The sentence in the 16<sup>th</sup> row is the same to that of the 15<sup>th</sup> except that the subject of the gerundive in the latter appears in genitive, rather than nominative case. The sentence is still marginally acceptable. The sentence in the 17<sup>th</sup> row is to be compared with the 12<sup>th</sup> sentence. In the 12<sup>th</sup> sentence, the internal subject is in nominative case. The lack of agreement on the gerundive results in ungrammaticality. In the 17<sup>th</sup> sentence, on the other hand, the genitive marked subject doesn't force agreement with the gerundive. Dropping the agreement suffixes is even preferable. The absence or optionality of the agreement between the genitive subject and the verbal noun is

reminiscent of the agreement between the noun and its possessor. The system is exactly the same.

Now, let us compare the agreement and case assignment system of noming gerundives we discussed above with the possessing gerundives. I am repeating the crucial examples in here for convenience:

Table 9: NOC: possessions & nomings

No	Matrix S	inf S	inf	Matrix V	Example
15	Nom	Nom	CM-AgrS.P-acc	V-AgrS-O	✓Yosef Mariam mäkinayitun mät'ägän-wa-n fällägä-w
16	Nom	gen-N-acc	CM-AgrS.P-acc	V-AgrS-O	?✓Yosef yä-Mariam-n mäkinayitun mät'ägän-wa-n fällägä-w
17	Nom	gen-N-acc	CM-	V-AgrS-O	✓Yosef yä-Mariam-n mäkinayitun mät'ägän fällägä-w

We have already seen neither agreement nor case marking on the gerundive head could be marked when their subject is nominative case. This is not the case with the possessions. The agreement of the genitive marked subject is optional, as comparison between 16 and 17 shows. The sentence in 17 shows a situation where the genitive marked subject is not agreeing with the gerundive head. In this case, the accusative case marker, which is assigned by the matrix predicate, targets the subject of the gerundive. If the genitive subject is agreeing with the gerundive, on the other hand, we have two instances of the accusative case marker appearing both on the subject and the gerundive head. We need to address, first why the accusative case marker is targeting the subject in the possessing gerundive, while it appears on the gerundive head in the nomings. Next, we need to explain why two instances of the case marker happen to appear in the same clause.

The first problem has something to do with headedness. Amharic is extremely consistent when it comes to the position of the functional items in a phrase or clause. All the distinct distribution properties emerging here are not exclusive to the gerundive clauses. The same problems have already been tackled within the DP in [Workneh \(2011\)](#) and [Kramer \(2009\)](#). Within the DP, it has already been noted, the definite article and the rest of the functional items target certain types of categories while skipping other types. Direct modifiers of the head noun such as adjectives and quantifiers are always directly targeted. Modifiers of those modifiers, such as intensifiers of the adjectives are consistently skipped. This is probably not surprising, given the relative position (hierarchy of) of the heads of the adjectives in relative to their internal modifiers (intensifiers). What looks rather a surprising discovery comes from the relative clauses. When a relative clause modifies the head noun, the definite article and the rest of the functional items such as the gender marker, and the case markers appear on the lexical verb skipping all the materials in the relative clause including the subject and its modifiers, the object and its modifiers (note, the object in Amharic seems higher than the verb) etc.

I explained the situation by calling for a notion of "headedness". The idea is related with [Grimshaw \(1990\)](#) sense of extended projection. The idea is: the verb is the lexical head of the verbal projection. Neither the subject, nor the object is the head. When the verbal projection is functioning as modifier of the noun, in relative clauses, it is only the lexical verb which is visible to the outside domain. For that reason, I argued, only the lexical verb receives the functional items from the higher projection. The same is true of the Adjectives. The situation with the possessive DP modifiers is a bit complex. What counts as head in the possessor DP, the headedness theory would predict that the head noun of the possessor would always carry the functional items. This is not quite the case. While all the functional heads such as the case marker, the definite article and the gender marker run together with all the modifiers of the

noun including the adjectives, quantifiers and the relative clause, they seem to fall apart when it comes of the possessive DP. The internal structure of the possessor DP seems to intervene with the distribution of the functional items. The definite article is no more able to appear on the possessor DP. The gender marker also seems to disappear completely.

- (30) bät'am k'äw-it-u-n bäg arädat  
*very red-fem-def-acc sheep slaughter*  
 'he slaughtered the very red ewe'
- (31) yä-lij-it-u-n beg arädat  
*of-child-fem-def-acc sheep slaughter*  
 'he slaughter the girl's ewe'
- (32) yä-tinish-it-u-n lij beg arädat  
*of-little-fem-def-acc child sheep slaughter*  
 'he slaughter the little girl's ewe'

(30), the head noun is modified by an adjective *red*. All the three functional items appear on the lexical head of the modifier phrase, which is the adjective. Given the adjectives are heads, our headedness theory predicts it correctly. Put the same principle of headedness into the possessor DP, the theory predict that these functional items would appear on the lexical head of the possessor DP. As the example in (34) shows, yes, there are functional items on the possessor noun. But, the problem is, these functional items are internal to the possessor DP; they are not from the higher DP, except the case marker. How do we know this? because turning each of them to a different value will turn the meaning of the possessor; not the head noun. Take the shift in the gender marker, for example:

- (33) yä-lij-u-n beg aräd-ä-at  
*of-child-def-acc sheep slaughter-3msS-3fsO*  
 'he slaughter the boy's ewe'

You see, the removal of the feminine gender marker doesn't affect the meaning of the head noun, the *sheep*. Rather it affected only the possessor noun. From this, we might conclude that these items are part of the possessor, not the higher DP. This conclusion is still not correct for two reasons:

- (a) the case marker is of the main DP
- (b) the definite feature seems to spread to the whole DP

The first point is straightforward because the accusative case cannot be marked within the possessor DP. It should ultimately come from a case assigner verb, which is the *slaughter*. This verb selects the main DP, not specifically the possessor DP. As such, the case assignment is to the whole DP. From this, we can tell that the accusative case is assigned to the main DP. Its appearance on the possessor DP needs to be independently explained. The explanation for the distribution of the accusative case follows from the framework developed in that thesis. That is, the accusative case marker (feature) follows the definite article (they form a cluster).

Coming to the second point, the relationship between the definite article and the possessor DP is quite complex; and, it is a well known problem across all Semitic languages, even beyond. As I have already mentioned in the above sections, I solved it by allowing an upward probing

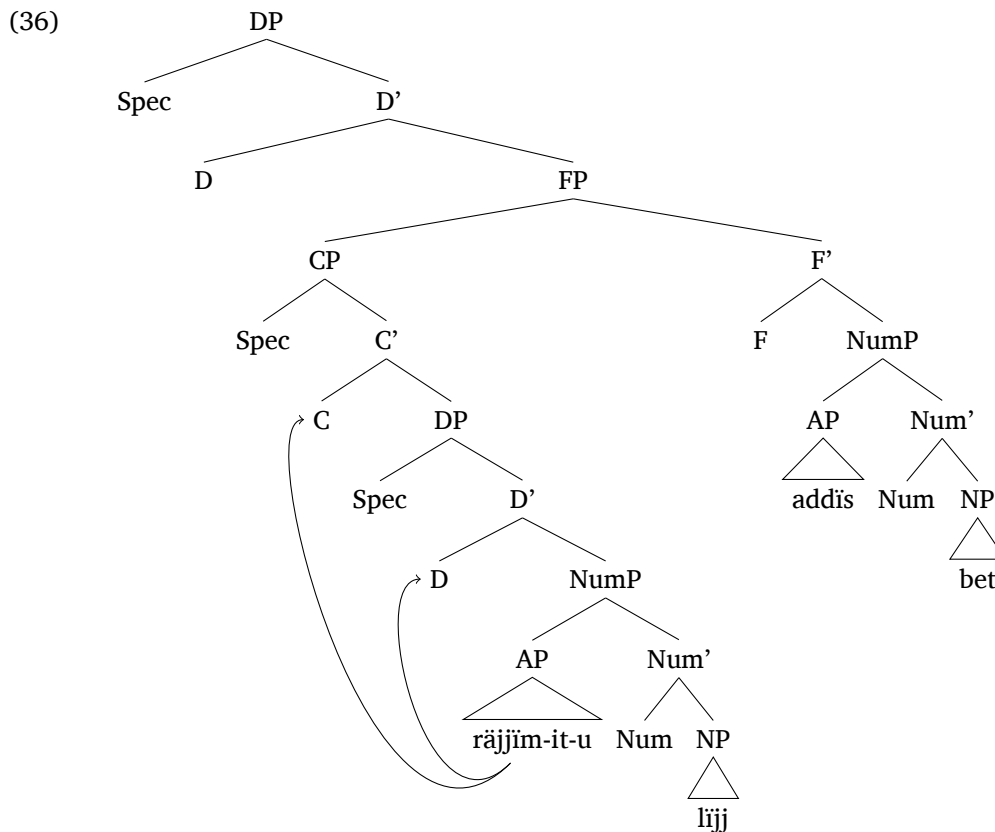


of the head of the possessor, which is the noun if there is no modifier to it, towards D. Once the probing is complete, the definiteness feature of the higher D gets unified with the definiteness feature of the possessor DP; while the case marker independently lexicalizes. As for the gender, I proposed, that the possessor DP, having its own gender feature, doesn't probe to. As such, the head noun of the main DP remains unaffected by the gender feature of the DP. It remains neutral. Both feminine and masculine gender agreement becomes possible (Corbett (1991, 2001) has similar examples in Russian—gender seems to track backwards, that is, the gender of the noun seems to be deduced from the verbal inflection).

- (34) yä-lij-u-n beg aräd-ä-w  
*of-child-def-acc sheep slaughter*  
 'he slaughter the boy's ram'

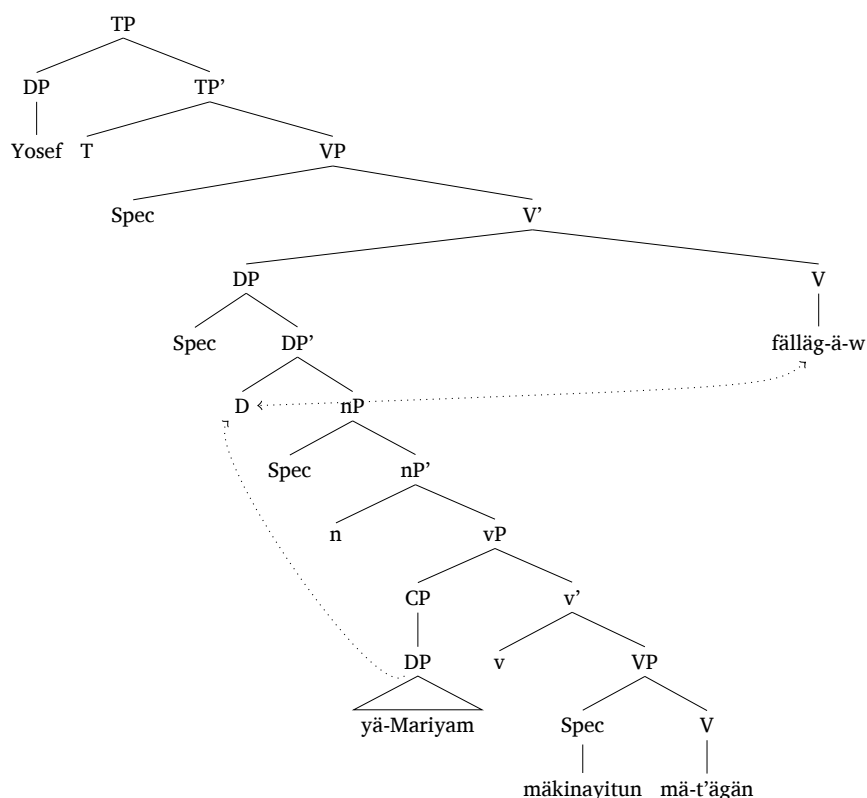
Note also that distribution of the functional elements is as recursive as the number of modifiers. If the possessor has a possessor or a modifier to itself, the functional items will migrate to the modifier. Look the following example; and its analysis given in (Workneh 2011, 106).

- (35) [yä-räjjim-it-u lij] addis bet ak'at'all-ä-w  
 [YÄ-tall-Fem-Def-acc child] new house burn-3msS-3msO  
 'he burned the tall girl's new house'



The point to take from this all is that the possessive DP contains its own internal definiteness and gender features. It gets the case marker from the main DP projection. This is true of the genitive subjects in the gerundive clauses. When we look at the noming gerundives, we have seen that the accusative case targets the head of the gerundive (the verbal noun). The situation of the nomings is comparable with the relative clause modifiers to the DP. Where the lexical verb is the head of the clause in these clauses. The possessings, on the other hand, are comparable to the possessive DP modifiers. The possessor DP contains certain internal features, due to the inner DP it contains, which make it impossible to have the higher features directly. Applying the analysis of the possessives into the genitive subjects works perfectly. The thing is, the relationship between the genitive subjects in the verbal nouns is nothing different from the relationship between the head noun and its possessor DP. Not only in structure (agreement and case assignment), in meaning too, the two come exactly the same. This similarity (unity) is one of the reasons to analyze the verbal nouns as gerundives (nominal categories) rather than as verbal categories usually assumed in the literature.

So, going back to the table 9, the case marking of the possessor in 17 gets exactly the same analysis as the possessive DPs in the above examples.



This process of agreement, from the genitive subject to the DP gives the correct output of marking the accusative case on the subject.

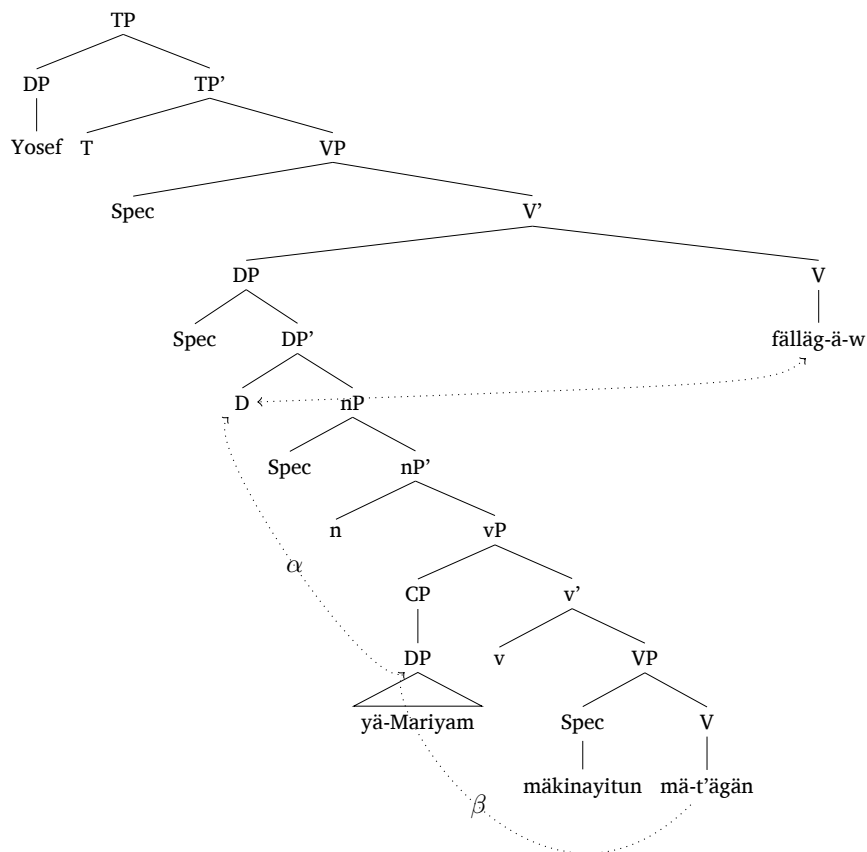
Coming to the example in 16, it is interesting to note that the accusative case marking on the head gerundive is dependent on the nature of the agreement. That is, head of the gerundive cannot get the accusative case unless it agrees with the subject. Only the accusative case without the accusative case makes the sentence ungrammatical:

(37) \*Yosef yä-Mariam-n mäkinaytun mätägän-n fällägaw

The agreement of the verbal noun with the subject, however is possible, as the example in 17 shows. I explain this asymmetry by the order of operations. First, the proposal is, the gerundive head gets the accusative case not by directly probing to D, as in the nomings; rather by agreeing with the genitive subject. Since the genitive subject is able to probe to the DP, it naturally blocks the probing of the verbal noun to the higher head. In the course of agreement with the head noun, however, the head of the gerundive can copy the case feature. That is what is happening in 16. The dependency of the case marking on the agreement (37) is then easily explained.

If there is no agreement, there is no case marking. The next question is: if agreement and case go hand in hand, that is, if the agreement of the verbal noun with the subject results in copying of the case marker, why doesn't this happen all the time? that is, why is 17 grammatical. I propose that it is the order of derivation which makes both alternatives a possibility. That is, the situation we see in 16 is where the verbal noun probes to the subject after the subject agreed with the DP. The situations in 17 on the other hand emerges when the verbal noun probes earlier: before agreement is established between the D and the subject. At that point, the case feature on the subject is still unvalued. As such, the agreement of the verbal noun with the subject doesn't result in copying of the case feature.

To make things more clear: let us call the the two agreement operations  $\alpha$  and  $\beta$  for the subject agreement with the DP and the verbal noun agreement with the subject, respectively.



(a) 16 is generated when operation  $\alpha$  proceeds before  $\beta$ .

(b) 17 is the result of the operation  $\beta$  proceeding before  $\alpha$

If the subject agrees with the DP projection first, then, the verbal noun is able to copy all the features of the subject. That is the situation in 16. If the Agree operation of the verbal noun precedes that of the agreement of the subject with the D, then, the verbal noun can copy the inherent features of the subject such as number and gender, but cannot copy the borrowed feature Case since it is not part of the subject yet.

Note that the above examples work for restricted number of control verbs. As one can easily notice, *fällägä* is not a typical OC verb because it allows lexical subjects in the embedded clauses. It is a type of an *ambivalent* verb. Some works analyze these kinds of ambivalent verbs as a form of restructuring. That is, they argue that the verb standardly takes either the PRO or the lexical subject. Then, under certain structural shifts, it allows the other kind of argument. But, still to whatever class we put it, the facts remain true. Verbs like *wäddädä* ('like') and *tämäñä* ('wish') pattern with *fällägä*.

## 1.5 Agreement and case in Non-control verbs

Table 10: ONC verbs

No	Matrix S	inf S	inf	Matrix V	Example
18	Nom	Nom	CM-AgrS.P-acc	V-AgrS-	✓ Yosef Mariam mäkinayitun mat'ägän-wa-n sämma
19	Nom	pro	CM-AgrS.P-acc	V-AgrS-	✓ Yosef mäkinayitun mat'ägän-wa-n sämma
20	Nom	Nom	CM-AgrS.P-acc	V-AgrS-O	?? Yosef Mariam mäkinayitun mat'ägän-wa-n sämma-w
21	Nom	gen-N-acc	CM-	V-AgrS-	✓ Yosef yä-Mariam-n mäkinayitun mat'ägän sämma

There are two special properties that we notice on this class of verbs that we haven't seen in the above groups of verbs. This class of verbs are typical CP taking predicates. They take finite clauses as their complements. They also take the gerundive clauses as their complements. Both the possessing and nominating gerundives could be complements of the non-control verbs. The nominative subject in the nomings agrees with the verbal noun, while the genitive subject could optionally do so too. Most of the agreement and case assignment systems we have seen in the OC or NOC classes don't show up here. The matrix predicate assigns no case to the verbal nouns, as the example in 20 shows. I put the two question markers rather than a star because under certain circumstances, such constructions could be possible. One case, for example, where the verbal noun could get an accusative case, and the matrix verb could agree with it, is when the information coded in the gerundive is emphasized. Assume a bad news which is a sort of unbearable to the Yosef to hear, the speaker, with the interest of emphasizing the gravity of the event, might use the structure by putting the case and the object agreement markers.

- (38)    inätu       mä-motawan bäč'ink'ät säm-a-w  
           *his.mother CM-died.3fs depressed heard-3msS-3msO*  
           'Depressed, he heard it of the death of his mother'

The accusative case marking, on the other hand, is still obligatory when the subject is in genitive form. This distinction between the nomings and the possessions is another reason to believe that their internal structure is distinct. The *possessions* are true DPs. They behave exactly like a DP. Nomings, on the other hand, lack some prototypical characteristics of DPs. A typical DP receives case when it appears as a complement of a transitive verb. This is well known; and formalized under the Visibility Condition in the GB theory. The fact that accusative case marking, even functioning as the complement of a transitive verb like *hear*, is unattested for nomings suggests that they are not DPs even if they have some nominal properties.

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