

Dative = prospective

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Contents

| | | |
|----------|---|-----------|
| 1 | Introduction | 2 |
| 2 | Some basic on the morphemes | 4 |
| 2.1 | The dative morpheme | 4 |
| 2.2 | The prospective aspect marker | 5 |
| 3 | The underlying unity of the lə & li prefixes | 5 |
| 3.1 | Meaning | 5 |
| 3.2 | Form | 6 |
| 3.3 | Distribution | 6 |
| 3.4 | Relation with negation | 7 |
| 3.5 | Adverbial function | 7 |
| 3.6 | Selection | 8 |
| 3.7 | Similarity with the genitive yə | 8 |
| 4 | The proposal | 9 |
| 4.1 | Universal Spine Hypothesis (USH) | 9 |
| 4.2 | A smaller nominal projection | 11 |
| 4.3 | Contextual allosemy | 16 |
| 4.4 | Deriving the forms and distributions | 19 |
| 4.4.1 | Form | 19 |
| 4.4.2 | Distribution | 22 |
| 4.5 | The English ‘to’ as dative and prospective marker | 24 |
| 5 | Conclusion | 24 |

Abstract

Since the development of a fine-grained syntax of the DP and the IP projection in the 1980s, a number of similarities across those two types of projections have been noted. Different works have attempted to explain these similarities.

One of the most serious attempts to explain the uniformities across the nominal and the verbal domains is Wiltschko's 2014 Universal Spine Hypothesis (USP). According to USP, the verbal and nominal extended projections are unified at an abstract syntactic level. They emerge from a single abstract projection that gets instantiated by different categorial units of individual languages.

In this paper, I will present a piece of supporting evidence for Wiltschko's hypothesis. I will show that the prospective aspect of the verbal spine and the dative case of the nominal spine are unified at an abstract level. The evidence is mainly from the Amharic language. But, I will also argue that the analysis can be extended to the English infinitive marker *to*, which also happens to lexicalize both dative and prospective features.

Keywords

Amharic; dative; prospective; Universal Spine Hypothesis

Abbreviations

CATP = Complement Taking Predicate. 1 = first person, 2 = second person, 3 = third person, acc = accusative, aux = auxiliary, ben = benefactive, dat = dative, def = definite, det = determiner, f = feminine, gen = genitive, ipfv = imperfective, m = masculine, neg = negative, nmlz = nominalizer, O = Object, pfv = perfective, pl = plural, poss = possessive, pros = prospective, S = Subject, sg = singular.

1 Introduction

The dative morpheme in Amharic displays quite interesting properties. First, it appears to be a prepositional element. As a prepositional item, it functions to mark the indirect object and other types of DPs.

- (1) *lə-issu dəbdabe lakk-əčč-ll-ət*
dat-he letter send-3fsgS-ben-3msgO
 'She sent him a letter.'
- (2) *lə-issu ak'k'əbbəl-əčči-w*
dat-he deliver-3fsgS-3msgO
 'She delivers it to him.'

The DP marked by the dative prefix *lə* is an applied argument in the first example. In that case, the DP marked by the morpheme is simply an indirect object.

The same morpheme can also mark direct object arguments, as shown in example (2). In this case, the argument marked by the morpheme is triggering an object agreement on the verb. This shows that the DP marked by the dative morpheme is a structural argument, ?.

These two properties of the morpheme contradict each other. In the first case, the morpheme behaves like a regular prepositional item. It renders the argument it marks as nonstructural. In the second case, the DP marked by it behaves like a structural argument.

In addition to that, the same morpheme appears with verbal nouns. Just like the English *to* and *for* complementizers, it may appear prefixed on the nominalizer item *mə*. Its relationship with the verbal nouns is especially intriguing for a number of reasons.

First, it appears in only restricted contexts. The *lə*- prefix can appear on the verbal nouns only if the verbal nouns are selected by a certain class of verbs. That is, the verbal noun can appear with the prefix if it is selected by the *desiderative & permission* verbs. The relationship between the selector predicates and the prefix is rather more complex.

The classes and aspectual specifications of the matrix verbs appear to determine the distribution of the *lə*-marked verbal nouns.

- (3) yosef (lə)-mə-hed yi-fəllig-al
Josef (dat)-nmlz-go 3msgS-want.ipfv-aux
 ‘Josef wants to go.’
- (4) yosef *(lə)-mə-hed ak’k’əd-ə
Josef (dat)-nmlz-go plan-3msgS
 ‘Josef planned to go.’

Finally, and most importantly to the current purpose, this same exact prefix has an uncanny resemblance with the prospective aspect marker *li*. In this paper, I will argue that all the above properties of the morpheme including its resemblance with the prospective aspect marker can be explained if we adopt the Universal Spine Hypothesis, Wiltschko (2014).

The major upshot of the paper is that the common morph *l* contains one of these cross-categorial features which appears to slightly change its exact function depending on the category of the stem or spine it attaches on. It serves as an ideal case to demonstrate the power of Wiltschko’s universal Spine Hypothesis.

2 Some basic on the morphemes

2.1 The dative morpheme

The morpheme *lə*-has been annotated as a dative marker since Ludolf's publication of the *Grammatica Linguae Amharicae* in (1698), Little (1974). This morpheme is also known to have various cognates in most other Semitic languages. Its exact functions, however, tend to vary from one language to the other. It functions as a locative marker in Hebrew while it marks dative and genitive in Arabic and Ge'ez respectively, Ahland (2009).

In the archaic Amharic, it was also used as a genitive marker. The following examples are taken from Ahland (2009).

- (5) *lə-ibab iggīr yəll-ə-w*
dat-snake leg has-3msgS-3msgO
 'Snake has no leg.'

Observing its prevalence and multifunctionality, (Leslau 1991) has stated that *lə* morpheme in Amharic and related Semitic has a general meaning denoting "to, toward, for, to the advantage of...".

As I have noted in the introduction, the prefix *lə* serves as the prototypical dative marker by attaching to the indirect objects.

- (6) *Mariam lə-yosef dəbdabe lakk-əčč*
Mary dat-Josef letter send-3fsgS
 'Mary sent a letter to Josef.'

But, unlike regular dative markers, which tend to be prepositions that solely target nominal categories, this prefix can also appear on the verbs.

- (7) *yosef dəbdabe-u-n tinant mət'to lə-nəbbər-ə-w lə-zziya lə-rəjjim-u lij*
Josef letter-def-acc yesterday come dat-was-3msgS-def dat-that dat-tall-def boy
lak-ə-w
send-3msgS-3msgO
 'Josef sent the letter to that tall boy who came yesterday.'

In the above, example, the prefix is attached to the auxiliary verb *nəbbər* on the demonstrative pronoun *zziya* ('that') and on the adjective *rəjjim* ('tall'). It may also attach to adjectives and relative clauses.

2.2 The prospective aspect marker

Li (which may also appear as *li* in some phonological environments) is a relatively studied aspect marker that appears on the imperfective form of the verbs and gives a sense of eminence of the eventuality. *Li*-clauses could appear embedded within CATPs as well as with auxiliaries.

(8) yosef li-hed fəlləg-ə
yosef pros-go want-3msgS
 ‘Josef wants to go’

(9) yosef li-hed nəw
Josef pros-go is
 ‘Josef is about to go.’
 ‘Josef is going to go.’

This morpheme has been discussed in a number of previous works including [Stolen \(2013\)](#); [Workneh \(2017\)](#); [Yimam \(2006\)](#), and most extensively in [Leung & Halefom \(2017\)](#). The state-of-the-art understanding of the morpheme is assumed to select smaller verbal projections, probably similar to the English infinitive clauses, and introduces a controlled infinitival clause.

3 The underlying unity of the lə & li prefixes

No previous work has noted the unity of the two forms yet. This is because the dative morpheme is assumed to be a nominal marker, while the prospective morpheme is assumed to be verbal. In this section, I am going to present pieces of evidence for the underlying unity of the two morphemes. Once the unity of the morphemes is established, I will use it as supporting evidence for Wiltschko’s 2014 Universal Spine Hypothesis (USP).

3.1 Meaning

As already noted above, the constructions made with the *lə* + the verbal noun is an exact paraphrase of the *li* + imperfective. The interchangeability of these constructions has already been noted independently by various authors—most notably by [Leslau](#) and [Dawkins](#).

([Leslau 1995: 404](#)) states that “*li* + *imperfect* may be replaced by *lə* + *verbal noun*” (emphasis is mine).

(10) wendim-u-n li-ay (lə-mə-ayət) yi-hed-al
brother-def-acc.pros-see dat-nmlz-see 3msgS-go-aux
 ‘He will go to see (in order to see) his brother.’

- (11) kə-irsəwə gar li-nəgagər (lə-mə-nəggagər) mət't'a
from-her with pros-speak (dat-nmlz-speak) come-3msgS
 'He came to speak (in order to speak) with you.'

He also made a similar statement on page 674: “With verbs that express wishing, liking, desiring, permitting, being able (can), possibility, intention, *li* + imperfect is rendered by the infinitive[verbal noun]. In fact, ***li* + imperfect is interchangeable with *lə* + verbal noun.**”

He then goes on to provide the following examples.

- (12) təmari-u-n lə-mə-rdat (li-ti-rəda) ti-fəlgal-əčč
student-def-acc dat-nmlz-help (pros-3fsgS-help) 3fsgS-want-3fsgS
 'She wants to help the student.'
- (13) addis-u-n beti-h-n lə-mayət li-mət't'a iwəddallə-hu
new-def-acc house-2msg.poss-acc dat-see pros-come like-1sg
 'I would like to come to see your new house'
- (14) bəzzih wər məč'ərrəša sira-w-n li-lək'k' k'orrət'-ə
this month end job-3msg.poss-acc pros-leave decide-3msgS
 'He decided to resign from his job at the end of this month'

(Dawkins 1969: 54) also expressed similar observation. According to him “The Infinitive [verbal noun] has an equivalent in *li* + Contingent. These two forms are largely interchangeable...”.

These two constructions are interchangeable (paraphrase of each other) because they are made of common underlying units.

3.2 Form

It is not just the semantic equivalent that makes me think of these two items to have underlying unity. Indeed, the clearest resemblance between the two comes from their morphological form. Both of the morphemes contain a common element *l-*.

3.3 Distribution

The other reason to consider them a single item is their distribution.

The prospective marker *li* never appears on the *lə*-marked constructions. These two are exactly complementary to each other. This suggests that they are probably different morphological variants of the same underlying feature. The form appears as *li* whenever the feature appears on the imperfective verbs, and as *lə* elsewhere.

3.4 Relation with negation

Quite interestingly, the verbal nouns can not be marked with the negation morpheme. This is because of the fact that the verbal nouns are nominal in their category. The negative marker is specific to verbal categories. This relation of the negation morpheme, however, gets reversed once the verbal nouns come with the *lə*-prefix.

- (15) Yə-yosef a-*(lə)-mə-hed asgərrəm-ə-ñ
gen-yosef neg-dat-nmlz-go surprise-3msgS-1sgO
 ‘Josef’s not going surprised me.’

This shows that the *lə* element is not a simple propositional/dative item that selects nominal categories. It adds some verbal properties to the verbal nouns and makes them compatible with the negation morphology. This again is clear evidence of its affinity to the prospective aspect marker which itself is an extension of the verbal projection.

3.5 Adverbial function

The verbal nouns (also known as *infinitives* in traditional grammar) are typical structural arguments. They function as subjects and objects of transitive verbs. While that is their standard function, the appearance of the *lə* prefix makes them have adverbial functions as well.

Observing this special function of the verbal nouns, Dawkins (1969) considers the *lə*-marked constructions as ”adverbial infinitives”.

- (16) misa-u-n *(lə)-mə-blat hed-ə
lunch-def-acc dat-nmlz-eat went-3msgS
 ‘He went to eat his lunch.’

He further claimed that the *lə* marked verbal noun has only an adverbial function. This claim, however, turned out to be incorrect. As Leslau later noted the *lə*-marked gerundives (verbal nouns) can appear as complements of different classes of CATPs as well.

- (17) lə-mə-srat hed-ə
det-nmlz-work go-3msgS
 ‘Josef went to work.’

Here, the verbal noun is simply a purpose clause. This makes the marker quite similar to the English infinitive morpheme *to* which serves as a purpose clause complementizer as well. This again suggests that the *lə* morpheme has a relation with the verbal clauses. It is not just a regular dative marker that appears on the nominal categories.

3.6 Selection

Selection is the other evidence for the unity of the two morphemes. The verb classes which select the *lə* + *verbal noun* are the same classes of verbs which select the *li* + *imperfective*. Construction marked by both morphemes are selected by the *desiderative*, *intention* and *modal* verb classes.

I have already given a number of examples on the desiderative and intention verbs. Therefore, I will add only an example of the modal verbs here.

- (18) čigr-u-n li-fəttaw (lə-mə-ſitat) čall-ə
problem-def-acc pros-solve (dat-nmlz-solve) can-3msgS
 ‘He managed to solve the problem.’

What is rather striking about the selection is that of the *lə*- marked verbal nouns. As I have stated [Workneh \(2022\)](#), the verbal nouns in Amharic have a very widespread distribution. They can combine with all sorts of verb classes including communication, cognitive, perception, propositional, permission, aspectual, and many other verb classes. But, once they are marked by the *lə* prefix, their distribution becomes very restricted and matches the restricted distribution of the *li* clauses. This exact match in selection cannot be a mere coincidence. The reason why they are selected by the same classes of verbs is because these two *l*- variants have the same features.

3.7 Similarity with the genitive *yə*

The dative marker *l* and the genitive morpheme *yə* have close affinities both in the diachronic and synchronic syntax. First, historically, both are used to mark the genitive and the dative. In archaic Amharic, the dative preposition was used to mark the possessor in the possessive construction. This function is now completely taken over by the *yə* morpheme.

In addition to the historical connection, what is rather interesting here is that these two morphemes behave quite similarly in synchronic syntax as well. Most important of all their similarities is their property to combine with all types of lexical categories. They are cross-categorical morphemes.

It is quite common to assume that different functional items specialize in different category types. The aspect morphemes are specific to the verbal spine, while the gender feature is almost always specific to the nominal spine. This is one of the motivations for the theories such as Grimshaw’s theory of extended projection and other recent extensions of it such as bi-uniqueness in [Panagiotidis \(2015\)](#). The idea is that functional items specialize to either the nominal or the verbal bases.

In stark contrast to the idea of *bi-uniqueness* and the general idea of specific features for each extended projection, these two morphemes span across categories. They mark both nominal and verbal categories.

For the *yə-* morpheme for example, in case it appears on the nouns, it functions as a possessive marker.

- (19) Yə-yosef fəras
gen-Josef horse
 ‘Josef’s horse’

In cases where it appears on the verbs, it renders it as a relative clause.

- (20) tinant yə-mət’t’a-u səw...
yesterday gen-come-def man
 ‘The man who came yesterday...’

Observing the cross-categorial properties of the genitive marker in [Workneh \(2011\)](#), I have argued that the morpheme appearing on the verbs and the nouns is exactly the same item. If that turns out to be a correct analysis, the same kind of analysis can be extended to the *l-* morpheme because their properties are quite similar.

Just like the *yə-* morpheme, *l-* is considered a dative marker when it appears on nouns, and a prospective/infinitive marker when it appears on verbs.

4 The proposal

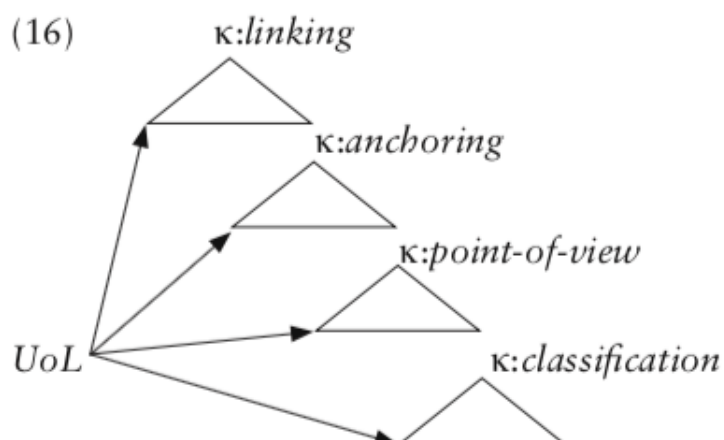
4.1 Universal Spine Hypothesis (USH)

According to USH, universal grammar provides a set of abstract hierarchies which are universally organized by their functions.

The universal spine is supposed to contain four main functions such as *classification*, *point of view*, *anchoring* and *linking*.

- **Classification:** classifies roots into verbal/eventive and nominal/individual categories
- **View Point:** introduces viewpoint aspect to the event/individual
- **Anchoring:** anchors the event and the individual to an utterance
- **Linking:** links the event/individual to the discourse

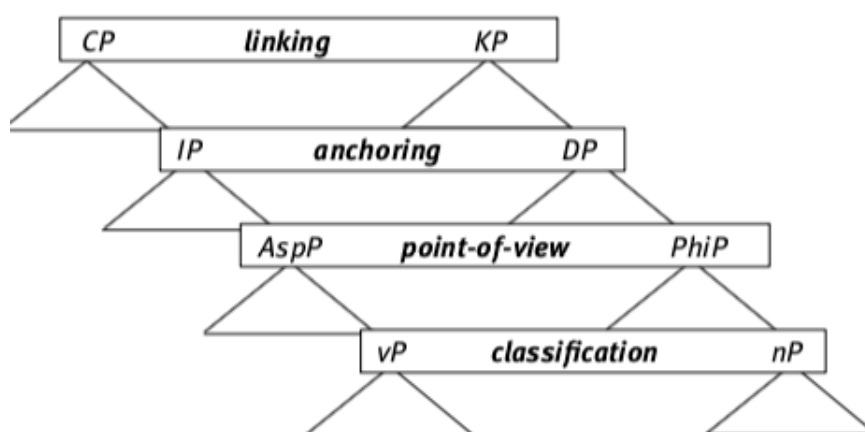
Figure 1: The universal spine according to Wiltschko (2015)



The *classification* function is realized by a specific verbal feature in the VP domain, and nominal feature in the NP layer. A similar kind of mapping is assumed for the other functions. The classification layer is an event and thematic layer (also Aktionsart or the inner aspect); the viewpoint aspect provides the perspective on the eventualities lying on the lower layer. The viewpoint layer is the viewpoint aspect in the verbal spine, while the numerals have been associated with it in the nominal layer Bliss (2013); Megerdooimian (2008).

- (21) a. [CP [IP [AspP [vP [VP]]]]]
 b. [KP [DP [φP [nP [NP]]]]]

Figure 2: The mapping of the universal spine, (Wiltschko 2016: 28)



The linguistic objects could be mapped to a head position or to an adjunct position in the spine. The heads are the universal categories. But, they contain no actual content. They appear with actual content only when they get filled by language-specific word classes. That is to say, the lexical items of individual languages (known as UoL, short for *unity of language*) substantiate those universal heads by getting inserted into them.

There is a fixed relationship (or feature) that governs the relationship between the UoLs and the spine.

The association/insertion of the UoL is assumed to be based on three different attributes:

- Place: A UoL could be associated with the upper or lower part of the spine.
- Manner: a particular UoL could associate with the spine either as a modifier or as an argument
- Timing: UoL could be associated early on or later in the derivation.

If a certain lexical item is inserted late, the only property that the structure can affect is its form. For items that are inserted early, their meaning can also be affected by the syntactic structure. The unique function that a certain layer of the spine houses would influence the semantic value of the lexical item associated with it. The structure functions as a context to determine the meaning. This part of the theory is very similar to the alloosemy theory of Marantz. The multiple interpretations of lexical items, depending on their position in the syntax, can be easily explained with this approach.

Each of the layers is supposed to have an underlying unity. The VP corresponds to the NP, the vP does so to the nP and so on to the top of the hierarchy. The correspondence is established by the core interpretative units which are common to the spines.

The parallelism between the nominal and verbal projections is merely a reflection of those underlying universal hierarchies. The hierarchies are category neutral—meaning that at the abstract level, they come specified neither with the verbal nor with the nominal categories. These functional structures form the universal spine.

A specific language X may or may not have a word class for a definite article, while another language Y might have a related category such as a demonstrative. Both of these word classes are a category of D; as such would be assumed to appear on D. For languages that contain more than one word class for a specific category, they would be assumed to compete (complementary to each other) for a specific head.

4.2 A smaller nominal projection

Having the core framework of the hypothesis, I would like to propose a slight modification to it. Even if Wiltschko assumes all the projections of the verbal and nominal to have equal numbers of layers, I will suggest that the nominal projection is not as complex as the verbal projection. I suggest that the *LINKING* and *ANCHORING* layers

do not exist in the nominal spine. Only the classification and viewpoint are part of the nominal spine while the other two are specific to the verbal spine.

Put another way, the DP spine contains only a subpart part of the universal spine.

The *l*- merges with a category-neutral feature. The exact function and interpretation of the feature is determined only after the actual categorized material combines with it. That is to say, the two possible interpretations, prospective and dative, are determined by the category of the stem with which the underspecified feature merges.

It is exactly the same SO, the *l*- appearing in different spines give rise to the different senses of it that know of such as the dative, prospective, and other related senses. These functions of the unit appear by virtue of the fact that it is associated with different syntactic layers, such as the verbal and nominal spines. The slight functional or interpretive senses that the item houses are also predicated by the syntax. It would be indeed a surprise if come with exactly the same sense or meaning appearing on different types of spines.

While USH turned out to be one of the highly stream-down hypotheses to explain the universality of categories across domains, I highly agree with the core principles and motivations, I have disagreements on how the mapping is done across the nominal and verbal categories. In the verbal domain, the point of view is assumed to add aspectual information. In the nominal domain, this information is assumed to be induced by the phi-features such as gender, and nominal features. The anchoring anchors the utterance (the linguistic expression) to the event. As the tense tells the place of the utterance in a time sequence, the event is assumed to be anchored to the event by the tense (temporal information).

Given that the DP projection contains no or little temporal information, it would be implausible to assume that all the hierarchies available in the verbal spine would be available in the nominal spine as well. Here, I suggest that the DP projection does not contain the higher verbal projections such as the left periphery and the propositional layer. That is, the DP is assumed to contain the parallel domains up until the point of view spine. The two upper spines, such as anchoring and linking, are assumed to be specific to the verbal spine.

Put in other words, only the base layers are universal to both spines. I am not going into the details of why this turned out to be the case. But, there is a general assumption that the structure of the DP is smaller than the verbal functional sequence. Cinque's 1999 inventory of the functional features in the verbal domain is a witness to this. He has identified over 30 functional items within the clausal domain, while the number of functional layers within the DP is believed to come nowhere close to that number. The number of functional layers identified within the DP so far is pretty small, probably within the number of 8 or 10.

The way in which Wiltschko argued to create the parallelism between the verbal and nominal projections does not offer a solid ground for mapping the D layer with the T

layer. She made a point based on the position of possessor arguments in the nominal and the subject arguments in the verbal spine. Indeed, it has been widely noted that the possessor arguments in the nominal projection behave quite similarly to the subject arguments in the verbal spine. But, unlike the case with the verbal subjects, which are well established to appear on the SpecTP, or IP layer, the position of the possessor arguments has never been established to be in the D-layer. Indeed, many languages allow for the presence of the possessor and other DP-internal categories, which are also supposed to appear in the D-layer, such as demonstratives and definite articles. Amharic has this structure as well.

- (22) Ya yə-yosef wəndim
That gen-Josef brother
 ‘that brother of Josef’

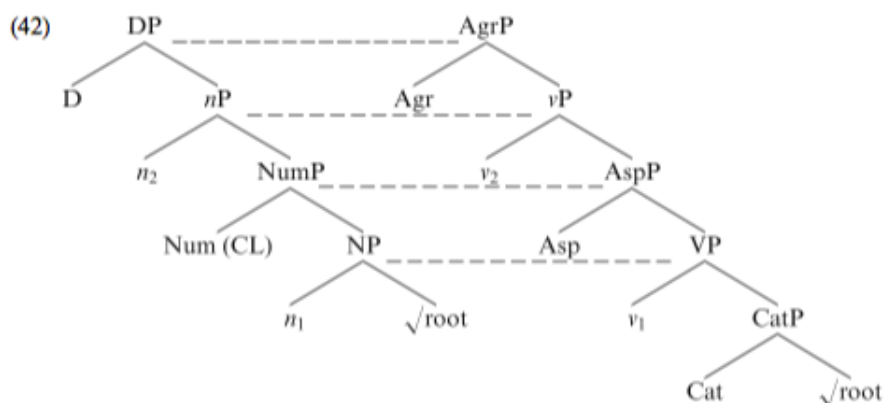
The standard analysis is that the possessor projects in the lower domain than the demonstratives, quantifiers, and numerals.

- (23) Ene-ziya bizu yə-nigus lij-očč
pl-that many gen-king child-pl
 ‘those many children of a king’

Facts like this clearly show that the possessor cannot be in the Spec of D at least in some languages. For these languages the possessor appears pretty low, probably in the nP layer. This means that the argument for the correspondence of the D with the T or IP based on the position of the possessor cannot be attested.

According to [Megerdoomian \(2008\)](#), the NumP of the nominal projection corresponds to the inner aspect while the nP maps to the vP of the verbal projection. As shown in the following picture, she also assumes the AgrP, a projection which appears just higher than the AspP, is assumed to be a correlate of the DP.

Figure 3



Note that AspP in this case is the inner aspect, not the grammatical aspect, which lies just under the TP layer. Given the current understanding that agreement doesn't project, the grammatical aspect (Asp₂P) appears to be the right verbal projection that well corresponds with the DP layer. I am proposing to replace the AgrP by the grammatical aspect AspP (also known as Asp₂P).

Most of the comparative study of the verbal and nominal domain involves comparing the verbal aspect with the number/quantification properties of the nouns.

The verbal aspect has been compared with cardinality properties of nouns, for example, in Megerdooomian (2008). ? also compared the progressive aspect of the verbs with the the plural number of the nouns. The mass/count distinction of the nouns, has been compared with the telic/atelic (bounded and unboundedness) of the verbs in Chierchia (1998).

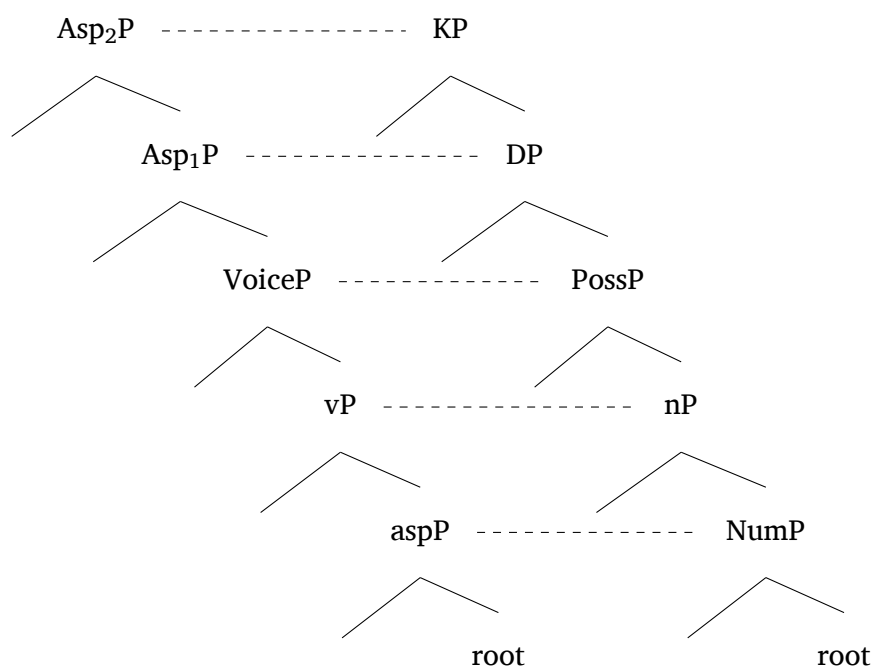
While the verbal aspect is often compared with the number feature of the verbal domain, the other verbal functional items such as causative, applicative, tense, or voice have shown to have a corresponding projection in the nominal domain. Due to this, I suggest that the DP layer contains at most a counterpart to the AspP layer. Every projection of the nominal category can get a corresponding verbal projection within what Ramchand & Svenonius (2014) call the "zone 1".

(24) Maximal correspondence hypothesis All the projections of the nominal domain can be maximally mapped to the AspP of the verbal projection.

There is no element of tense, or the complementizer domain in the nominal projection. Most specifically, the proposal here is that the verbal grammatical aspect is so elaborate that almost all the nominal projections are mapped to it. The case and propositional layers of the nominal domain are also mapped to the grammatical aspect.

Based on this, we can then modify Megerdooian (2008) to present a compare picture of the mapping of the verbal and nominal domains as follows.

Figure 4: The mapping of the spines



According to this proposal, every projection of the nominal category is mapped to the verbal counterpart. But, the nominal projection maps to verbal within the AspP layer. The reason for the partial mismatch between the two projections can be understood in two different ways.

To explain each of the layers, the lowest of the above spines is the boundedness layer—a number of the nominal and the aspectual of the verbs are unified by this boundedness parameter, Megerdooian (2008).

The next layer is the categorization layer where the internal arguments are introduced; both for the verbal and the nominal categories. Then comes the voice layer, where the effector arguments are added to the derivation.

In the grammatical aspect domain, the nonspecific types of Ds are mapped to the perfective clausal features. Finally, we get to the other type of grammatical aspect, which again maps to the case of the DP. That is the layer I am most specifically interested

in the current paper—to establish a correspondence between the genitive case of the nominal domain with the prospective aspect.

4.3 Contextual allosemy

As I have shown in section 3, there are many reasons to believe that the prospective *li* and dative *lə* originate from a single underlying item. I use the common phoneme *l-* to represent that unified common identity of the two morphemes.

Here, I further that the two features of prospective and dative are unified by the notion of *oriented path*. It is a path that orients the frame of reference away from the reference point of the source towards a certain specified or unspecified end.

Both notions of prospective and dative contain a sense of directionality. They imply a *forward* relation from a specific reference point.

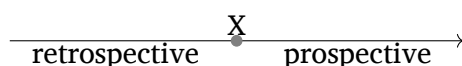
The prospective marks an eventuality that follows or proceeds forward away from a reference time or event. It denotes the event to follow comes immediately after the reference time/event. In that sense, it contains a sense of path which proceeds immediately after the reference point.

- (25) inne sidərs li-təññ-a nəbbər
I went pros-sleep-3msgS was
 ‘He was about to go when I arrived.’

Here, the time of arrival serves as the reference point. The prospective makes the event of the sleeping follow immediately after the reference time of the arrival.

This can be demonstrated by a linear like as in 5.

Figure 5: oriented path



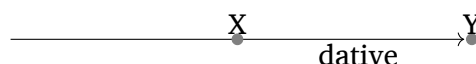
Here, X is the reference event. The prospective indicates events that immediately follow X.

The dative also has a similar sense of directionality. But, it emphasizes the endpoint the major point of reference.

- (26) lə-yosef dəbdabe lakk-ə-ll-ət
dat-Josef letter send-3msgS-ben-3msgO
 ‘He sent a letter to Josef.’

Here, yosef is the reference point, and dative indicates the directionality of the path towards the reference point.

Figure 6: oriented path



The path that immediately follows the reference point X and precedes the reference point Y, I assume, is what the *l-* prefix denotes at an abstract level.

The *l-* morpheme contains just the directional path without emphasizing either the source or the endpoint references. That is the abstract meaning of the item.

But, the actual meanings of the source and endpoint, as well as the exact meaning of the reference points are provided by the syntactic context. The reference point is interpreted as time or event as the prefix attaches to the verbal spine. The reference Y would be an individual as the prefix appears on the nominal spine.

Based on this notion of *oriented path*, both the dative and the prospective can be conceived to have an abstract unity at the very conceptual level.

Other than that, the unified morpheme comes with no pre-specific meaning. The exact sense of the *prospective* and *dative* are determined based on the spine it attaches on—exactly as USH predicts.

(27) Underspecified *l-*

- a. $l- + DP_{\text{nominal}} \rightarrow \text{Dative}$
- b. $l- + VP \rightarrow \text{Prospective}$
- c. $l- + DP_{\text{verbal}} \rightarrow \text{infinitive}$

According to this, the attachment of the morpheme on the verbal spine gives rise to the prospective reading on the item. The spine, somehow, contributes to and constrains the kinds of possible readings available to the underspecified item. The sense of prospective makes sense in the verbal domain; while dative is associated with the nominal domain. That way, the exact sense associated with the morpheme is determined by the spine.

The system of meaning assignment is somehow similar to Marantz's 2013 contextual allosemy. The syntactic environment plays a significant role in the assignment of actual sense or meaning. For the USH, it is the spine where the item appears which plays a significant role in the meaning specification. For Marantz, any category local (similar to the morphological locality) to the item can affect the meaning.

USH, in principle, doesn't exclude Marantz's alloosemy theory. As such, it is possible to unify the two systems to determine the meanings of underspecified items. What is a more crucial proposal that USH brings forward is the unified, abstract spine that can be used to explain the parallelism between the verbal and the nominal domains.

For that I find USH more attractive because it has the potential to explain the fine-grained verbal and nominal hierarchies listed in the Cartographic project, Cinque (1999); Cinque & Kayne (2005). That means the mechanism of semantic assignment to underspecified items doesn't have to be fully determined by the spine. Other mechanisms of meaning assignment can be added to enrich the system because that is not the core part of the proposal.

Based on this, I would like to enrich the system using the contextual alloosemy to assign the meaning of the prefix. It is important for the current to do enrichment for the proposal because the spine is not sufficient for the meaning assignment.

Note that the meaning of the prefix on the verbal nouns is not exactly dative. That is why it is often assumed to be an infinitive marker in the traditional grammar.

Consider the example we have seen in (28), repeated here.

- (28) yosef (lə)-mə-hed yi-fəllig-al
 Josef (dat)-nmlz-go 3msgS-want.ipfv-aux
 'Josef wants to go.'

If the category of the base (the spine) would have been a sufficient factor for the meaning, the *lə* item would have a dative sense on the verbal nouns to the extent that they are a category of DP. But, it doesn't have. As we have seen, its meaning is rather much closer to the prospective than the dative. This cannot be fully explained by the category of the base alone. That is why we need to supplement it with contextual alloosemy.

As I have argued for the selection Workneh (2021), the features embedded in the complement domain of the DP appear visible to the higher layers. For that, the nominal and the gerundive DPs are differentiated by the lower functional items. The nominal DP contains a noun inside; while the gerundive contains a nominalized verb. These embedded features serve as a context to determine the meaning of the underspecified *l-*. That is exactly what the proposal we have in (27) says.

DPs with the nominal complement serve as contextual factors to determine the meaning of the prefix to be dative. The DPs with the gerundive (nominalized verb) complement also function as contextual factors to fix the meaning of the prefix to be infinite (or prospective kind). Note that I am marking it as infinitive because the *eminence* the occurrence of the event available in the regular prospective appears slightly weaker in the verbal nouns.

4.4 Deriving the forms and distributions

4.4.1 Form

Once we establish that the *l*-morpheme is a single unit in the abstract syntax, the next question is then why it appears in two different forms such as *lə* and *li/i*. In this subsection, I suggest that the two forms are a reflection of the aspectual features of their stem verbs. To be precise, I suggest that the *i/i* part in the prospective marker is an agreement morpheme. It appears there as abstract *l*- agrees with the imperfective aspect feature of the verb.

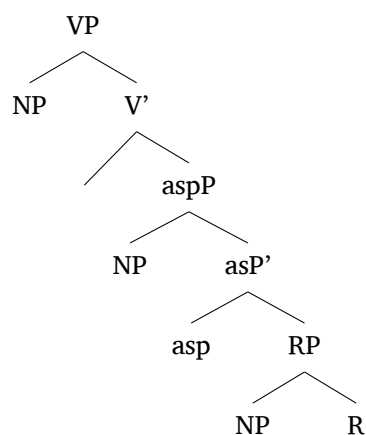
To understand how and why it appears in two different forms, it is necessary to understand how the aspectual features appear in the syntax.

The verbs in Amharic come in two forms—perfective form, which typically appears as $C_1\text{ə}C_2\text{ə}C_3$ (sequence of consonants where ə vowel is interspersed) in the triadic verbs, and the imperfective form which appear in other various forms. One of the properties that make imperfective different from the perfective is the absence of a complete vowel-consonant pattern as we have in the perfective. Since the perfective typically appears with the ə sound, it is only the imperfective verb that comes with vowels such as *i/i*.

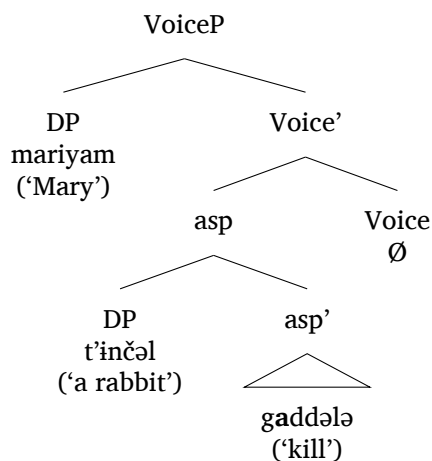
It is also important to note that the verb form aspect— that is perfective and imperfective— is determined pretty low in the verbal layer.

In [Demeke \(2003\)](#); [Amberber \(1997\)](#); [Workneh \(2020\)](#) the verb form aspect is assumed to project pretty low in the verbal spine—probably somewhere within the VP/vP. For a discussion on the distinction between the verb form aspect and grammatical aspect, look at ([Workneh 2020: 233-241](#)). To differentiate it from the grammatical aspect, small caps are used to represent it.

Amberber for example put the position of the verb form aspectuals as shown in 7:

Figure 7: The position of the verb form aspect

Demeke (2003) and also Workneh (2020), on the other hand, consider the aspP heads as verbalizers of the roots which replace the standard vP head, a.

Figure 8: The position of the aspP, according to (Workneh 2020: 289)

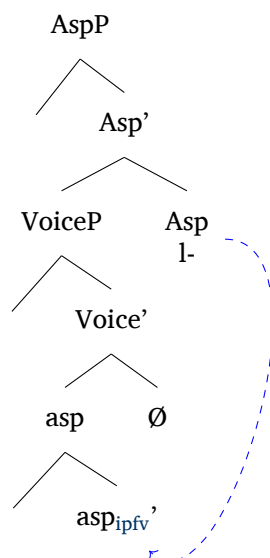
This lower domain verbal aspect appears to determine the form of the prefix *l-*.

Notice that the two forms of the prefix mirror the two complementizers that I discussed Workneh (2021). There, I have shown that the complementizer appears as *?ndi* when it appears with imperfective verbs, and as *?ndə* on the perfective verbs. The last vowels in both cases are aspectual inflections which reflect the aspectual forms of the base verbs. I have argued there that the last vowel is an agreement morpheme. The same assumption works here. The *i* is an imperfective agreement morpheme. The *ə* is the

elsewhere form, as the imperfective is generally considered an elsewhere form as in general, as well.

The relationship between the prospective aspect head and the lower aspectual heads is also explained with the same mechanism that the relationship between the complementizers and aspectual heads is explained. That is, the aspect features are copied via long-distance agreement—so far as no phase introducing head has been projected.

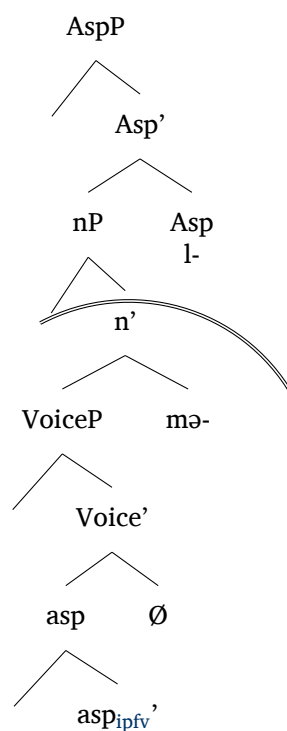
Figure 9: Asp agrees with asp



As shown in 9, the AspP which is specified with the prospective aspect (due to its position in the verbal spine) receives the *i/i* component because it agrees with the lower imperfective aspect head.

If a nominalizer head such as the *mə* is introduced in the clause, however, the relationship gets blocked. This can be because the nominalizer head introduces a phase boundary to the clause.

Since the nominalizer projection intervenes between the prospective head and the verbs, the aspectual forms of the verbs do not affect the form of the prefix. For that, it appears in its default form, which happens to be *lə*. This especially works if we assume the nominalizer head as a phase head.

Figure 10: agreement blocked

In this case, no agreement relation would be possible between the two aspectual projections. The *l-* item appears in its default morphological form, which appears to be *lǝ*. The same goes with the dative case. Since no aspectual property is available within the nominal projections, the prefix again appears in its default form.

4.4.2 Distribution

Given the position of the aspectuals is pretty low in the verbal spine, related issues are why the *li* prefix cannot appear on the perfective. This is a much broader issue because the grammatical aspects are generally incompatible with the perfective verb form in this language.

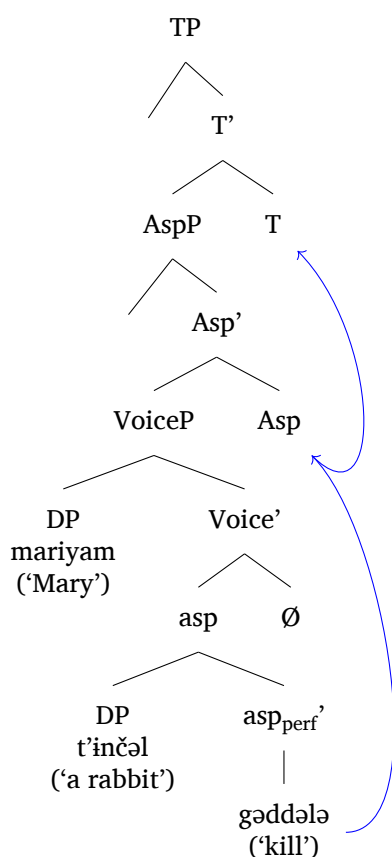
Thus far, two strategies have been suggested to solve this restriction.

The first approach is head spanning. In [Workneh \(2020\)](#) I suggested spanning of AspP and the TP in case the Asp comes specified with the *pfv* feature. Since the two heads appear unified, there would not be any place for the aspects to project on top. This approach works only if the perfective aspect is assumed to appear higher in the verbal domain. Since we have seen that this is not the case, I am not going to pursue this approach.

A rather better approach has been suggested in Wondem (2014) where head movement has been argued to be the reason why the perfective never licenses tense auxiliaries.

The exact analysis is slightly different, the most practical application of the head movement idea is to assume that the perfective aspect marked verbs move to higher projections such as the grammatical aspect, AspP, and the TP. Since the verb moves to those higher positions, it occupies the heads.

Figure 11: The position of the aspP, according to (Workneh 2020: 289)



According to this analysis, the verb moves to TP when it comes with the *pfv* feature. This movement makes the projection or insertion of other grammatical items such as the grammatical aspect and tense auxiliaries impossible. AspP would contain the trace of the verb, and the T would have the verb, and there won't be any position to introduce the grammatical aspect and the tense auxiliaries.

In the imperfective, on the other hand, the verb doesn't raise to the higher domains. As we have seen in the previous section, the relationship between the higher and the lower aspectual heads is that of agreement.

4.5 The English 'to' as dative and prospective marker

It is well established that the infinitive marker in English displays uniform properties across nominal and verbal spines. The infinitive marker is also a dative marker.

(29) Mary gave a book to John

Here, the *to* morpheme is a dative marker. Exactly the same morpheme is used to mark infinitives. The exact interpretation of the infinitive function is pretty illusive—but appears to be very similar we call the *prospective* aspect.

Indeed, a number of authors have already noted that one of the functions of the *to* morpheme is to mark the clause as prospective.

Duffley in a number of works such as (Duffley & Enns 1996: 226), (Duffley 2000: 240) and (Duffley 2003: 341) has noted that the meaning of the *to* marked infinitive is a prospective one.

Smet (2010) also has stated “to-infinitive with regret is prospective in marking a posterior intention”. A similar idea has been expressed in (Brinton 2000: 115) as well.

These works have made it clear that one of the many possible readings of the *to*-marked infinitives are prospective in meaning, at least when it appears with the *be going* construction, (Deo 2015; Schroeder 2011; Comrie 1976: 186).

If that is correct, it provides further evidence for the main proposal of the paper—that is the correlation of the dative case of the nominal spine and the prospective aspect of the verbal spine.

5 Conclusion

In this paper, I have argued that the dative case and the prospective aspect are unified at an underlying syntax. The dative and prospective markers in Amharic display some common properties. Based on that, I have claimed that the pieces of evidence presented here support Wiltschko's Universal Spine Hypothesis which stipulates the underlying unity across the nominal and verbal spines. I have also suggested to modify the structure of the nominal spine. The nominal spine is considered less complex than the verbal; and that the highest verbal projections such as the TP and CP have no corresponding layers in the DP. That way, every projection of the DP is mapped to the sub-TP layer of the verbal spine.

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