THE MORPHOSYNTAX OF
APPLICATIVE MARKERS IN AMHARIC

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1 INTRODUCTION[2]

In Amharic (Ethiosemitic), an applicative argument …
- …can be expressed as a PP
- …triggers one of two types of a special marker on the verb (cf. Niger-Congo)

(1) dañña-w   **bä-Aster**   färräd-ä-**bb**-**at**   **Malefactive**
     judge-DEF.M against-Aster.F judge.PF-3MS.S-**BB-3FS.A**
     'The judge judged against Aster.' (Amberber 1997:3,(9a))[3]

(2) dañña-w   **lä-Aster**   färräd-ä-**ll**-**at**   **Benefactive**
     judge-DEF.M for-Aster.F   judge.PF-3MS.S-**LL-3FS.A**
     'The judge judged in Aster's favor.' (Amberber 1997:4, (10a))

The applicative marker is unusual in two ways:
- It supplements rather than replaces adpositional marking on the DP (unlike N-C)
- It is internally complex, comprised of two parts.
    - Part 1: a morpheme that seems cognate to the preposition *lä/bä-* (glossed as BB/LL)
    - Part 2: agreement with the applicative argument (glossed as 3FS.A)

Goal: develop an analysis of the Amharic applicative marker

Applicative markers have inspired a great deal of controversy in the Amharic literature. There are three competing analyses:[4]
- Incorporated preposition + agreement (Yabe 2001, 2007)
- Appl head + agreement (Demeke 2003 in part)
- Two-part agreement marker (Mullen 1986, Amberber 1996, 1997, Demeke 2003 in part)

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[3] Gloss abbreviations: 1 – first person, 3 – third person, ACC – accusative case, AUX – auxiliary, C – complementizer, DEF – definite marker, M – masculine, F – feminine, IMP – imperative, PF – perfective, PL – plural, S – singular, .A – applicative agreement, .O – object agreement, .S – subject agreement. Examples without a citation are from the authors' fieldwork.
[4] In addition to early theoretical work (Hetzron 1970) and primarily descriptive work (Haile 1970, Amberber 2002).

We develop a new line of argument under the **agreement approach** to the applicative marker.
- Bring to bear fresh evidence (e.g., interaction of object agreement and applicative marker)
- Develop a new analysis, support new approaches to Agree

<u>In a Nutshell</u>
- We argue that the applicative marker is a bi-morphemic agreement marker (Section 3)
  - o Part 2: agreement in phi-features with the applicative argument (*-at*)
  - o Part 1: agreement in one additional feature, [±GOAL], borne by the PP containing the applicative argument (*–bb or –ll*)
- Analysis (Section 4)
  - o *v* Agrees with PP in [GOAL], which allows it to then Agree with the phi features of P's DP complement (Rackowski and Richards 2005)
  - o At PF, Fission (Noyer 1997) creates two exponents from one syntactic node
  - o This explains many of the properties of applicative markers
- Conclusion (Section 5)

2 APPLICATIVE MARKERS IN AMHARIC: A QUICK OVERVIEW

There are two types of applicative markers in Amharic: bb+Agr (see (1)) and ll+Agr (see (2)).
- Correspond to two main kinds of applicatives (classified roughly by thematic role).

Table 1: Types of Arguments Used with each Marker

bb[5]+Agr	ll+Agr
Malefactive	Benefactive
Instrument	Goal (e.g., *return to, bring to, send to, sell to, explain to*)[6]

- Examples: malefactive (1), benefactive (2), instrumental (3), goal (4)

(3)   Aster **bä-mät'rägiya-w**   mäskot t'ärräg-ät∫t∫-**ɨbb-ät**   **Instrument**
       Aster.F with-broom-DEF.M window clean-3FS.S-**BB-3MS.A**
       'Aster cleaned a window with the broom.' (Amberber 1997:3, (8a))

(4)   Yohannɨs   mäs'haf-u-n   **l-Aster**   mälläs-ä-**ll-at**   **Goal**
       Yohannes.M book-DEF.M-ACC to-Aster.F return.PF-3MS.S-**LL-3FS.A**
       'Yohannes returned the book to Aster.' (Demeke 2003:70, (29))

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[5] *bb-* can also be used to refer to certain locative phrases (Leslau 1995:428-429), and can be attached to an existential copula to indicate deontic modality (with the sense of "it is on him to do…"; Leslau 1995:430-432). We set the locatives and the deontic use aside here for space reasons, as does most of the previous work on Amharic applicatives.
[6] There is one major exception: the goal of the verb *give* cannot be referred to with an applicative marker (see e.g., Demeke 2003:70-71). See Section 4.

The bb/ll+Agr unit is optional, but bb/ll cannot appear without Agr (Mullen 1986:208, Yabe 2007).[7]

(5)   dañña-w   **lä-Aster**   färräd-ä-**ll**-**at**   **Benefactive = (2)**
        judge-DEF.M for-Aster.F judge.PF-3MS.S-**LL-3FS.A**
        'The judge judged in Aster's favor.' (Amberber 1997:4, (10a))

(6)   dañña-w   lä-Aster   färräd-ä   **No ll+Agr**
        judge-DEF.M   for-Aster.F judge.PF-3MS.S
        'The judge judged in Aster's favor.' (Amberber 1997:4, (10a))

(7)   *dañña-w   lä-Aster   färräd-ä-ll   **No Agr**
         judge-DEF.M for-Aster.F   judge.PF-3MS.S-LL
         Intended: 'The judge judged in Aster's favor.'

These facts are widely known and reported by all sources.
- However, the properties of the applicative marker itself have been less thoroughly investigated.

<u>Key Question:</u> is applicative agreement similar to or different from other kinds of agreement?

3 APPLICATIVE AGREEMENT

The second component of the applicative marker agrees with the applicative argument. It cannot agree with a direct object/Theme, e.g., *the book*.

(8)   *Yohann\i{}s   <u>mäs'haf-u-n</u>   **l-**Aster   mälläs-ä-**ll**-<u>ät</u>
          Yohannes.M book-DEF.M-ACC to-Aster.F return.PF-3MS.S-**LL-3MS.A**
          Intended: 'Yohannes returned the book to Aster.'

However, the applicative agreement marker is almost morphologically identical to the agreement marker used for themes (9) and for the goal of the predicate *give* (10): glossed as e.g., 3FS.O

(9)   Almaz   **tämari-wa-n**   ayy-ätʃtʃ-**at**   **Theme**
         Almaz.F student-DEF.F-ACC see-3FS.S-**3FS.O**
         'Almaz saw the female student.'

(10)   G\i{}rma   **lä-Almaz** mäs'haf-u-n   sät't'-**at**   **Goal of *give***
         Girma.M to-Almaz.F book-DEF.M-ACC   give-(3MS.S)-**3FS.O**
         'Girma gave the book to Almaz.'

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[7] The bb/ll+Agr is obligatory when the applicative argument has accusative case. We put this form aside here.

(i)   dañña-w   Aster-\i{}n   färräd-ä-*(ll-at)
         judge-DEF.M   Aster-ACC   judge.PF-3MS.S-(LL-3FS.A)
          'The judge judged in Aster's favor.' (Amberber 1997:4, (10b))

Table 2: Object Agreement Marker Paradigm ((9), (10))

	Singular	Plural
1st person	-ññ	-n
2nd person	-h (masc.) -ʃ (fem.)	-atʃtʃɨhu
3rd person	-(ä)w, -t after [u] or [o], -ɨw after [ʃ] or [tʃ] (masc.) -at (fem.)	-atʃtʃäw

Table 3: Applicative Agreement Marker Paradigm

	Singular	Plural
1st person	-ññ	-n
2nd person	-h (masc.) -ʃ (fem.)	-atʃtʃɨhu
3rd person	-ät (masc.) -at (fem.)	-atʃtʃäw

- o   All cells of the paradigms are identical except for 3rd person masculine singular

It has not been carefully investigated to what extent the applicative marker has the morphological, syntactic and semantic properties of object agreement in Amharic.
- We have collected and confirmed a list of these properties (Baker 2012a, Kramer to appear).
- <u>Now:</u> run through those properties and see if the applicative marker behaves the same way as object agreement

<u>Preview:</u> it does, and this is the key to analyzing the entire applicative marker

<u>Terminological NB:</u> we refer to all markers that covary with person/number/gender as agreement
- In Section 3, cover term for clitic doubling and phi feature valuation
- In Section 4, pursue phi feature valuation account, but (probably) compatible with clitic doubling analysis as well

Morphosyntactic Properties

<u>Same Position with respect to Verbal Stem:</u> In clauses that contain a main verb and an auxiliary verb, the object agreement marker attaches to the main verb.

(11)   **s'ähafi-wa-n**   ɨ-fällɨg-**at**   -allä-hu
       secretary-DEF.F-ACC   1S.S-look.for-**3FS.O**   AUX.NONPAST-1S.S
       'I am looking for the secretary.'

The applicative marker displays the same behavior: it attaches to the main verb.

(12) k'ut'äñña   mist-u hulligize ti-tʃ'oh-**ibb-ät**   -all-ätʃtʃ   **Malefactive**
      quick.tempered wife-his always   3FS.S-shout-**BB-3MS.A** AUX.NONPAST-3FS.S
      'His quick-tempered wife is always shouting at him.' (Leslau 1995:427)

<u>Only One Marker Per Verb and Agrees with Highest Argument:</u> Even when a clause contains both a theme and a goal for *give*, there can only be one object agreement marker.

- In (13), there are two internal arguments, but two object agreement markers is ungrammatical.[8]

(13) *Girma **lä-Almaz** <u>mäs'haf-u-n</u> ⎡ sät't'-**at-**<u>äw</u> ⎤ give-(3MS.S)-**3FS.O**-<u>3MS.O</u>
                                                 ⎣ sät't'-ä-<u>w</u>-**at** ⎦ give-3MS.S-<u>3MS.O</u>-**3FS.O**
       Girma.M to-Almaz.F book-DEF.M-ACC
       Intended: Girma gave the book to Almaz.

  o The object agreement marker must agree with the higher argument = the goal.

(14) Girma **lä-Almaz** <u>mäs'haf-u-n</u> sät't'-**at**   (*sät't'-ä-<u>w</u>)
       Girma.M to-Almaz.F book-DEF.M-ACC give-(3MS.S)-3FS.O   give-3MS.S-3MS.O
       'Girma gave the book to Almaz.'

Similarly, there can only be one applicative marker per clause.

- In (15) and (16), there is both an instrumental and a benefactive, but having two applicative agreement markers, or two entire applicative markers, is ungrammatical.

(15) **Two Applicative Agreement Markers (ll+Agr+Agr)**
       *Girma **lä-Almaz** yähonä dädʒdʒ <u>bä-mät'rägiya-w</u> ⎡ t'ärräg-ä-**ll-at-**<u>ät</u> ⎤
                                                                    ⎣ t'ärräg-<u>äti</u>-**ll-at** ⎦
       Girma for-Almaz some doorway with-broom-DEF.M sweep.PF
       Intended: Girma swept some doorway with the broom for Almaz.

(16) **Two Applicative Markers (ll+Agr+bb+Agr)**
       *Girma **lä-Almaz** yähonä dädʒdʒ <u>bä-mät'rägiya-w</u> ⎡ t'ärräg-ä-**ll-at-**<u>bb-ät</u> ⎤
                                                                    ⎣ t'ärräg-ä-<u>bb-ät</u>-**ll-at** ⎦
       Girma for-Almaz some doorway with-broom-DEF.M sweep.PF
       Intended: Girma swept some doorway with the broom for Almaz.

- The applicative agreement marker in such cases must agree with the higher of the two arguments, in this case the benefactive (see McGinnis 2008).

(17) Girma **lä-Almaz** yähonä dädʒdʒ <u>bä-mät'rägiya-w</u> t'ärräg-ä-**ll-at** (*t'ärräg<u>äbbät</u>)
       Girma **for-Almaz** some doorway with-broom-DEF.M sweep.PF-3MS.S-**LL-3FS.A**
       'Girma swept some doorway with the broom for Almaz.'

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[8] This verb is a phonologically acceptable string in the language so there is no phonological reason why two object markers should not co-occur.

In fact, the object agreement marker and the applicative marker cannot co-occur with each other as well, strongly indicating that the applicative marker is a type of object agreement marker.

(18)   **Applicative Marker and Object Agreement Marker**

      *Almaz <u>bet-u-n</u>   **bä-mät'rägiya-w**   t'ärräg-ät∫t∫-<u>ɨw</u>-**ɨbb-ät**
      Almaz house-DEF.M-ACC with-broom-DEF.M   sweep.PF-3FS.S-<u>3MS.O</u>.**BB-3MS.A**
      Intended: Almaz cleaned the house with the broom.[9]

Semantic Properties

<u>Sensitive to Specificity:</u> The object agreement marker generally agrees with specific nominals (Yabe 2001, Haile 1970)….

- …a specific wh-word like *which student* as in (19), but not a non-specific wh-word *who* as in (20).

(19)   Almaz   tɨnant   **yätɨññaw-ɨn tämari**   ayy-ät∫t∫-**ɨw**
      Almaz.F yesterday which-ACC   student.M   see-3FS.S-3MS.O
      'Which student did Almaz see yesterday'?

(20)   Gɨrma   tɨnant   **männ-ɨn** ayy-ä**(*-w)**
      Girma.M yesterday who-ACC   see-3MS.S-3MS.O
      'Who did Girma see yesterday?'

The same goes for the applicative marker (Demeke 2003:76).

(21)   **lä-yätɨñña-wa   set**   näw Gɨrma   mägbiya-w-ɨn   yä-t'ärräg-ä-**ll-at**
      for-which-DEF.F   woman is   Girma.M doorway-DEF.M-ACC C-sweep.PF-3MS.S-LL-3FS.A
      'For which woman did Girma sweep the doorway?'

(22)   **lä-man** näw Gɨrma   mägbiya-w-ɨn   yä-t'ärräg-ä-**(*ll-ät)**
      for-who is   Girma.M doorway-DEF.M-ACC   C-sweep.PF-3MS.S-LL-3MS.A
      'Who did Girma sweep the doorway for?'

<u>Triggers Emphasis:</u> The object agreement marker triggers a poorly-understood semantic effect of emphasis on the argument which it agrees with – most likely some kind of topichood.

- Reported in Haile 1970 and Demeke 2003, and confirmed in fieldwork

(23)   Almaz   **bet-u-n**   bä-mät'rägiya-w   t'ärräg-ät∫t∫-**ɨw**
      Almaz.F house-DEF.M-ACC with-broom-DEF.M sweep.PF-3FS.S-**3MS.O**
      'Almaz cleaned <u>the house</u> with the broom.' (Demeke 2003:91)

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[9] Putting the object agreement marker on the other side of the applicative marker still results in an ill-formed verb: *t'ärräg-ät∫t∫-**ɨbb-ät**-<u>äw</u>*

Demeke (2003) reports a similar effect of emphasis on the applicative argument.

(24)   Almaz   **bä-mät'rägiya-w**   bet-u-n   t'ärräg-ätʃtʃ-**ɨbb-ät**
        Almaz.F with-broom-DEF.M house-DEF.M-ACC sweep.PF-3FS.S-**BB-3MS.A**
        'Almaz cleaned the house <u>with the broom</u>.' (Demeke 2003:92)

<u>Summary:</u> we've seen the following similarities…

(25)   **Similarities between Applicative Marker and Object Agreement**
            a. Same position on the stem
            b. Only one per verb
            c. Agree with highest argument
            d. Agree with specific arguments
            e. Associated with a semantic interpretation of emphasis
            f. Phi part of applicative marker is nearly morphophonologically identical with object agr

Conclusion: It misses a generalization to say that applicative agreement and object agreement are two separate types of morphemes…
- … their phonology, morphology, syntax and semantics are nearly identical.

Instead, we submit that the applicative marker and object agreement should be considered the same phenomenon: non-subject agreement markers in Amharic.
- Different forms in 3rd person masculine singular = allomorphy triggered by *bb-/ll -*

4 ANALYSIS

To capture the similarities in (25), we propose that the applicative marker is a two-part agreement marker (Mullen 1986, Amberber 1996, 1997, in part Demeke 2003)
- Part 1: agrees with the PP: [+GOAL] = *ll-*, [-GOAL]= *bb-*
- Part 2: agree with person/number/gender of applicative argument (uses same exponents as other non-subject verbal agreement)

Mechanics of Agreement
All object agreement in Amharic involves the functional head *v* (Baker 2012a, Kramer to appear)[10]
- …because both the object marker and the applicative marker are on the verb stem, even in the presence of auxiliaries (see (11) and (12))

Applicative arguments are PP's introduced in the specifier of an Appl(icative)P, which is in turn sister to *v* (cf. Demeke 2003, Pylkkänen 2008's high applicatives[11]).
- Evidence: when a (benefactive) applicative argument is present, it blocks object agreement with the Theme[12]

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[10] We appeal to *v* tentatively for familiarity – the precise nature of the agreeing head is to be determined as long as it is lower than the subject.
[11] According to Pylkkanen's typology, high applicatives can combine with unergative predicates, and the Amharic applicative is grammatical with unergatives (see Amberber 1997:5-6).

(26)   Girma   **lä-Almaz**   <u>mäs'haf-u-n</u>   [anäbäb-ä-**ll-at**   read-3MS.S-LL-3FS.A]
         Girma.M for-Almaz.F book.M-DEF-ACC [*anäbäb-ä-<u>w</u>   read-3MS.S-3MS.O   ]
         'Girma read the book for Almaz.'

The little *v* that selects for ApplP has unvalued phi features as well as an unvalued goal feature.
- Since there is no entailment relation between the goal feature and the phi features, they may be valued by different goals (relaxation of Chomsky 2000, 2001 'all or nothing' Agree; Béjar 2008).

v searches into its c-command domain for a phrase with which to Agree (NB: Amharic is head-final).
- The closest phrase matching either [GOAL] or [φ] is the PP specifier of ApplP – it matches [GOAL]
- The *v* and PP enter into an Agree relationship, and the *v*'s [GOAL] feature is valued

(27)
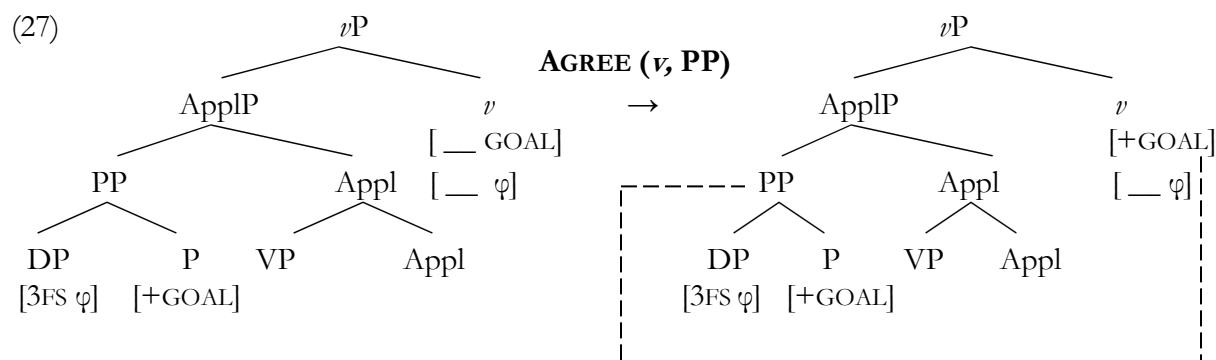
NB: *v* and PP otherwise do not Agree in Amharic (and generally do not Agree in other languages).
- It is only in cases where *v* has [GOAL] and the PP is specified for [+/-GOAL] that Agree is licensed (and *v* c-commands PP and PP c-commands any Theme).

Crucially, we assume that once a probe has entered into a relationship with a goal, the probe can ignore (i.e., see past) the goal for the rest of the derivation (Rackowski and Richards 2005).[13]
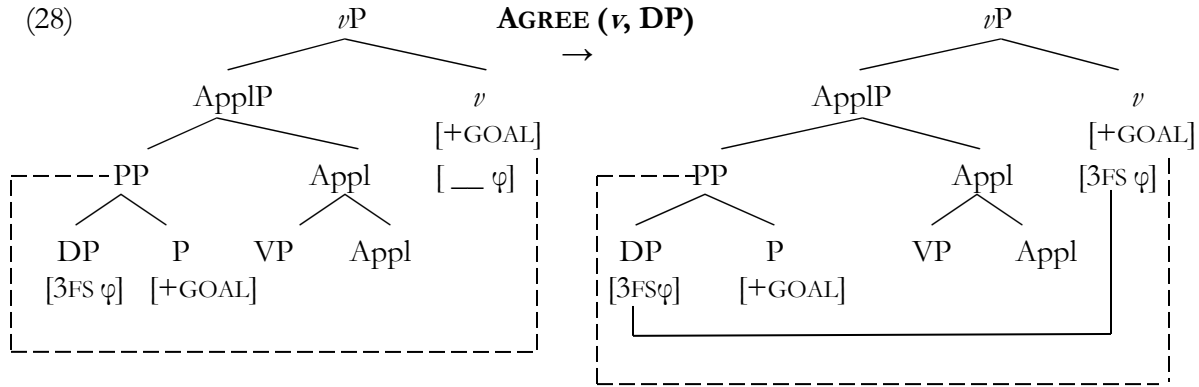- For our purposes, this means that once *v* has Agreed with PP, it has access to the DP complement of P.

After *v* Agrees with PP, then, *v* Agrees with the DP complement of P – valuing *v*'s phi features.[14]

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[12] Interestingly, instrumental applicative arguments do not block agreement with the Theme (see (23)). We tentatively suggest that they need not be merged in Spec,ApplP (although they can be).

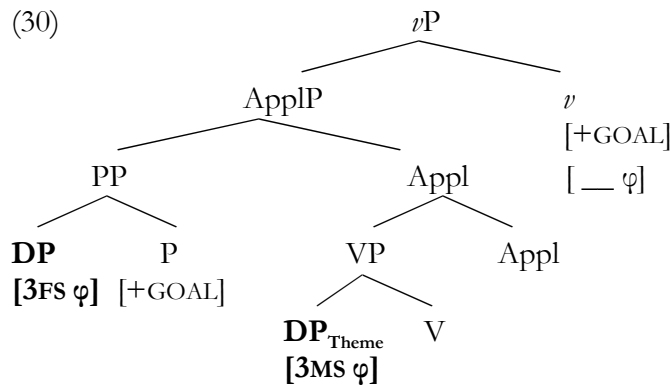[13] See also Richards 1998, Hiraiwa 2001 for different implementations of this idea.

[14] An alternative analysis is that the PP projection inherits/receives the phi features of the DP complement, possibly via Agree between P and DP. *v* would then Agree with the PP in [GOAL] and [φ]. Rezac (2008, 2011) develops roughly this kind of analysis in order to explain dative agreement in Basque. We set this alternative aside for now primarily because, in Amharic, the only cases where *v* agrees with a DP complement of P is when there is morphological evidence that it agrees with the PP first (*bb-, ll-*). This seems to point towards a Rackowski and Richards approach where agreement between *v* and PP facilitates agreement between *v* and the DP complement.

(28)   *v*P   **AGREE (*v*, DP)**   *v*P
           ┌──────┴──────┐   →   ┌──────┴──────┐
        ApplP   *v*   ApplP   *v*
      ┌───┴───┐   [+GOAL]   ┌───┴───┐   [+GOAL]
    PP   Appl   [__ φ]   PP   Appl   [3FS φ]
  ┌──┴──┐   ┌──┴──┐   ┌──┴──┐   ┌──┴──┐
 DP   P   VP   Appl   DP   P   VP   Appl
[3FS φ] [+GOAL]   [3FSφ] [+GOAL]

An Important Clarification: *v* does **not** agree with the Theme after it Agrees with PP.

(29)   *Yohann**i**s   mäs'haf-u-n   **l**-Aster   mälläs-ä-**ll**-**ät**   (= (8))
          Yohannes.M book-DEF.M-ACC to-Aster.F return.PF-3MS.S-**LL-3MS.A**
          Intended: Yohannes returned the book to Aster.'

However, the DP object of P and the DP Theme (complement to V) do not c-command each other

(30)   *v*P
                     ┌─────────┴─────────┐
                  ApplP   *v*
            ┌───────┴───────┐   [+GOAL]
          PP   Appl   [__ φ]
       ┌───┴───┐   ┌────┴────┐
     DP   P   VP   Appl
    [3FS φ] [+GOAL] ┌──┴──┐
                      DP~Theme~ V
                      [3MS φ]

   o   Hence, they should be equally local to *v* under traditional locality conditions on Agree

Recall that we have adopted the modifications to Agree in Rackowski and Richards 2005.

(31)   **Locality Condition on Agree (Rackowski and Richards 2005)**
          A goal A is the closest one to a probe if there is no distinct goal B such that for some X (X a
          head or maximal projection), X c-commands A but not B.

This locality condition has the effect that the DP object of P is closer to *v* than the DP Theme.
*   There is a head such that it c-commands the DP Theme and not the DP object of P: Appl.
*   There is no head/maximal projection that c-commands the DP object of P but not the DP
    Theme.
        o   The P does not 'count' since it is in an Agree relationship with *v* already (i.e. 'ignored' for
            the rest of the derivation).

<u>Interim Summary</u>
- *v* Agrees with PP in [GOAL] (Béjar 2008)
- *v* Agrees with DP inside PP in [φ] (Rackowski and Richards 2005)

Mechanics of Exponence
This analysis results in the right values ending up on the features of *v*, but it does not necessarily explain how the phi features and the goal feature are exponed separately.

Fission (Halle and Marantz 1993, Noyer 1997, Müller 2006, McGinnis 2013 among others)
- PF (post-syntactic) operation
- Used in cases where multiple exponents (seem to be) inserted at one syntactic node

The Technical Details (in Distributed Morphology terms)
- Certain nodes are marked for fission (allow for multiple iterations of Vocabulary Insertion)
- Insert most specified Vocabulary Item at a fission-marked node A first
- Then, any non-discharged features are fissioned off onto a new node B
- Insert most specified Vocabulary Item at B, and repeat until no features remain to be discharged

We propose that the syntactic terminal node *v* is marked for fission.
- PF receives the feature bundle in (32) to expone from the syntax.

(32)   *v*
          [3FS φ]
          [+GOAL]

The following Vocabulary Items compete for insertion at (32).

(33)   a. [3], [F], [S] ↔ -at
         b. [+GOAL] ↔ -ll
         c. [2], [F], [S] ↔ -ʃ
         d. [-GOAL] ↔ -bb

   - (33)a matches the most features and is inserted (in accordance with the Subset Principle).

However, (33)a does not expone all of the features of (32).
- Since (32) is marked for Fission, the unexponed feature [+GOAL] is fissioned into a new node.[15]

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[15] A technical wrinkle: previous accounts assume that fissioned nodes attach to the right of the original node. However, if that were the case in Amharic, then we would predict that the string *–atll* is the realization of *v* (since both *–at* and *–ll* are specified as suffixes in their Vocabulary Item entries). We submit that whether Fissioned nodes attach to the right or the left is an instance of language-specific variation. In Yucatec Maya (González-Poot and McGinnis 2006) and Georgian (McGinnis 2013), they attach to the right, whereas in Amharic, they attach to the left.

(34)   *v*   →   *v*
           /   \   Vocabulary Insertion   /   \
    [+GOAL]   [3FS]   [+GOAL]   [3FS]
                  -at   -ll   -at
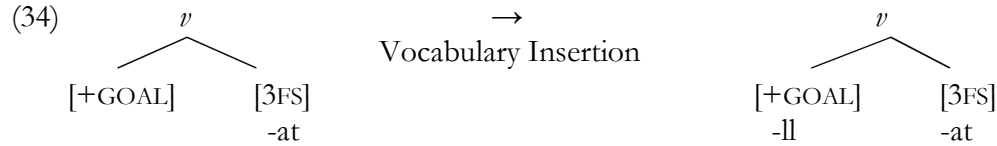
Vocabulary Insertion then applies onto the node that contains [+GOAL], and (33)b is inserted.

- This results in the correct, bi-exponent string –*llat* realizing *v*.

Analysis Overall:

- *v* agrees in [GOAL] with PP in Spec, ApplP
- This agreement allows the *v* to agree in [φ] with the DP complement of P
- The phi features and the goal feature on *v* are realized separately at PF via Fission

Advantages of the Analysis

- Explains why the applicative marker and the object agreement marker are so similar: both agreement on *v*
- A Fission approach explains the syntactic integrity and continuity of the applicative marker (one head in the syntax), despite its morphological bifurcation
- Explains the binary nature of *bb-/ll-* since they are realizations of a binary feature: [+/-GOAL][16]
- Explains the homophony of P and *bb-/ll-* = alliterative agreement (Corbett 2006), cf. Niger-Congo
- Points towards an explanation for the lack of *ll-* marker with the indirect object of *give* (see (10))
  - Dative *lä-* is a case marker there, i.e., indirect object is a DP and not a PP with [+/-GOAL] features
- Other analyses (P incorporation, Appl head) fail to capture this array of facts (Appendix)

5 CONCLUSION

Quick Summary:

- The applicative marker in Amharic as a whole has many of the same characteristics of object agreement but partially resembles a preposition.
- Analysis: the applicative marker is a two-part agreement marker that agrees separately with the PP in [+/-GOAL] and in phi features with the DP complement of P
- Support for (the spirit of) Mullen 1986, Amberber 1996, 1997, Demeke 2003 (in part)
- Support for some alternative approaches to Agree (Béjar 2008, Rackowski and Richards 2005)

Open Empirical Questions: there are still a few loose ends in the data.

- Other uses of *bb-* (deontic, locatives)
- Accusative applied argument triggering *bb/ll* (cf. Baker 2012b)

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[16] We assume that other PPs in Amharic lack the goal feature and thus are not possible Goals for agreement with *v*. However, there are attested cases of non-subject agreement putatively with Sources, and Sources are marked with the preposition *kä-* 'from.' However, we tentatively argue that all such cases are instances of agreement with a pro-dropped malefactive (mostly because it is impossible to agree with an inanimate Source, which would not be a good candidate for a malefactive). Many questions remain open here (e.g., the verb lacks *bb-/ll-* in such cases), and investigation is ongoing.

Cross-Linguistic Picture
- Substantially similar facts across Ethiosemitic (Demeke 2003, Chaha: Banksira 2000, Gumer: Völlmin 2006)
- Also found in other language families, e.g., Cushitic (Somali: Appleyard 1990) and Caucasian (Abaza: O'Herin 2001)
- To what extent can the analysis above be generalized to account for these cases?

6 REFERENCES

Amberber, Mengistu. 1996. Transitive alternations, event-types and light verbs. Doctoral Dissertation, McGill University.

Amberber, Mengistu. 1997. The unergative-unaccusative distinction and the benefactive applicative in Amharic. *Proceedings of the Twenty-Third Annual Meeting of the Berkeley Linguistics Society: Special Session on Syntax and Semantics in Africa*. 1-13.

Amberber, Mengistu. 2002. *Verb Classes and Transitivity in Amharic*. Münich: Lincom.

Appleyard, David. 1990. Prepositional particles in Somali and their cognates in other Cushitic languages. *African Languages and Cultures* 3. 15-31.

Baker, Mark. 1988a. *Incorporation: a Theory of Grammatical Function Changing*. Chicago: University of Chicago Press.

Baker, Mark C. 1988b. Theta-theory and the syntax of applicatives in Chichewa. *Natural Language and Linguistic Theory* 6. 353-89.

Baker, Mark C. 2012a. On the relationship of object agreement and accusative case: evidence from Amharic. *Linguistic Inquiry* 43. 255-274.

Baker, Mark C. 2012b. "Obliqueness" as a component of argument structure in Amharic. In Maria Cristina Cuervo and Yves Roberge, eds. *The End of Argument Structure?*. Syntax and Semantics 38. Bingley: Emerald Press. 43-74.

Banksira, Degif Petros. 2000. *Sound Mutations: The Morphophonology of Chaha*. Amsterdam: Benjamins.

Béjar, Susana. 2008. Conditions on phi-agree. In Daniel Harbour, David Adger and Susana Béjar, eds. *Phi Theory*. Oxford: OUP.130-154.

Chomsky, Noam. 2000. Minimalist inquiries, the framework. In Roger Martin, David Michaels and Juan Uriagereka, eds. *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*. Cambridge: MIT Press. 89-155.

Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz, ed. *Ken Hale: A Life in Language*. Cambridge: MIT Press. 1-52.

Corbett, Greville. 2006. *Agreement*. Cambridge: CUP.

Demeke, Girma A. 2003. The clausal syntax of Ethio-Semitic. Doctoral dissertation, University of Tromsø.

González-Poot, Antonio, and Martha McGinnis. 2006. Local versus long-distance fission in Distributed Morphology. In Claire Gurski, ed. *Proceedings of the 2005 Canadian Linguistic Association. http://ling.uwo.ca/publications/CLA-ACL/CLA-ACL2005.htm*

Haile, Getachew. 1970. The Suffix Pronouns in Amharic. *Papers in African Linguistics* 3. 101-111.

Halle, Morris and Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In Ken Hale and Samuel Jay Keyser, eds. *The View from Building 20*. Cambridge: MIT Press. 111-176.

Hetzron, Robert. 1970. Toward an Amharic case-grammar. *Studies in African Linguistics* 1. 301-354.

Hiraiwa, Ken. 2001. Multiple agree and the defective intervention constraint in Japanese. *MIT Working Papers in Linguistics* 40. 67-80.

Kramer, Ruth. To appear. Clitic doubling or object agreement: the view from Amharic. *Natural Language and Linguistic Theory.*

Lambdin, Thomas O. 1978. *Introduction to Classical Ethiopic (Ge'ez).* Ann Arbor, Michigan: Scholars Press.

Leslau, Wolf. 1995. *Reference Grammar of Amharic.* Wiesbaden: Harrassowitz.

Marantz, Alec. 1993. Implications of asymmetries in double object constructions. In Sam A. Mchombo, ed. *Theoretical Aspects of Bantu Grammar.* Volume 1. Stanford, CA: CSLI. 113-151.

McGinnis, Martha. 2008. Applicatives. *Language and Linguistics Compass* 2. 1225-1245.

McGinnis, Martha. 2013. Agree and Fission in Georgian plurals. In Ora Matushansky and Alec Marantz, eds. *Distributed Morphology Today.* Cambridge: MIT. 39-58.

Mullen, Dana. 1986. Issues in the morphology and phonology of Amharic: the lexical generation of pronominal clitics. Doctoral dissertation, University of Ottawa.

Müller, Gereon. 2006. Pro-Drop and Impoverishment. In P. Brandt and E. Fuß, eds*., Form, Structure, and Grammar. A Festschrift Presented to Günther Grewendorf on the Occasion of his 60th Birthday.* Akademie Verlag, Berlin. 93-115.

Nakamura, Masanori. 1997. Object extraction in Bantu applicatives: some implications for minimalism. *Linguistic Inquiry* 28. 252-280.

Noyer, Rolf. 1997. *Features, Positions, and Affixes in Autonomous Morphological Structure.* New York: Garland.

O'Herin, Brian. 2001. Abaza applicatives. *Language* 77. 477-493.

Pylkkänen, Liina. 2008. *Introducing Arguments.* Cambridge: MIT Press.

Rackowski, Andrea and Norvin Richards. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36. 565-599.

Rezac, Milan. 2008. Phi-agree and theta-related Case. In Daniel Harbour, David Adger, and Susana Béjar, eds. *Phi Theory.* Oxford: OUP. 83-129.

Rezac, Milan. 2011. *Phi-features and the Modular Architecture of Language.* Dordrecht: Springer.

Richards, Norvin. 1998. The Principle of Minimal Compliance. *Linguistic Inquiry* 29. 599–629.

Völlmin, Sascha. 2010. Benefactives and malefactives in Gumer (Gurage). In Fernando Zúñiga and Seppo Kittilä, eds. *Benefactives and Malefactives: Typological Perspectives and Case Studies.* Amsterdam: Benjamins. 317-330.

Yabe, Tomoyuki. 2001. Clitic doubling and the link with possessed noun phrase constructions: the case of Amharic object marking. Paper presented at the CUNY/SUNY/NYU Mini-Conference.

Yabe, Tomoyuki. 2007. The morphosyntax of complex verbal expressions in the Horn of Africa. Doctoral dissertation, CUNY.

Zeller, Jochen. 2006. Agreement and the EPP in Kinyarwanda applicatives. In Patrick Brandt and Eric Fuss, eds. *Form, Structure and Grammar.* Berlin: Akademie Verlag. 275-295.

APPENDIX: ALTERNATIVE ANALYSES

There are two main alternative analyses of the applicative marker (and of *bb/ll* in particular) that we have considered:

- *bb/ll* are incorporated prepositions
- *bb/ll* is the realization of an Appl(icative) head

We present some arguments against each alternative.

Option 1: Incorporated Prepositions
The morpheme *bb* is cognate with the preposition *bä-*, and the morpheme *ll* is cognate with the preposition *lä-*.

(35)   *bä-* : by means of, by, through, in, into, at, on, against, etc. (Leslau 1995:602)
         lä- : to, for (Leslau 1995:601)

This makes it tempting to analyze *bb*/*ll* as a preposition that combines with the agreement marker.
- In fact, many analyses of applicative constructions in other languages propose that applicative markers are prepositions which incorporate into the verb during the course of a syntactic derivation (see e.g., Baker 1988ab, Nakamura 1997, Zeller 2006).

However, there are some difficulties with treating *bb*/*ll* as if they are prepositions, especially as prepositions that are derived from or related to the applicative PP itself.

Limited to *lä-* and *bä-:* Amharic contains many other prepositions, but none of the others are used as applicative markers.

(36)   kä-   'from'   *kk+Agr
            sɨlä   'about'   *sɨl + Agr
            wädä 'towards'   *wädd+Agr

This is not a phenomenon that targets prepositions generally in Amharic.

ll and bb Never Appear Separate from a Verb: The *bb*/*ll* is strictly a verbal morpheme.
- It cannot appear as a preposition on its own, even with a pronominal object (Mullen 1986:80ff.).[17]

(37)   a. *ll-Gɨrma   to-Girma   c. lä-Gɨrma   to-Girma

         b. *ll-ɨssu   to-him   d. lä-ɨssu   to-him
         c. *ll-ät[18]   to-3MS.A   e. *lä-ät   to-3MS.A

Thus, while *bb*/*ll* seem to be related to prepositions, they are probably not prepositions themselves.

We capture the similarities and differences between *bb*/*ll* and prepositions in our analysis by…
- …having *bb*/*ll* be the realization of agreement of *v* with a PP
- …the agreement involves a binary feature (hence, restricted to only two prepositions – one with the plus value and one with the minus value)

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[17] This is distinct from other Semitic languages where pronominal agreement markers/clitics can appear on prepositions, e.g., Modern Hebrew, Lebanese Arabic, Ge'ez (Mullen 1986:123, Lambdin 1978:44).
[18] This is meant to be interpreted with the *llät* as a freestanding word/phrase, not attached to a verb.

<u>Option 2: Appl Head</u>
Another alternative would be to have *bb-/ll-* be the realization of a syntactic head Appl(icative) in whose specifier the applicative is merged (Demeke 2003 in part)
- …similar to many Bantu languages (see e.g., Marantz 1993, Pylkkänen 2008, McGinnis 2008).

(38)   ApplP
                  ╱   ╲
            PP   Appl
         bä-Aster   ╱   ╲
                    Appl   …
                    -bb-
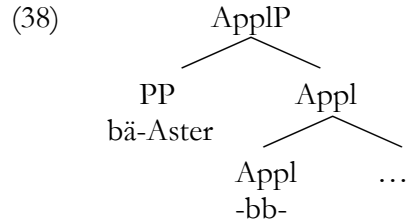
However, applicatives in Bantu are very different from Amharic applicatives. In Bantu:
- the object agreement and the applicative marker do not form an inseparable morphological unit (e.g., they do not require each other's presence, they are not contiguous)
- the applicative marker does not generally look like a preposition
- the applied object can be passivized (not true for this construction in Amharic; Yabe 2007)
- the applied object must receive accusative case in order for the applicative marker to be present
The Bantu and Amharic constructions are related from a larger perspective in that they involve applicatives, but the details seem to be sufficiently different so as to warrant different analyses.

An Appl head approach would also lose the advantages of our analysis…
- …no connection between the form of Appl and the form of the P head of the applicative
- …it no longer falls out that the entire applicative marker behaves like one syntactic unit
- …it no longer falls out that the entire applicative marker behaves like object agreement
- …it is unexplained why there are two (and only two) Appl heads