## THE MORPHOSYNTAX OF APPLICATIVE MARKERS IN AMHARIC

## Ruth Kramer and Mark Baker

In Amharic, there is often a marker on the verb when an applicative argument is present, as there is in many other languages, notably including Niger-Congo languages. However, looking closer, the morphosyntax for applicatives in Amharic is rather unusual, in that the so-called applicative marker often supplements rather than replaces adpositional marking on the NP, and in that it includes a kind of verbal agreement (see (1) and (2)).

- (1) dañña-w **lä-Aster** färräd-ä-**ll-at Benefactive** judge.M-DEF for-Aster.F judge-3MS-**BEN-3FS**"The judge judged in Aster's favor.' (Amberber 1996:164 (5a))
- (2) 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))

In (1), the benefactive Aster is marked with the preposition  $l\ddot{a}$ - 'for.' On the verb, there is a benefactive marker that resembles the preposition (l-) as well as a third person feminine agreement marker referring to Aster (-at). In (2), there is the "applicative" marker, bb-, which resembles the preposition  $b\ddot{a}$ , and again -at appears. The meaning of this bb- is roughly the opposite of l-, i.e., it is a malefactive.

Applicative markers have inspired a great deal of controversy in the Amharic literature. They have been analyzed in various ways including as incorporated prepositions, as Appl(icative) heads, and as complex agreement markers (see e.g., Hetzron 1970, Mullen 1986, Amberber 1996 et seq., Demeke 2003, Yabe 2007). In this paper, we develop further, and provide novel support for, an agreement approach to the applicative marker (cf. Mullen 1986, Amberber 1996, Demeke 2003 in part). By focusing on the similarities between applicative markers and object agreement, we construct a new line of argument that the applicative marker is a bi-morphemic agreement marker, composed of agreement in phi-features with the applicative argument itself (e.g., manifested as -at) together with agreement in one additional feature, [±goal], borne by the PP containing the applicative argument (e.g., manifested as -ll or -bb).

Amharic verbs can generally agree in phi-features with Theme and Goal arguments. An example of agreement with a Theme ('the female student') is in (3).

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

We can enumerate many substantive similarities between object agreement markers like -at in (3) and applicative markers like -ll+at in (1) or -bb-at in (2).

First, the paradigms are nearly identical for the phi-feature component of agreement with the applicative argument and object agreement with the Theme; the third feminine singular agreement is exponed as –at in both (1) and (3), for example. Second, the applicative marker as a whole (-llat) and the object agreement marker both occupy the same position in the verbal stem with respect to auxiliaries and negation. Third, just as the object marker agrees with the highest argument if there

are two potential controllers (e.g., with the Goal in a ditransitive construction in (4)), so the applicative marker agrees with the highest applicative argument if there is more than one (e.g., with the benefactive instead of the instrumental in (5)).

- (4) Girma lä-Almaz mäs'haf-u-n sät't'-at (\*sät't'-ä-w)
  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.'
- (5) Gɨrma lä-Almaz yähonä däʤʤ bä-mät'rägiya-w t'ärräg-ä-ll-at (\*t'ärrägäbbät) 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.'

Fourth, there can only be one object agreement marker per clause, and likewise there can be only one applicative marker per clause. Fifth, and perhpas most notably, the object agreement and applicative marking cannot co-occur: if an applicative construction includes a theme, the verb can be marked **either** with object agreement **or** with the applicative marker, not both; an ungrammatical sentence that results from marking both is in (6).

(6) Applicative Marker and Object Agreement Marker Cannot Co-occur

\*Almaz bet-u-n bä-mät'rägiya-w t'ärräg-ät∫t∫-iw-ibb-ät

Almaz house-DEF.M-ACC with-broom-DEF.M sweep.PF-3FS.S-3MS.O.BB-3MS.

Intended: Almaz cleaned the house with the broom.

(Note that putting the object agreement marker on the other side of the applicative marker still results in an ill-formed verb: \*t'ärräg-ätftf-**ibb-ät-**äw.) If the applicative marker is simply another type of object agreement, this restriction follows immediately from the general restriction that there can be only one object marker per clause.

An additional similarity between applicative marking in Amharic and normal object agreement is that both applicative markers and object agreement markers can only register semantically specific arguments, and both trigger a poorly-understood effect of emphasis (perhaps topic-hood for the argument they refer to). This means that object agreement is in a sense optional; (3) remains grammatical if the final verb is *ayyätsis*, for example. The applicative marker is also optional, as shown in (7). Moreover, a particularly important fact about this is that the applicative marker is optional only as a whole unit.

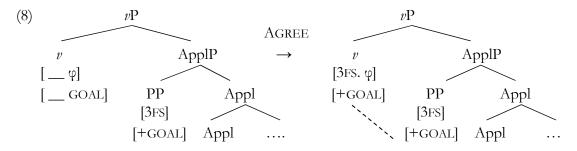
- (7) dañña-w lä-Aster färräd-ä /\*färräd-at /\*färräd-ä-ll judge.M-DEF for-Aster.F judge-3MS judge.(3MS)-3FS judge-3MS-BEN 'The judge judged in Aster's favor.'
- (7) is a version of (1). The sentence is grammatical if the entire —///+ at unit is omitted. However, it is ungrammatical if just the benefactive marker —/// or just the phi-feature agreement marker —at is left out. In other words, the benefactive or malefactive marker and its following agreement marker are inseparable: one cannot appear without the other. In this way, Amharic is quite different from applicatives in (say) Bantu languages, which allow an object marker on the verb to express the applied argument along the applied affix, but in Bantu it is perfectly possible to have an applied affix

without an object marker, and the two do not form a morphological constituent in any sense (the applied affix is a suffix and the object marker is a prefix/proclitic).

We conclude from the array of similarities between the applicative markers and object markers seen in Amharic, as well as the morphological integrity of the applicative marker, that the applicative marker is a bi-morphemic agreement marker. We propose that the first morpheme manifests agreement with an extra feature of the (PP) applicative argument (+goal = ll-; -goal =bb). The second part manifests agreement with the applicative argument in phi-features, using the same endings as other non-subject verbal agreement.

For comparison, French and Italian have prepositional clitics (y, en) as well as nominal ones. The difference between these languages and Amharic, we claim, is that in French and Italian clitics that express adpositional features do not have the ability to express phi-features as well, whereas in Amharic, the direction and phi-feature pieces are individually exponed. Note also that it is not too surprising that the agreement with a given PP ( $l\ddot{a}$ +NP or  $b\ddot{a}$ +NP) is phonologically (and perhaps etymologically) related to the P (ll- and bb-, respectively). This is similar to the fact that agreement with class X in a Bantu language is shown by a prefix similar to the exponent of class X on the agreed-with nominal more often than not.

Elaborating the theoretical details, we propose that all object agreement in Amharic involves the functional head v, in part because object markers and applicative markers remain 'low' on the verbal stem in clauses containing auxiliaries (the morphological order is  $[Agr_{Subj}-Verb-\underline{Agr_{Obj}}-Aux-Agr_{Subj}]$ ). We also propose that applicative arguments in Amharic are introduced in the specifier of an Appl(icative)P which is sister to v. The little v that selects for ApplP has unvalued phi features as well as (optionally) an unvalued goal feature. It searches into its c-command domain for a phrase with which to Agree (under the minimalist definition of Agree). The closest phrase is the PP specifier of ApplP, which contains all the right features to value the v. The v and PP enter into an Agree relationship, and the v's features are valued. The establishment of the Agree relation between v and the PP for (1) is shown in (8).



This analysis results in the right values ending up on the features of v, but it does not explain how the phi features and the goal feature are exponed separately. We propose that the explanation for this lies in the morphological operation Fission (Halle 1997, Noyer 1997). Fission is a post-syntactic operation that splits a syntactic terminal node into two terminal nodes before any nodes are exponed (before Vocbaulary Insertion, in Distributed Morphology terminology). Exponence proceeds node by node, so two exponents are inserted at (what used to be) one single syntactic terminal. We propose that the syntactic terminal node v splits into two terminal nodes via Fission at PF, one containing the phi features, and the other containing the goal feature.



In (9), Fission breaks apart the v from (8), resulting in the goal feature having one exponent (-l) and the phi features having another (-at).

By analyzing *ll*- and *bb*- as agreement with PPs rather than as normal applicative heads, we capture two additional facts. First, *ll*- and *bb*- are continuous with the phi-object agreement markers because they are also agreement with that same argument. The syntactic integrity of *v* expresses the fact that that -*ll*+at seems to be a functional unit in the Amharic verb, even though it is split into two distinct exponents after the syntax. Second, treating this as agreement (not P-incorporation or applicative formation) makes sense of the fact that Amharic has exactly two "applied affixes", which seem to be (roughly) opposites of each other. That makes sense if agreement systems depend on the existence of feature systems, where features are typically binary in nature.

In sum, the applicative marker in Amharic taken as a whole has many of the same characteristics of object agreement markers. We have argued therefore that the applicative marker is a bi-morphemic agreement marker that agrees in direction and in phi-features with the same PP argument. Substantially similar facts are found across Ethiosemitic (e.g., Chaha, Gumer) and in other language families (e.g., Cushitic: Somali) for applicatives, and we submit that the analysis here provides a promising new avenue for future research on agreement-related applicative markers more generally.

## 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.

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

Halle, Morris. 1997. Distributed morphology: impoverishment and fission. In Benjamin Bruening, et al., eds., MIT Working Papers in Linguistics 30: Papers at the Interface. Cambridge: MITWPL. 425-449.

Hetzron, Robert. 1970. Toward an Amharic case-grammar. *Studies in African Linguistics* 1. 301-354. Mullen, Dana. 1986. Issues in the morphology and phonology of Amharic: the lexical generation of pronominal clitics. Doctoral dissertation, University of Ottawa.

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

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