# The Amharic Definite Marker and the Syntax-PF Interface / Ruth Kramer, UC Santa Cruz

Complex definite marking, where a definite marker unexpectedly appears within the DP itself (often in multiple locations), has been the focus of much recent research (Wintner 2000, Embick & Noyer 2001, Hankamer & Mikkelsen 2005, Dost & Gribanova 2006, etc.). Because of the mismatch between syntactic structure (D at the left edge of DP) and morphophonological realization (D within DP), it serves as an ideal testing ground for assumptions about the syntax-PF interface. In this paper, I develop a Distributed Morphology (DM) analysis of definite marking in Amharic that integrates DM assumptions about morphological operations with minimalist assumptions about phase impenetrability. The result is not only a feasible analysis of Amharic definite marking, but a more articulated theory of the syntax-PF interface.

The definite marker in Amharic is a suffix, -u/w in (1)-(4). In the simplest cases, when the DP only consists of N, the definite marker attaches to N; see (1). If the DP contains a prenominal AP, then the definite marker attaches not to N, but to the adjectival head A at the right edge of AP. This pattern holds even if the prenominal AP contains a degree adverb or a complement preceding A; see (2). If the DP contains a prenominal relative clause, the definite marker similarly attaches to the right edge of the relative clause ((3)a), even if the relative clause is internally complex ((3)b). Finally, if multiple APs modify the same N, the leftmost AP is obligatorily marked for definiteness and any following APs may be optionally marked; see (4). The key generalization is that the definite marker obligatorily attaches to the leftmost XP in DP.

My account focuses on cases in which the definite marker is obligatory, and in these cases, I propose that it is the realization of D. I assume that DP is a phase, and (unconventionally) that D is part of its spell-out domain. It is clear that the definite marker is a morphophonologically dependent element that needs a host to its left (i.e., a suffix), but under the above assumptions, when the DP is sent to PF, the definite marker does not have a host to its left (assuming DP is head-initial). I propose that D then undergoes a morphological operation to right-adjoin to as local a host as possible -- in other words, D is a kind of second position clitic. This is immediately advantageous in that it can explain why the leftmost AP is favored in a string of APs (it is closest to D), and why D attaches to N only when N is alone in the DP (only in this case is N leftmost). However, it remains unclear why D "skips" all the material internal to relative clauses and APs. To account for this, the idea that I pursue is that spell-out domains are impenetrable to morphological operations, i.e. the Phase Impenetrability Condition (PIC: Chomsky 2000, 2001, 2004) holds post-syntactically. Consider a spell-out domain α which contains a distinct spell-out domain β. β is impenetrable in the sense that morphological operations that occur during the spell-out of α (e.g. Lowering, Local Dislocation, Fission, Fusion, etc.) cannot target any morphemes internal to β or move any morphemes into β.

Consider how this will work. I assume that CP and AP are phases, and the PIC is as in (5). The relevant morphological operation that places the definite marker in "second" position I take to be Local Dislocation (see (6); Embick & Noyer 2001, Embick 2006). This works well and in a familiar way for the simple data where the definite marker attaches to N (e.g. [ -u * bet] → [bet-u]). However, this locality requirement seems too stringent when the definite marker "skips" a prenominal AP or CP since only string-adjacent heads can dislocate. At this point, the PIC becomes crucial. APs and CPs are phases, so they contain a spell-out domain which has previously been spelled out (this spell-out domain is essentially equivalent to the phase, since APs and CPs do not have filled specifiers in Amharic). The PIC states that this domain is inaccessible to morphological operations like Local Dislocation -- the definite marker cannot attach to any head that is fully within a spell-out domain. However, there is one crucial exception -- the edges of the spell-out domain are accessible, the intuition being that attaching morphemes to the edges will not disrupt the phase-internal relations that are already set. The spell-out domain of an AP or CP is in effect treated as a single, indivisible morphological object -- its subparts are invisible and inaccessible, but heads can either left- or right-adjoin to it. This spell-out domain is then the morphological element closest to the definite marker in terms of precedence, so the definite marker simply attaches to its right edge.

I argue that this phase-based analysis is superior to an analysis that relies on Lowering (cf. Embick & Noyer's (2001) analysis of similar definite marking facts in Bulgarian) as well as previous analyses of Amharic definite marking (Halefom 1994, Ouhalla 2004, den Dikken to appear). Taking a broader perspective, we can view these patterns as providing a window onto the fine structure of the operations (Spell-Out, Linearization) which derive morphophonological representations from syntactic representations.

**Examples** (definite markers italicized and underlined):

(1)      bet-_u_      house-DEF    'the house'

(2)      a. tɨllɨk'-_u_ bet                          big-DEF house            'the big house'
         b [bət'am tɨllɨk'-_u_]$_{AP}$ bet          very big-DEF house       'the very big house'
         c. [lə-mist-u    tammaññ-_u_]$_{AP}$ gəs'əbahriy
            to-wife-his  faithful-DEF    character
            the faithful-to-his-wife character

(3)      a. yə-sərək'-ə-_w_        astəmari
            C-stole-3MS-DEF   teacher
            the teacher who stole

         b. [lɨdʒdʒ-otʃtʃ-u-n      bəhayl   yɨ-gərf     yə-nəbbər-ə-_w_]$_{CP}$ astəmari
            child-PL-DEF-ACC   severely  3MS-bea t  C-AUX-3MS-DEF     teacher
            the teacher who used to beat the children severely

(4)      tɨllɨk'-_u_   t'ɨk'ur(-_u_)    bet
         big-DEF   black(-DEF) house
         the big black house

(5)      **Phase Impenetrability Condition**
         In a phase α, the spell-out domain of α is not accessible to operations outside α -- only the edge of α
         is accessible to such operations.
         (Chomsky 2000, 2001, 2004; although here assuming the head is not part of the edge)

(6)      **Local Dislocation**
         X * Y → Y-X            ( * = immediately precedes )
         An X that immediately precedes Y can dislocate to (left- or right-)adjoin to Y.

**References**

Chomsky, Noam. 2000. Minimalist inquiries, the framework. In R. Martin, D. Michaels and J. Uriagereka, eds. *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*. Cambridge: MIT    Press. 1-52.

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

---. 2004. Beyond explanatory adequacy. In A. Belletti, ed. *Structures and Beyond*. New York: OUP. 104-131.

Dikken, Marcel den. to appear. Amharic relatives and possessives: definiteness, agreement and the linker. *Linguistic Inquiry*.

Dost, Ascander and Vera Gribanova. 2006. Definiteness marking in the Bulgarian. *Proceedings of WCCFL 25*. Somerville: Cascadilla Press. 132-140.

Embick, David. 2006. Linearization and local dislocation: derivational mechanics and interactions. Ms., University of Pennsylvania.

Embick, David and Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32. 555-595.

Halefom, Girma. 1994. The syntax of functional categories: a study of Amharic. Doctoral dissertation, University of Quebec at Montreal.

Hankamer, Jorge and Line Mikkelsen. 2005. When movement must be blocked: a reply to Embick and Noyer. *Linguistic Inquiry* 36. 85-125.

Ouhalla, Jamal. 2004. Semitic relatives. *Linguistic Inquiry* 35. 288-300.

Wintner, Shuly. 2000. Definiteness in the Hebrew noun phrase. *Journal of Linguistics* 36. 319-363.