On the timing of multiple exponence: Evidence from Arapgir and Erzurum Armenian verbs

Introduction This paper zooms in on multiple exponence (ME) of the syncretic mood/polarity marker G in Arapgir and Erzurum Armenian, two closely related diasporan varieties formerly spoken in the Ottoman Empire (Davit’ Bek 1919, Mkrtč’yan 1952). In terms of derivational timing, I propose a Distributed Morphology (DM, Halle & Marantz 1993) analysis which locates ME of the G marker late in the derivation, after morphological words are formed. However, it does not happen too late, namely, after phonological exponents are inserted: I claim that this instance of ME is feature-driven, and it involves copying at Vocabulary Insertion.

Basics Modern Armenian employs a syncretic mood marker glossed below as G covering both Imperfective Indicative and Future semantics in the majority of formerly Ottoman Armenian varieties. In most dialects, including the Western and Eastern standards, G is uniformly realized as a prefix (1), however, in Arapgir and Erzurum, the marker shifted to a suffix position (2). Moreover, in the case of consonant initial roots, G simply switches from a prefix to a suffix position (2a), however, in the case of vowel-initial (2b) and mono-consonantal roots, a doubling pattern emerges.

(1) Standard Western
   a. [gɔ-χɔm-e-m] G-drink-TH-1SG
      ‘I drink.’
   b. [g-ud-e-m] G-eat-TH-1SG
      ‘I eat.’

(2) Arapgir (also Tsq’albila Erzurum)
   a. χɔm-i-m-[gʊ] drink-TH-1SG-G
      ‘I drink.’
   b. [k-ud-i-m-[gʊ]] G-eat-TH-1SG-G
      ‘I eat.’

The doubling pattern can be informally understood as the flipping of the affix licensed by a prosodic minimality condition, namely, that the ‘stem,’ defined as pre-thematic material, begins with a CV template. In the case of vowel-initial (√ud ‘eat’) and mono-consonantal (√l ‘cry’) roots, providing a spurious G helps satisfy the prosodic condition.

G-doubling is late First, the whole G pattern is incompatible with negation. Regardless of a particular analysis of this suppletive pattern, G-marking follows word formation in the sense that it requires a synthetic verb to attach to.

(3) a. [k-ud-i-m-[gʊ]] G-eat-TH-1SG-G
     ‘I eat.’
   b. [tʰ-e-m] ud-e-r NEG-TH-1SG eat-TH-CNEG
     ‘I don’t eat.’ Arapgir, Erzurum

Moreover, Erzurum (unclear about Arapgir) shows a pattern of G displacement similar to the English do-support pattern (4). Crucially, the doubling pattern is possible on the verb only, so it disappears in wh-question under G-to-C movement, which re-attaches G to the wh-word.

(4) a. [k-ud-e-[gʊ]] G-eat-TH.3SG-G
     ‘(S)he eats.’
   b. vev =gʊ ud-e? who G eat-TH.3SG
     ‘Who eats?’ Erzurum
G-doubling copies features  First evidence of pre-VI copying comes from the fact that different allomorphs are inserted into the two copies (/ku-/, /k-/ for prefixes, and /-gu/ for suffixes (2)). Regardless of the analysis of G allomorphy, we see interaction with other morphemes. Arapgir has a progressive marking pattern (Davit’ Bek 1919). The post-verbal /gu/ is replaced with a phonologically dissimilar progressive /nә/ or /ә/ (5a-6a). With vowel-initial and mono-consonantant verbs, the prefixal /k(u)/ is retained (5b-6b).

(5) Arapgir Habituals
a. χәм-i-m-[ɡу]
drink-TH-1SG-G
‘I drink.’
b. [кu-] л-а-m-[ɡу]
G-eat-TH-1SG-G
‘I cry.’

(6) Arapgir Progressives
a. χәм-i-m-[ɡу]
drink-TH-1SG-Prog
‘I’m drinking.’
b. [кu-] л-а-m-[ɡу]
G-eat-TH-1SG-Prog
‘I’m crying.’

Crucially, the progressive pattern is independent of the G pattern, which is demonstrated by the negation data in (7). Synthetic verb formation licenses G marking (including G doubling), but the progressive marker is compatible with periphrastic connegative forms as well.

(7) a. [кu-] л-а-m-[ɡу]
G-eat-TH-1SG-Prog
‘I’m crying.’
b. [ɡ, ϋ] е-m
Neg-TH-1SG
t-l-a-m-[ɡу]
cry-TH-CNeg-Prog
‘I’m not crying.’

This suggests that the G pattern is computed before the progressive marker, and a post-verbal G is omitted as a byproduct of the spell-out of the progressive. The non-co-occurrence between the progressive and G markers can be analyzed as fusing G and the Progressive or zero-marking G in the context of the Progressive. Both options follow the copying of the abstract G marker.

Summary of the analysis  Deriving the data from Arapgir and Erzurum, thus, involves the following components (a sample derivation shown in 8): 1) a copying rule (generalized reduplication à la Arregi & Nevins 2012) licensed by satisfying prosodic minimality; 2) a stipulation that allows vocabulary insertion at the pre-verbal G to trigger feature copying; 3) a fusion rule which bleeds overt realization of G.

(8) Derivation of the form in (6b):
[[G] - [(\nCry) - (TH) - (1SG)]_T - (G) - (PROG)]_Prog \rightarrow Inside-out insertion up to G
[[G] - [(\nCry, l) - (TH, a) - (1SG, m)]_T - (G) - (PROG)]_Prog \rightarrow Insertion at G
[[G] - [(\nCry, l) - (TH, a) - (1SG, m)]_T - (G) - (PROG)]_Prog \rightarrow G-copying
[[G, ku] - [(\nCry, l) - (TH, a) - (1SG, m)]_T - (G) - (PROG)]_Prog \rightarrow Fusion
[[G, ku] - [(\nCry, l) - (TH, a) - (1SG, m)]_T - (G, PROG)]_Prog \rightarrow Insertion at Prog
[[G, ku] - [(\nCry, l) - (TH, a) - (1SG, m)]_T - (G, PROG; nә)]_Prog.