

Cyclic Spell-out in Armenian: an alternative to lexically specified syllable structure

Introduction: It is generally assumed that Armenian plural allomorphy depends on the syllabic structure of the noun: /-er/ is chosen in case the noun is monosyllabic and /-ner/ otherwise (Vaux, 1998; Garibyan & Garibyan, 1987). However, plural allomorphy's sensitivity to schwa-epenthesis differs in Eastern Armenian (EA) and Western Armenian (WA) dialects: epenthesis seems to apply before allomorphy selection in EA but after in WA. In this talk, I show that the difference between the two dialects lies in dialect-specific subcategorization conditions rather than phonological rule ordering. I further argue that phonologically conditioned suppletive allomorphy (PCSA) is sensitive to phonological processes such as epenthesis not only in Armenian but in other languages as well (contra Paster, 2006).

Data: According to Vaux (1998, 2003) both WA and EA dialects avoid rising sonority consonant clusters in coda position through schwa epenthesis¹:

- (1) /arevn/ → [arevə̃n] 'sun'
/manr/ → [manə̃r] 'small thing'

As can be seen from the example below, in EA, plural allomorphy is sensitive to epenthesis.

- (2) *Singular* *Plural*
[manə̃r] [manə̃r-ner]

In WA, on the other hand, plural allomorphy disregards schwa epenthesis in such cases and /-er/, the allomorph for monosyllabic stems, is chosen over /-ner/:

- (3) *Singular* *Plural*
[manə̃r] [manr-er]

It might seem that the choice of /-er/ in (3) is motivated by sonority well-formedness constraints. However, the example in (4) attests otherwise:

- (4) *Singular* *Plural*
[artosə̃r] [artosə̃r-ner] 'tear drops'

If the stem is polysyllabic and ends with a rising sonority consonant cluster, /-ner/ is chosen over /-er/ and schwa epenthesis is used to split the stem-final consonant cluster.

Furthermore, in both dialects, schwa-epenthesis appears to split complex consonant clusters only before pluralization. For example, the definite article in Armenian is expressed by the clitic /-ə̃/ if the word is consonant final. However, while the epenthésized schwa appears in singular and plural forms (as in examples (2) and (4)), it is not pronounced in the definite form:

- (5) *Singular-Indefinite* *Singular-Definite*
[manə̃r] [manr-ə̃]

Spell-out and allomorphy: In his analysis of the Armenian data Vaux (2003) assumes that the input to phonological derivations is the output of morphological ones. This assumption leads him to conclude that the plural allomorph in both dialects is sensitive to the syllabic structure present in the lexicon. In this talk I show that syllable structure in Armenian is derived from the interaction of phonological constraints with cyclic Spell-out at word-level syntax, rather than being specified in the lexicon. Marantz (2001), Marvin (2002), Skinner (in progress), Newell (2008) and many others argue

1 All examples are taken from Vaux, 1998.

that category-defining phrases (i.e. nP, vP, aP, etc.) constitute phases whose heads send their Spell-out domain to the PF interface (Chomsky, 2001). I propose, then, that the plural suffix's sensitivity to phonological structure of the stem is due to Spell-out of nP, where full syllabic structure is derived through the interaction of constraints, including sonority constraints which trigger schwa epenthesis. Once the stem's syllabic structure is defined at nP phase it becomes visible to the plural suffix, which is later Spelled-out at DP phase under an appropriate allomorph. Furthermore, I show that in Armenian, as in Mohawk (Piggott, 1995) and Amazigh (Bensoukas, 2007), epenthetic schwa is non-moraic. I argue that in WA /-er/ is chosen over /-ner/ in such cases as (3) because the stem is mono-moraic. The non-pronunciation of schwa in (3) and (5) stems from its deletion for independent syncope reasons: I argue that schwa in the final syllable is deleted in such cases because the affix is vowel-initial. In example (4), on the other hand, schwa is pronounced because the plural allomorph is consonant-initial. The alternation between [ə] and Ø follows a pattern widely discussed in the literature of Government Phonology (e.g. Harris (1994), Charette (1990)).

General Predictions: According to Paster (2006), PCSA can only be sensitive to the phonological input of the stem or the stem's syllabic/moraic structure. If, however, syllabic structure is phonologically derived (rather than being specified in the lexicon), one would predict for PCSA to also show sensitivity to such phonological processes as epenthesis or deletion. The EA data shows that allomorphy can be sensitive to epenthesis. In this talk I present additional data from other languages where allomorphy is sensitive not only to epenthesis but to other phonological processes as well.

Conclusion: In conclusion, under my analysis the Armenian plural allomorphy's sensitivity to phonology stems from cyclic Spell-Out within the nominal domain rather than phonological rule ordering. My proposal further leads to specific predictions about PCSA which are borne out cross-linguistically and cannot be accounted for via Paster's proposal.

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