On the seemingly opaque morphophonology of Najamba (Dogon)

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Najamba (Niger-Congo, Dogon, Najamba-Kindigé) is a newly documented Dogon dialect that has received little theoretical consideration, particularly in regards to its seemingly complex nominal morphophonology. As reported by Heath (2009), Najamba nouns are such that they fall into several distinct classes based upon their realization of suffixation or vowel mutation when they are inflected for number. While one class of nouns realizes number via vowel mutation, two additional classes of nouns (animate and inanimate), mark this distinction via suffixation, although in entirely different ways. Inanimate nouns are unmarked in their plural form but are suffixed in the singular, while animate nouns are unmarked in their singular form but are suffixed in the plural.

In this paper, we present data suggesting that the proposed underlying segmental structure of Najamba suffixing noun stems (i.e. those in animate and inanimate classes) is obscured by their unusual patterns of suffixal inflection. More specifically, we propose that Najamba noun stems can either be vowel-final (e.g. CV) or consonant-final (e.g. CVC) underlyingly, and that their underlying segmental representations can be determined only by considering the manner in which they are inflected for number. Proposing that nouns stems are either vowel-final or consonant-final, rather than being one static shape, precludes the assumption that patterns of nominal inflection for number are unpredictable, as suggested by Heath (2009). Consider the following representative inanimate nouns in (1) where the singular is marked by the suffix –ŋgo and the plural is unmarked.

(1) | Singular | Plural | Gloss | | Singular | Plural | Glosss |
|---|---|---|---|---|---|---|
| a. [ɛlɛ-ŋgo] | [ɛlɛ] | 'peanut' | c. | [aːl-ŋgo] | [aːle] | 'rain' |
| b. [uriː-ŋgo] | [uriː] | 'sapling' | d. | [bur-ŋgo] | [buriː] | 'tender' |

A comparison of (1a,c) and (1b,d) reveals that words of nearly identical shapes in their unmarked plural form are noticeably different in their respective singular forms. (1a-b) illustrate a seemingly simple suffixation of root + prefix, while (1c-d) illustrate the apparent loss of a stem vowel to create a consonant-consonant sequence upon suffixation. Such vowel loss, however, appears unpredictable or unconditioned in its application. However, if one were to entertain that (1a-b) have vowel-final stems and (1c-d) have consonant-final stems, the noted pattern of suffixation is transparent. A ban against word-final closed syllables in the plural of (1c-d) subsequently forces the epenthesis of a vowel in these words. We note this outcome in Najamba noun stems containing sonorants (i.e. laterals, rhotics, and nasals) in their final syllable. Drawing from the behavior of such 'sonorant' noun stems, we find an analogous situation in 'obstruent' noun stems, whose parallel behavior in both vowel-final and consonant-final cases arises from the impermissibility of obstruent codas (e.g. [tebiŋgo] 'stray plant', [tebe] 'stray plants', *[tebŋgo]). Thus, the underlying segmental structure of these 'obstruent' stems must be gleaned from other factors (e.g. the nature of their epenthetic vowels).

In this paper, we offer an optimality theoretic account of Najamba suffixation that draws upon stem versus affix faithfulness, as well as syllable margin phonotactics in order to explain the seemingly opaque but truly transparent inflection for number in nouns and their agreeing adjectives in this language.

Reference: Heath, Jeffrey (2009). A grammar of Najamba. Unpublished online version: http://dogonlanguages.org/grammars.cfm.