

## Phonologically-conditioned allomorphy in Oromo plurals

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Allomorphs that appear to have phonological conditioning environments, yet cannot be phonologically derived from one another, are a major issue in phonology, raising fundamental questions about the division between phonology and morphology (e.g. Nevins 2011). In this paper, we illustrate a previously-undiscussed example of such phonologically-conditioned allomorphy in Oromo, a Cushitic language spoken mainly in Ethiopia. Our data comes from native speaker intuitions of one of the authors, corpus work with dictionaries and grammars (Gamta, 1989; Gragg, 1982; Guutama, 2004; Owens, 1985; Tucho, 1996), and elicitation with additional native speakers. Oromo has at least six plural suffixes: *-an*, *-e:n*, *-le:*, *-o:ta*, *-wwan*, and *-jji:*. To our knowledge, no previous studies have examined their conditioning environments. While some noun-plural suffix pairings are definitively ungrammatical, in many cases more than one plural suffix is possible for a given noun. For instance, *lafa* ‘ground, land’ can take both *-e:n* (*laffe:n*) and *-o:ta* (*lafa:ta*), and both have the same meaning. In contrast, *bofa* ‘snake’ can only take *-o:ta* (*bofo:ta*) but not *-e:n* (*\*boffe:n*). Meanwhile, it would be ungrammatical for either noun to take *-lee* (*\*lafale:*, *\*bofale:*). If language systems tend to be efficient and avoid unnecessary complexity, one might ask what necessitates this variety in plural suffixation, both within and across roots. Hence, our research question: What phonological factors motivate Oromo’s allomorphy in plural suffixation?

Based on a preliminary sample of over 300 nouns and their plurals, there are several phonological factors conditioning Oromo’s plural suffixation, ruling some plurals definitively ungrammatical and some choices more preferable or natural. The forms *-le:* and *-wwan* are only seen when the root ends in a long vowel, while *-e:n* and *-an* occur when the root ends in a consonant (i.e. the singular ends in a short vowel). Given that Oromo does not permit VVV sequences, this distinction could be about syllable structure, with C-initial suffixes appearing after VV-final roots and V-initial suffixes appearing after C-final roots. While the choice between *-le:* and *-wwan* remains unclear, the choice between *-e:n* and *-an* appears to be based on mora count; in general, *-e:n* occurs when the singular has two moras (bisyllabic with both short vowels, e.g. *hara* ‘lake’, plural: *harreen*, *\*harran*), while *-an* appears otherwise (three or more syllables, or bisyllabic with a long initial vowel, e.g. *gaafa* ‘horn’, plural: *gaaffan*, *\*gaaffeen*). As such, the choice between these affixes could be a minimal weight requirement for plurals. The environment of *-jji:* is partly semantic, in that it occurs when the singular ends in *-e:jsa/-e:ssa*, an apparent suffix referring to ‘having the characteristics of’ people or animals. The most widely used plural suffix is *-o:ta*, which can occur in a wide variety of contexts; the conditioning factors for it remain unclear, as there are similar word pairs with differing grammaticality (e.g. *siree~siroota*, but *k’orii~\*k’oroota*). There is no apparent effect of tone, vowel quality, or morphological alignment. Overall, our analysis reveals allomorphy conditioned by a complex combination of syllable structure, minimal length, and some apparently arbitrary factors.

Since this analysis is based on the existing lexicon, we cannot rule out the possibility that these patterns are lexicalized. As a result, we are systematically examining the allomorphy using nonce words. Our preliminary nonce word tests have revealed that all six of the observed plural affixes (*-an*, *-e:n*, *-le:*, *-o:ta*, *-wwan* and *-jji:*) are productive, in the contexts that we expect from the real-word analysis. Given that we did not include semantic information for the nonce words, there is strong evidence for phonological conditioning of the allomorphy.

Overall, our analysis shows a previously-undescribed case of phonologically-conditioned

allomorphy in the plural suffix in Oromo. It is particularly interesting because there are six productive allomorphs, some words accept multiple plural suffixes with the same meaning, and the relevant phonological factors are varied and complex. We contextualize these results and their importance within the literature on phonologically-conditioned allomorphy.

## References

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