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Kadenge & Simango 2014. Comparing vowel hiatus resolution in ciNsenga and chiShona: An Optimality Theory analysis

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1.   Summary

The article provides a formal comparative analysis of repair strategies used to resolve vowel hiatus in ciNsenga and chiShona within the Optimality Theory framework and shows that while vowel hiatus resolution is categorical in chiShona, it is domain-specific in ciNsenga. The analysis shows that vocalic hiatus is generally dispreferred and the two languages use similar repair strategies in most cases to resolve it. These include glide formation, secondary articulation (labialisation) and deletion. Where the repair strategies differ the variation is attributed to the fact that hiatus resolution is sensitive to phonology and morphosyntax, hiatus resolution strategies applying differently depending on the phonological and morphosyntactic context. In fact ciNsenga permits vowel hiatus in these cases while Shona resolves it through spreading (glide epenthesis).

After the introduction, the article begins by providing some background about the two languages, including the regions where they are spoken, and their morphosyntactic structures particularly regarding verbs and nouns. This is followed by a brief sketch of the Optimality Theory (Prince and Smolensky 2004, among others), thereby laying the foundation for the analysis that follows. The first of the two main parts of the article focuses chiefly on similarities in repair strategies used in resolving vowel hiatus in ciNsenga and chiShona. There are three important subsections that focus on glide formation, secondary articulation (labialisation) and vowel elision. In each subsection, relevant constraints are discussed and there are tableaux illustrating the points considered. A wide variety of data from both chiShona and ciNsenga is presented, with supporting data from other languages such as Shimakonde, Ivie and Luganda. The second main part deals with vowel hiatus across the prosodic stem boundary where the two languages exhibit contrasting behaviour. While ciNsenga tolerates vowel hiatus across the prosodic stem boundary chiShona does not. For both ciNsenga and chiShona the three vowel hiatus resolution strategies (glide formation, secondary articulation and vowel elision) that apply to examples in the preceding section are blocked. ChiShona, which does not tolerate vowel hiatus, resolves the problem through glide epenthesis. To account for the tolerance of vowel hiatus in ciNsenga and glide epenthesis in

chiShona the authors propose using two alignment constraints, ALIGN (ROOTverb, L, σ, L) and ALIGNL-PSTEM that are ranked in the reversed order in the two languages. The final section is the conclusion summarising the general discussion in the article.

2.   Evaluation

The article definitely contributes to our understanding of hiatus resolution in Bantu particularly from a synchronic point of view. Comparing two languages must be applauded as it highlights the complexity of this phenomenon within the Bantu language family. This study also represents an important attempt to analyse complex vowel hiatus data using the Optimality Theory (OT) framework. While many current articles on OT in the United States no longer explain the basic tenets of the theory, the authors provided this in section 3, showing an awareness of their South African readership who might otherwise be unfamiliar with the theory. By identifying the environment where normal strategies for resolving vowel hiatus fail as across the prosodic stem boundary and also by using two alignment constraints, ALIGN (ROOTverb, L, σ, L) and ALIGNL-PSTEM the authors are able to avoid a constraint ranking paradox within the same grammar. Without these two constraints the first ranking would allow normal solutions such as glide formation, secondary articulation (labialisation) and vowel elision to apply while re-ranking the same constraints would license vowel hiatus or glide epenthesis in what otherwise looks like the same environment. While re-ranking the same constraints within a single grammar is permissible in OT it has always been one weakness of the theory as its motivation is not obvious other than to just get the correct result. The article also presents compelling sets of data and tableaux although a welcomed addition, would have been to have at least one more tableau illustrating how earlier examples in section 4 are evaluated in the presence of the two alignment constraints.

While the analysis in the article seems very reasonable from a synchronic OT standpoint, a question that might need to be answered is whether or not, or to which extent phonology (or more specifically OT) needs to use findings from other branches of linguistics. Phonological proposals that contradict phonetic findings are often rejected. Here the analysis provided seems to ignore findings from diachronic studies in section 5 and yet one would think that conclusions that are also in tune with findings from other branches of linguistics would strengthen the argument presented unless the accuracy of those findings is doubtful. What complicates the data presented in the article are historical changes similar to those found in many other Bantu languages. CiNsenga examples in Table 10 reflect complete initial consonant loss hence Robert Kohno's (1995) proposal of an empty C node. ChiShona examples in Table 11, on the other hand, reflect sound changes with partial consonant losses, forms where glides are not generally used when there is no preceding vowel. Underlying object markers and vowel initial verb stems and their corresponding surface forms are in fact allomorphs. While the glides before the vowels in surface forms appear inserted, at least from a synchronic perspective, they are in fact reflexes of Proto Bantu *g, *j and *b (see for example, Sibanda 2011, Ngunga 1997, for similar changes). Therefore, a lingering question about the analysis in the article is whether or not alignment constraints will always be the best constraints to use when dealing with consonant losses and glides that are assumed to be inserted synchronically. In other words, is OT always going to ignore morphology and findings from diachronic studies? (For morphology on its own, one can of course appeal to the notion of 'item and process' versus 'item and arrange'.) Also, considering the case of chiShona, when dealing with allomorphs is it always best to choose one and to prefer

epenthesis rather than elision? Perhaps these questions could have been addressed as part of the conclusion. Of lesser importance is the problem with the explanation after example (55) stating that secondary articulation only occurs with compatible consonants. This seems incomplete as the reader is left wondering what these consonants are. A full explanation would have been more helpful.

Overall, this is a clearly written article that is easy to follow and with convincing arguments from a synchronic perspective.

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