Factors influencing the presence and realization of melodic tones in Bantu

Bantu languages are noted for their use of grammatical/melodic tones in verbal constructions. The realization of inflectional features such as tense, aspect, mood, polarity and clause type (among others) often have a tonal exponent which targets certain TBUs of the verbal stem. One well-known example is Kikuria where a High tone is assigned to different stem TBUs, depending on the TAM—e.g. to the first mora in the Past, the second mora in the Past Progressive, the third mora in the Remote Future, and the fourth mora in the Inceptive (Odden 1987, Mwita 2008)). But the relationship between melodic tones to TBUs is not always one-to-one. In some cases a single tone must be mapped onto multiple TBUs. E.g. in the Future in Cilungu, the melodic High associates to all stem TBUs from the second to the final (Bickmore 2007). In other cases, some constellation of inflectional features will assign multiple tones (a tone melody) which ultimately dock onto one or more stem TBUs. E.g. LHL melodies are proposed for both Lulamogi (Hyman 2014) and Simakonde (Manu 2014).

A theoretical question arises as to where in the grammar these melodic tones are generated, what factors condition their presence, and how they are ultimately mapped onto the appropriate TBUs. One possibility is that the melodic tones are floating in the input, and end up docking onto the appropriate TBUs within the phonology. Under this scenario, either the floating tones must be annotated as to the TBU(s) they need to dock to (e.g. the approach taken in Bickmore 2007), or the constraints/rules themselves must make reference to the inflectional features of the verb. In an OT approach, the melodic tones exhibiting different docking patterns could trigger different co-phonologies.

Another approach is for the relevant inflectional properties to not just generate the melodic tones, but to build into the UR/input of the verb the docking location as well. This is the approach taken, e.g. in Rolle (2018). Under his analysis, the Kikuria Inceptive (described above) triggers the addition of a High tone which is linked to the fourth TBU of the stem in a phantom structure. OT constraints ensure this phantom structure synchronizes with the stem tone in the optimal output candidate. To account for this same Kuria pattern Trommer (2019) proposes an input LLLH melody that will ultimately link one-to-one left to right within the stem.

An important question, relevant to both approaches, which is the central subject of this presentation, is whether the factors which determine the presence of melodic tones in the input (with or without further structure indicating the docking site(s)) are purely morpho-syntactic. If not, what kinds of phonological information must be taken into account? I will present data from Lala, a Zambian Bantu language, which bears on this question, and which is problematic for the position which excludes phonological information from being a factor in determining the presence of melodic tones in the input.

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