The role of phonology in Vata adjectival agreement

In *realizational* theories of morphology, different opinions exist on the relationship between phonology and Vocabulary Insertion. On the one hand there are *separationist* theories like Distributed Morphology (Halle & Marantz 1993), which assume that Vocabulary Insertion applies independently from phonology. These theories predict that the properties of a language's phonology never play a role when vocabulary items (VIs) are inserted. The opposite view is held by *integrationist* theories as for instance proposed in Wolf (2008). These theories assume that the general phonology of a language can influence Vocabulary Insertion.

Based on adjectival agreement in the language Vata, I argue for an integrationist model of morphology.

Adjectival agreement in Vata depends on the number of the noun, in that there are different agreement classes for singular and plural nouns. Plural nouns fall in two agreement classes. Nouns in class A trigger the agreement marker [ɪ] on adjectives.

(1) a. *ɟil-i*   *zal-ɪ*   b.   *ɓl-a*   *zal-ɪ*
       rat.A-PL   red-AGR:A.PL   buffalo   red-AGR:A.PL

Class B nouns trigger the agreement marker [wa] on adjectives.

(2) a. *dɔlj-a*   *zal-wa*   b.   *pɛli-ŋwa*   *zal-wa*
       mouse.B-PL   red-AGR:B.PL   priest.B-PL   red-AGR:B.PL

However, when adjectives with the stem-vowel [ɔ] like *pɔp* 'white' or *wɔt* 'cold' agree with class B nouns, they take the class-A agreement marker [ɪ] as shown in (3).

(3) *dɔlj-a*   *zal-wa*   *pɔp-ɪ*   *wɔt-ɪ*
     mouse.**B**-PL   red-AGR:B.PL   white-AGR:**A**.PL   cold- AGR:**A**.PL

The stem vowel [ɔ] thus seems to cause an agreement mismatch: the adjective takes **A**-agreement with class-**B** nouns. The morpheme [ɪ] realizes all class-A agreement but is restricted to a phonological context (adjectives with the stem-vowel [ɔ]) under class-B agreement.

The aim of this talk is twofold: First, it will be shown that separationist models face problems to account for such a morphological pattern. Second, I show how the agreement mismatch in Vata can be accounted for by an integrationist model.

I propose an Optimality-theoretic model (Prince & Smolensky 2004), that assumes that regular phonological constraints are active at Vocabulary Insertion. The phonological component consists of two levels of OT-evaluation. The first level is the Morphophonological Level, which determines vocabulary insertion. The second level is the Phonological Level at which regular phonological processes apply.

At the Morphophonological Level the agreement mismatch is created to satisfy the phonological constraint *[ɔ-w], which penalizes the combination of the segments [ɔ] and [w]. I argue that [ɪ] is the elsewhere agreement marker and the morpheme [wa] is specific to class B (2). The less specific VI inserting [ɪ] realizes class-B agreement on adjectives with the stem vowel [ɔ], because the constraint *[ɔ-w] rules out the Class-B-specific [wa]. Since [wa] is specific to class B, class-A agreement (1) is always realized by [ɪ].

References

Halle, Morris & Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In *The view from Building 20: Essays in honour of Sylvain Bromberger*, 111–176. Cambridge, MA: MIT Press.

Prince, Alan & Paul Smolensky. 2004. Optimality Theory: Constraint Interaction in

Generative Grammar. In. https://doi.org10.7282/T34M92MV.

Wolf, Matthew Adam. 2008. *Optimal interleaving: Serial phonology -morphology interaction in a constraint-based model*. Amherst, MA: University of Massachusetts. https://scholar-works.umass.edu/dissertations/AAI3336987.