

Paradoxes of MaxEnt markedness

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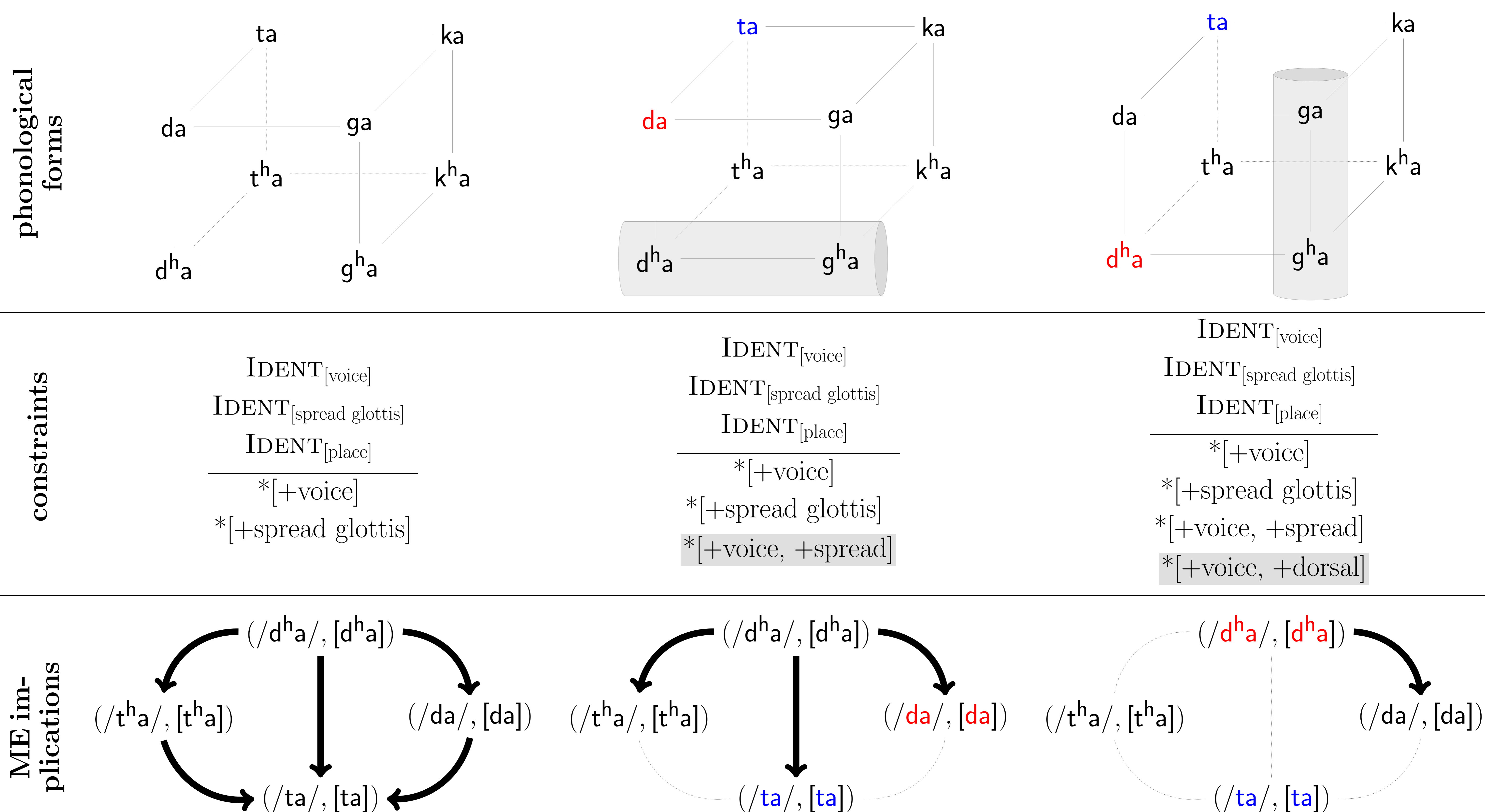


MAIN RESULT

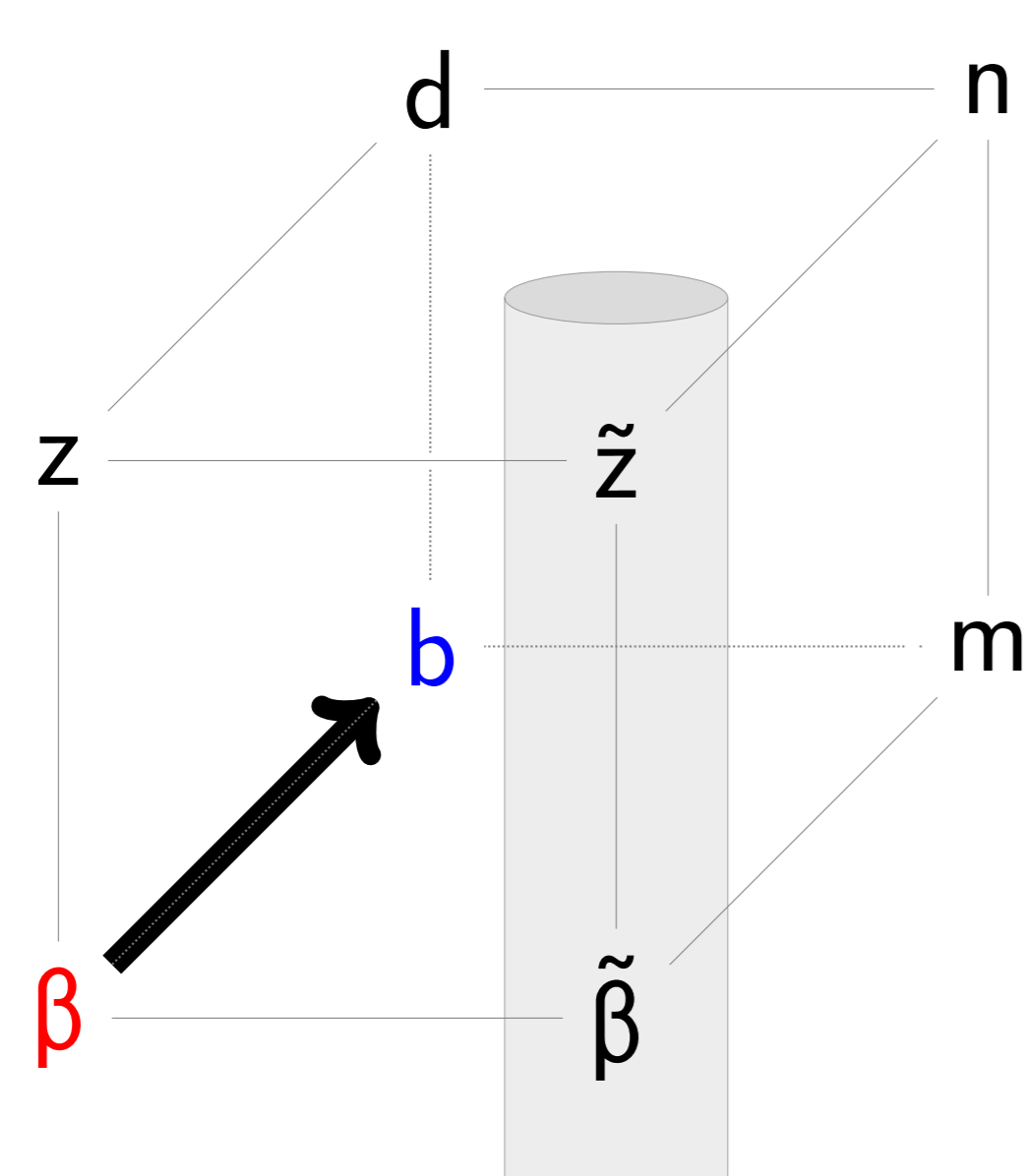
- Markedness implications: **voiced velars** are more marked than **voiceless velars**
rounded vowels are more marked than **unrounded vowels**
- In probabilistic phonology, a markedness implication means that the following inequality holds across all grammars in the typology, without exceptions:
probability of the faithful realization of the **more marked** form \leq probability of the faithful realization of the **less marked** form
- You can compute the (markedness) implications predicted by your own ME grammar using CoGeTo!
- ME misses most markedness implications because they must obey the following paradoxical generalization:

Suppose that ME predicts a markedness implication. For any markedness constraint M that is not violated by the two forms compared:
if the **more marked** form can be transformed into a candidate that violates M by violating only one faithfulness constraint F only once,
then the **less marked** form can be transformed into a candidate that violates M by violating only that faithfulness constraint F only once.

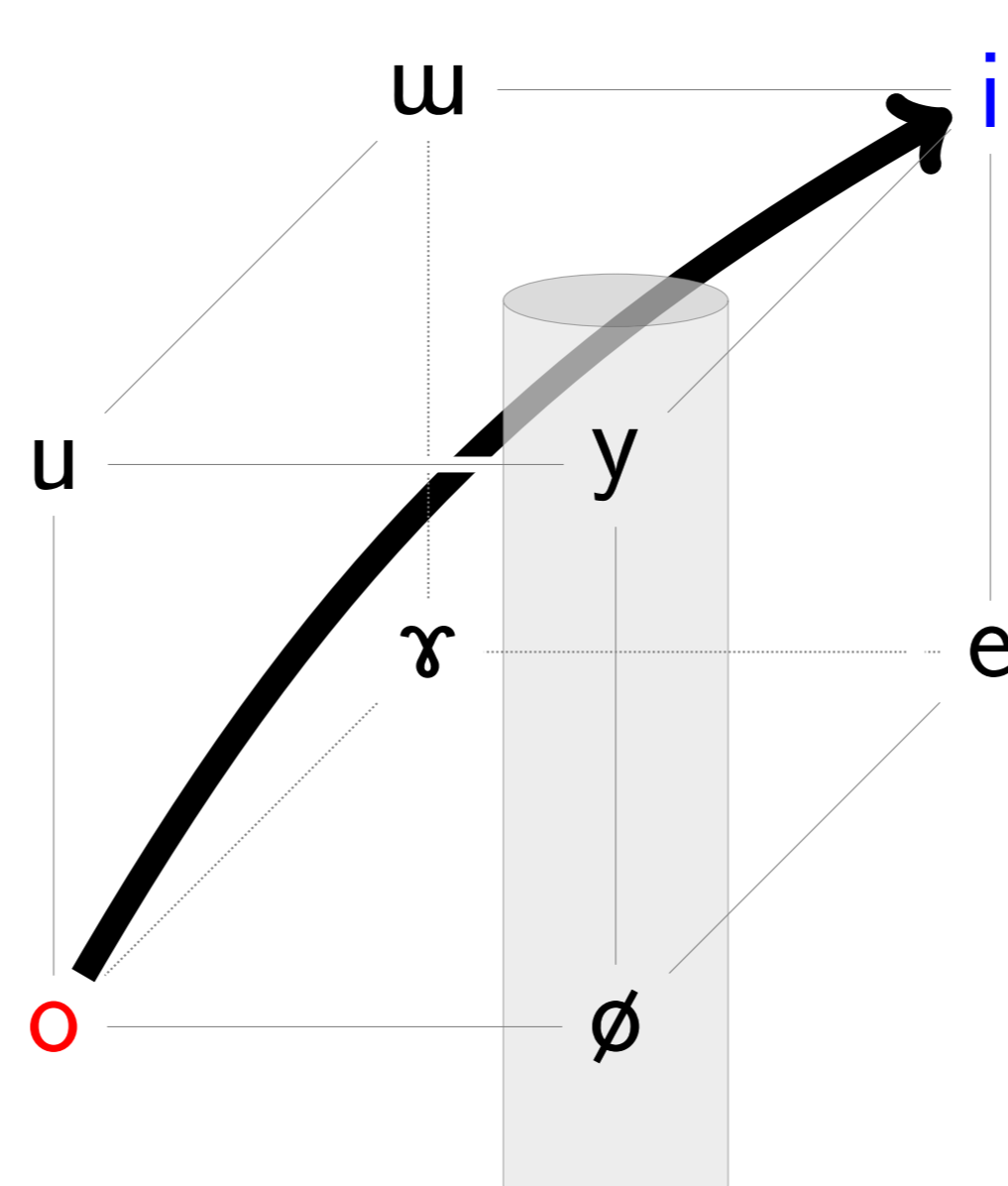
PARADOXES OF VOICING AND ASPIRATION



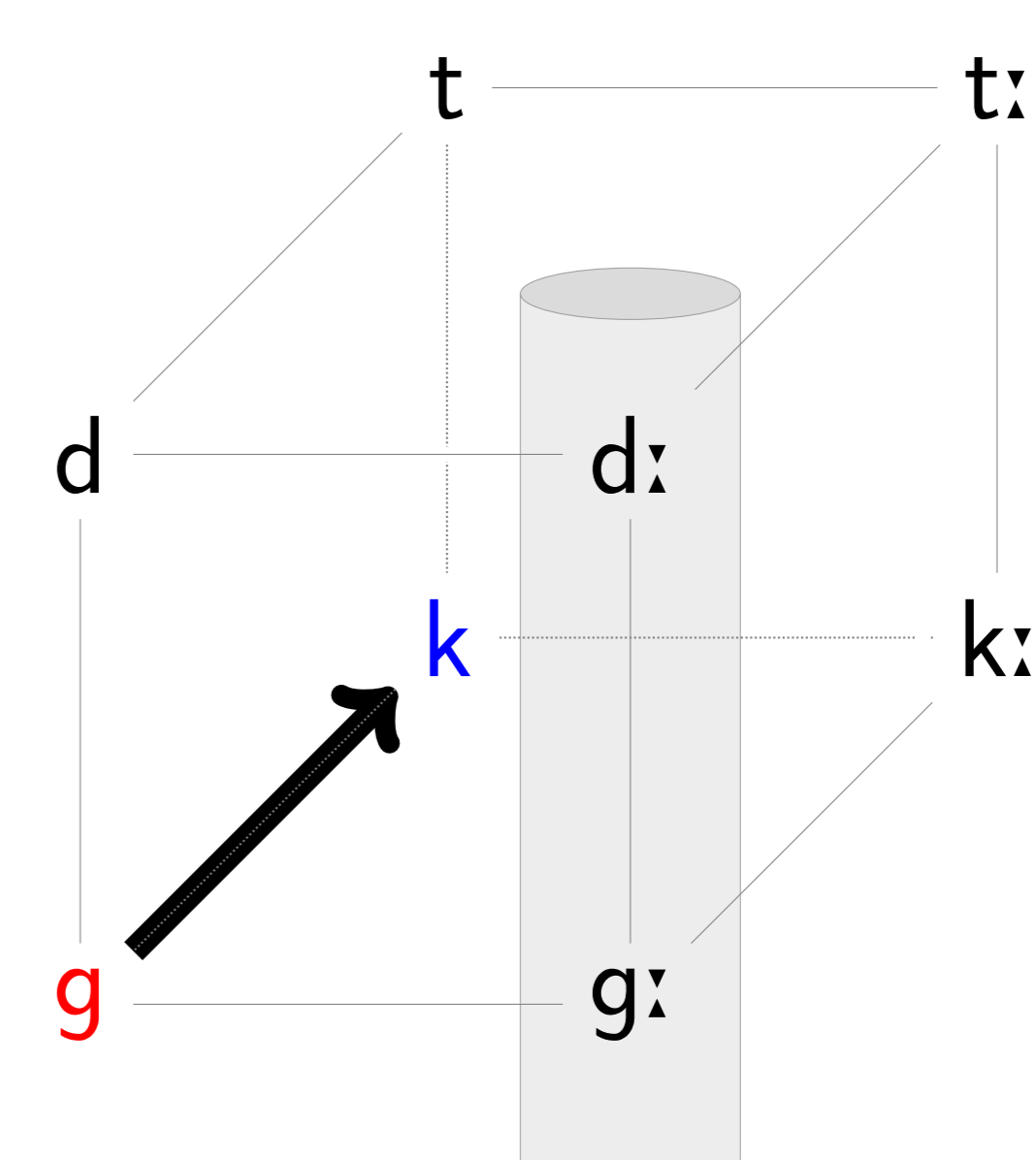
PARADOXES EVERYWHERE



The generalization that fricatives (β) are more marked than stops (b) is lost because of a markedness constraint against nasal fricatives (\tilde{z} , $\tilde{\beta}$)



The generalization that back rounded non-high vowels (o) are more marked (de Lacy 2006) than front unrounded high vowels (i) is lost because of a markedness constraint (ROFRO; Kaun 2004) against rounded front vowels (y , \emptyset)



The generalization that voiced velar stops (g) are more marked than voiceless ones (k) is lost because of a markedness constraint against voiced geminates ($g:$, $d:$)