

## When multiple exponence is blocked

Morphological blocking (Aronoff and Anshen 1998), is often taken to be evidence of a principle of economy, a restriction against unwarranted redundancy. However, cases of multiple exponence, where two or more morphs in a single word are associated with the same semantic or syntactic property (e.g. Harris 2009), seem to run contrary to this same principle. Treatments of blocking that formalize a mechanism for restricting redundancy (e.g. Noyer 1992, Stump 2001) then have to provide an additional mechanism for multiple exponence, for those circumstances where some redundancy is apparently warranted. A recent proposal from Xu and Aronoff (2011) offers a simple solution: the restriction against morphological redundancy is a *violable* constraint, and those cases where multiple exponence is observed are merely rare instances where multiple high-ranked realizational constraints force the violation of that constraint. Exponents ranked above this constraint are always realized if licensed, regardless of any other exponents licensed by the same features.

In this paper I show that Xu and Aronoff's simple solution, though conceptually useful, is unfortunately too simple, predicting that morphs which participate in multiple exponence cannot be blocked by other morphology, when in fact some cases of multiple exponence, exemplified in the nominal class marking systems of Gurma and Gitonga, two Niger-Congo languages, show exactly this effect. In addition, the claim that this model predicts the (perceived) typological rarity of multiple exponence depends on questionable assumptions about the typological distribution of morphological inventories and the ranking distribution of language-particular realization constraints relative to the cross-linguistic constraint against multiple exponence. As a result, the typological questions return to issues of what characteristics of the lexicon support multiple exponence strategies rather than blocking.

In Gurma (Becket 1974), the gender and number of indefinite nouns is marked by a suffix, while the definite nouns are additionally marked by a prefix.

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|----------|-----------|
| 1. bád-ō | ō-bád-ō   |
| a chief  | the chief |

However, the heads of relative clauses are marked with a different prefix, regardless of definiteness, and possessed nouns, regardless of definiteness, have a prefix that agrees the possessor. Each of these segmental changes may also be accompanied by tone changes.

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|---------------|----------|-----------|
| 2. yā-bád-ó   | ñ-bád-ó  | ó-bád-ó   |
| the chief who | my chief | his chief |

Similarly, in Gitonga (Amaral 2007), the demonstratives agree with the class of their head noun, and while some of them like the distal determiner (3a) are only marked once, others like the proximal determiner are marked twice (3b).

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|-------|---------------|--------|----|---------------|----------|
| 3. a. | mi-simbo      | ji-ɾe  | b. | mi-simbo      | j(i)-eji |
|       | 4-tree        | 4-DIST |    | 4-TREE        | 4-4.PROX |
|       | 'those trees' |        |    | 'these trees' |          |

Furthermore, the numeral 'one' doubly agrees with its head noun, taking the nominal class marker as a prefix and the adjectival class marker in the suffix.

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|-------|----------|----------------|----|------------------------|----------------|
| 4. a. | jiwonga  | jimwejo        | b. | ɲak <sup>h</sup> ɛɾe   | mojo           |
|       | yi-wonga | yi-mu-eyi-o    |    | 0-ɲak <sup>h</sup> ɛɾe | 0-mu-oju-o     |
|       | 7-cat    | 7-one-7.PROX-O |    | 1-lizard               | 1-one-1.PROX-O |

However, the class 1 distal determiner uses the class 3 agreement (5b) while the class 3 numeral 'one' uses the class 1 agreement (6b).

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|-------|----------------------|----------|----|----------------------|----------------|
| 5. a. | ɲak <sup>h</sup> ɛɾe | j(u)-oju | b. | ɲak <sup>h</sup> ɛɾe | wu-ɾe          |
|       | (1)-lizard           | 1-1.PROX |    | (1)-lizard           | 3-DIST         |
| 6. a. | ŋ-gaɾa               | w(u)-owu | b. | ŋ-gaɾa               | mojo           |
|       | 3-lion               | 3-3.PROX |    | 3-lion               | 1-one-1.PROX-O |

Class 1 and class 3 have otherwise distinct adjectival agreement, but their nominal agreement is identical: /mu-/ with monosyllabic roots, /N-/ with plosive-initial longer roots, and /0-/ otherwise. The similarity between the two classes generates implicational relations between the classes, leading to partial syncretism, favoring the class 3 prefix in one case and the class 1 prefix in the other. Exceptionality of this kind is to be expected in a framework like Realizational OT, in which morphological relations are treated as learned violable constraints, but the particular claims related to the distribution of multiple exponence are not satisfied.

The typological predictions regarding the abundance of multiple exponence are dependent, among other things, on the expected set size of exponents capable of interacting. This, together with the more complicated observed relationships between multiple exponence and blocking, reinvoles questions about what distinguishes grammars that allow multiple exponence from those that favor blocking. While a single violable constraint against multiple exponence may be helpful as a conceptual reference point, it is neither explanatory nor descriptively adequate.