A Working Typology of Multiple Exponence: Cross-linguistic Variation and Theoretical Implications

Gabriela Caballero, Assistant Professor, University of California, San Diego Alice C. Harris, Professor, University of Massachusetts Amherst

Multiple Exponence (ME) is a one-to-many association between meaning and form (Matthews 1972, 1974) that challenges widespread principles of economy and structural complexity (e.g. Andrews 1990, Anderson 1992, Kiparsky 2005), as well as incremental morphological theories (e.g. Steele 1995). In light of these challenges, some outright deny the existence of "true" ME (e.g. Hale & Marantz 1993) or introduce theoretical mechanisms specifically designed to handle redundancy in morphological marking (e.g., enrichment rules in Distributed Morphology (Müller 2006)). Despite its critical theoretical ramifications and increasing number of documented cases, there is still no clear sense as to what is the possible range of variation in ME patterns cross-linguistically. The goal of this paper is to address this gap and present the results of a preliminary investigation of ME patterns in (currently) about fifty languages in a range of families. While based on a small data set, this study represents, to the best of our knowledge, the first attempt at characterizing ME typologically.

Our working definition of ME is the following: multiple (or extended) exponence is the occurrence of multiple realizations of a single morphological feature or bundle of features in a single prosodic/morphological word. This definition excludes phenomena that involve two or more words, such as negative concord (in many cases), preposition doubling, agreement marker on the source, and possessed agreeing with possessor. It also excludes examples that involve different scope, such as Georgian *xmovn-eb-ian-eb-i* '[ones] having vowels', where the first *-eb* pluralizes 'vowel', and the second pluralizes the whole word. We also exclude examples with cumulative meaning, such as *re-re-write*, and examples where the morphological features encoded are the same, but the semantic roles encoded are different, such as reflexives or examples like Nuaulu *u-ampeta-ku* 'I am wet', where *u*-encodes 1st person singular subject, and *-ku* encodes 1st person singular patient (Donohue 2004: 234).

In our survey of ME patterns, we found variation in the following properties, each of which we believe contributes significantly to determining the character of ME in some languages: a) whether one instance of the morpheme is required by the presence of some unrelated morpheme (for example, in Batsbi y-opx-y-al-ŏ 'she dresses', the second gender marker (here -y) occurs only if -al, an intransitivizer, occurs (cf. y-opx-o 'she puts it on')); b) whether the markers involved in ME are formally the same or different underlyingly, and if the same, whether these may involve different allomorphs (for example, in the Batsbi example above, the gender markers are identical, while in Walapai ma-gwa:w-ny-ay-ng-ì-ngmé? 'what makes you think you can also talk' (Watahomigie et al. 1982: 120), both occurrences of -ng derive from -k-m, where -k is the same subject marker, and -m may be an allomorph of ma-); c) whether markers of ME are affixal (as in the cases exemplified above) or non-concatenative (as in Matthew's 1974 parade example of German plural nouns marked both by affixation and Umlaut, e.g., from Hals 'neck', Häls-e 'necks'); d) whether the markers involved in ME are immediately adjacent or if other morphological material appears between them; e) whether ME is obligatory or optional (for instance, in Lower Jubba Maay, plural nouns are marked by either an -o suffix or a -yal suffix, or they can optionally appear with both markers, e.g., 'mouths' is either af-o, af-yal or af-o-yal (Paster in press); f) whether ME is productive or not; g) whether the categories expressed involve inflectional, derivational or other (e.g., negation) kind of information; and h) whether the distribution or

appearance of ME may be phonologically conditioned or not (e.g., Choguita Rarámuri causative ME is exclusively found with final stress bases (Caballero 2008)).

While there is great diversity in terms of the properties that ME patterns may display both cross-linguistically and intra-linguistically, our survey reveals the following tentative generalizations: 1) there do not seem to be any principled restrictions as to the types of morphological information (inflectional, derivational) that may display ME (as noted in Caballero 2008); 2) there do not seem to be any cases of **identical**, redundant allomorphs immediately adjacent to each other (as suggested also in Inkelas & Caballero 2008). That is, there are no cases of contiguous stacking of the same allomorph; there is always some intermediate morphological material or one interation undergoes some phonological change (for example, in the Lent'ex dialect of Svan, xägem-n-un-e 'causes to build' is syncopated from xägem-un-un-e, where each instance of -un is a causative marker).

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