## Edge Geminates: weight typology and asymmetries

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It is well-known that geminate consonants are more common in intervocalic position than either in word-initial or word-final position; this relates to the fact that length cues for geminates are more salient in intervocalic position (Kraehenmann 2011). While edge geminates may not be common, their weight properties are of interest because they differ in structure from intervocalic geminates. The latter are typically heterosyllabic (though see Topintzi 2008), but edge geminates are - at least superficially - tautosyllabic, within an onset (word-initial geminate) or coda (word-final geminate). Our paper has two goals: first, to present a typology of the weight properties of edge geminates; second, to make observations that may predict whether an edge geminate patterns as heavy or light.

Consider the weight of word-initial geminates first. Researchers such as Davis (1999, 2011a,b), Muller (2001), Topintzi (2008, 2010) and Kraehenmann (2011) show that such geminates vary as to their weight depending on the language. In Trukese and Pattani Malay, an initial geminate contributes to syllable weight whereas in Leti (Hume et al. 1997) and Baghdadi Arabic (Blanc 1964, Youssef 2013) it does not. The Trukese evidence comes from a bimoraic minimal word constraint disallowing prosodic words of the shape CV and CVC, but allowing words of the shape CVV and GV (where G = geminate). Also, as Davis and Toretta (1997) and Topintzi (2010) show, other processes in Trukese support the moraicity of an initial geminate. In Pattani Malay comparable evidence comes from stress; primary stress falls on an initial syllable only if this syllable starts with a geminate. On the other hand, evidence against the moraicity of initial geminates in both Leti and Baghdadi Arabic comes from the fact that GV words do not satisfy a bimoraic minimal word constraint nor do such syllables attract stress, although stress is weight-sensitive in these languages. Regarding word-final geminates, it can be shown that their weight also varies depending on the language. In Hadhrami (Bamkhramah 2009) and Cairene Arabic, final CVG syllables, but not final CVC ones attract stress on them; presumably, only the former are bimoraic. Also, the bimoraic word constraint in these dialects allows CVG words but not CVC ones. In contrast, Hungarian final geminates fail to pattern in a way suggesting that they are moraic (Síptar & Törkenczy 2000).

Besides offering a typology showing the weight properties of edge geminates, we also tackle the more difficult matter of determining factors that might predict the behavior of edge geminates. In doing this, we consider the relationship between edge geminates and edge consonant clusters in the language under consideration: Are edge geminates unique in the language in that there are no edge clusters or do edge clusters occur? If they do occur, what is the relationship between an edge geminate and an edge cluster regarding weight properties? As an initial finding, we observe that if the edge geminate is unique, it is more likely to pattern as moraic. For example, Trukese and Pattani Malay do not have initial clusters; the initial geminate patterns as moraic. Hadhrami Arabic lacks final clusters; the final geminate acts as moraic. A second observation is that if a language does have edge clusters, the edge geminate will tend to pattern the same way as the cluster with respect to weight. For example, Leti and Baghdadi Arabic with weightless initial geminates also have initial clusters that are

weightless. Final clusters in Hungarian act as nonmoraic, but as moraic in Cairene Arabic. The corresponding final geminates exhibit the exact same behavior. We discuss exceptions to this and also note that our observation predicts weight asymmetries between initial and final geminates in the same language. Examples of Arabic, Berber and Swiss German will be considered.

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