

MARKEDNESS AND THE SYLLABLE CONTACT LAW IN ONSET sC CLUSTERS

Kelly Enochson
George Mason University

Accounting for the errant behavior of onset sC clusters is a common phonological problem (Barlow 2001, Gierut 1999). Studying L2 production of sC and CC clusters can give insight into how adult speakers acquire the two differently. This study examines whether sonority distance in general, or the structure of sC clusters in particular, influences production patterns of onset clusters. Several studies in L2 phonology indicate that onset clusters with a large sonority distance are less marked and acquired earlier than onset clusters with a small (or negative) sonority distance (Broselow & Finer 1991, Eckman & Iverson 1993). Among onset sC clusters, this means that [sl] is less marked than [sn], which is less marked than [st] (Cardoso and Liakin 2009, Carlisle 2006). Many of the previous L2 studies that examine the treatment of sC clusters study speakers of languages such as Spanish and Brazilian Portuguese, which allow onset clusters, but not sC clusters (Cardoso & Liakin 2009, Carlisle 2006, Yavaş & Someillan 2005). We study L2 English learners whose L1s do not allow any onset clusters, to determine the effect of markedness in terms of sonority distance on production of sC clusters and CC clusters.

The current study compares the effect of sonority distance on the L2 production of onset sC clusters and CC clusters. Participants are 8 L2 English learners (L1 Mandarin Chinese, Cantonese, Japanese). Data come from a word list reading task, which includes 83 tokens of CCVC words, representing all sonority distances in English. Results show that among sC clusters, sonority distance is negatively correlated with correct production (Pearson correlation, $r(32) = -.511$, $p = .003$). For example, [st] is likely to be produced correctly, while [sw] is likely to be modified using internal epenthesis. Among CC clusters, sonority distance is not correlated with correct production (Pearson correlation, $r(40) = -.176$, $p = .278$). CC clusters of all sonority distances result in approximately the same proportion of correct production.

Participants who do not have onset clusters in their L1 treat sC clusters differently from CC clusters. Among sC clusters, results show the opposite pattern of that predicted by markedness in terms of sonority distance. To account for the data, we consider /s/ to be outside the onset (Barlow 2001, Goad & Rose 2002) and appeal to the Syllable Contact Law (Murray & Venneman 1983). The SCL states that the greater the sonority drop between coda and following onset, the more harmonic the relationship. Because the /s/ in an sC cluster is outside the onset, it functions as the previous environment, similar to the coda of a previous word (Kaye 1992, Pan & Snyder 2004). These data exhibit a pattern that follows the predictions of the Syllable Contact Law. The most harmonic relationships (Gouskova 2004), such as s-stop, are likely to be produced correctly; less harmonic relationships, such as [sw], are likely to be modified using internal epenthesis. The Syllable Contact Law is not relevant for these participants' production of CC clusters, because CC clusters are treated as true branching onsets, whereas sC clusters are treated as an adjunct and a head.

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