

*The Phonological and Phonetic features of  
Cantonese-speaking ESL learners' Initial Consonant Clusters*

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**Abstract**

The paper reports on the phonological and phonetic properties of English initial consonant clusters produced by a group of Cantonese-speaking ESL learners whose proficiency level is between intermediate and advanced.

A number of studies have documented the difficulties of Cantonese-speaking ESL learners in producing English consonant clusters (Walmsley 1977, Luke and Richards 1982, Bolton and Kwok 1990, Hung 2000, Stibbard 2004). Studies which focus on consonant clusters (Tarone 1987, Eckman 1987, Eckman and Iverson 1993, Peng and Setter 2000, Wong 2006a, 2006b) have examined the difficulties and strategies which Cantonese-speaking ESL learners use to modify the syllable structure when producing spoken English. These studies have shown that Cantonese learners tend to delete some consonants or modify others. However, most of these studies focus mainly on the general features of Cantonese learners' spoken English (Walmsley, 1977; Hung, 2000, for example) while others examine very specific types of consonant clusters (Peng and Setter, 2000; Eckman and Iverson, 1993). A comprehensive study on the acquisition of English consonant clusters by Cantonese-speaking ESL learners is lacking. The aim of the research study reported in this paper is to provide a more complete picture of the issues involved in the acquisition of English consonant clusters.

The research questions that this paper intends to address are:

- (1) Which types of initial consonant clusters are the most and least problematic?
- (2) Which segments in the initial clusters pose the most difficulties to these learners?
- (3) What are the common strategies employed?
- (4) What are the phonetic properties of the problematic clusters?

A list of 34 sentences with 112 English test words containing 32 types of initial clusters and 69 final clusters were used to elicit spoken data from a group of undergraduate English majors.

Results show that a cluster with an initial /s/, regardless of whether it is a 2-member or 3-member one, is the least problematic. On the contrary, a cluster with an /r/, which can only be a non-initial segment, always causes problems. Evidence of transfer from L1 was found. Positive transfer from Cantonese was reflected by the high accuracy in the English initial cluster /kw/, which has a near equivalent /k<sup>w</sup>/ in Cantonese. Negative transfer was displayed by

the strategy of co-articulation employed by many learners. This suggests a possible impact of the constraints of syllable structure in Cantonese on English—initial consonants tend to be co-articulated like /k<sup>w</sup>/.

### References:

- Bolton, K. and H. Kwok. (1990). The Dynamics of the Hong Kong Accent: Social Identity and Sociolinguistic Description. *Journal of Asian Pacific Communication* 1, 147-72.
- Eckman, F. (1987). The Reduction of Word-final Consonant Clusters in Interlanguage. In: A. James and J. Leather (eds.), *Sound patterns in second language acquisition*. Dordrecht: Foris.
- Eckman, F. (1991). The Structural Conformity Hypothesis and the Acquisition of Consonant Clusters in the Interlanguage of ESL Learners. *Studies in Second Language Acquisition*, 13, 23-41.
- Hung, T. (2000). Towards a phonology of Hong Kong English. *World Englishes*, 19, 337-56.
- Luke, K-K. and J. Richards. (1982). English in Hong Kong: functions and status. *English World Wide* 3, 47-64.
- Peng, L. and J. Setter. (2000). The emergence of systematicity in the English pronunciations of two Cantonese-speaking adults in Hong Kong. *English World-Wide* 21, 81-108.
- Stibbard, R. (2004). The Spoken English of Hong Kong: A Study of Co-occurring Segmental Errors. *Language, Culture and Curriculum* 17, 127-142.
- Tarone, Elaine E. (1987). Some Influences on the Syllable Structure of Interlanguage Phonology. In Georgette Ioup and Steven Weinberger (Eds.), *Interlanguage Phonology*, pp.232-247. Cambridge, Mass, Newbury House Publishers.
- Walmsley, J.B. (1977). Cantonese-English: An Essay in Diagnostic Linguistics. *Proceedings of the Third AILIA Congress Copenhagen* 1, 261-77.
- Wong, C.S.P. (2006a). Modification Patterns in the Acquisition of English Consonant Clusters. Paper at the XVIIIth International Conference on Foreign / Second Language Acquisition". Szczyrk, Poland.
- Wong, C.S.P. (2006b). What Makes English Consonant Clusters Difficult for Cantonese-speaking ESL Learners? Paper presented at the PacSLRF 2006. University of Queensland, Brisbane, Australia.