

## Incomplete Laryngeal Neutralization In KL Malay

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Phonetic studies of the phenomenon of word-final devoicing show that contra the received view in the phonological literature, word-final devoicing is not always completely neutralizing<sup>1</sup> ((Port & Crawford (1989) for German, among others), i.e., word pairs such as in (1) from German are not always acoustically identical.

- (1) a. /rad/ → [rat] ‘bicycle’  
b. /rat/ → [rat] ‘a bit of advice’

We conducted a pilot experiment on a speaker of Kuala Lumpur (KL) Malay to test if KL Malay stops, which are traditionally transcribed as voiceless word-finally (Teoh (1994)) as in (2), exhibited incomplete word-final neutralization. The results of our experiment indicate that there is a strong tendency towards ‘incomplete neutralizations’ in some contexts.

- (2) a. /mulut/ → [mulot] ‘mouth’  
b. /wujud/ → [wujot] ‘exist’

For the purposes of this experiment, we have confined ourselves to measuring the duration of the preceding vowel, and the closure duration of the final stop – both acoustic parameters along which voicing distinctions usually occur. The experiment revealed that final-voiceless/voiced word-pairs differed in the expected way for all the pairs tested (3); furthermore, some pairs showed significant differences (marked in boldface in (3)).

The results from this study corroborate the results of experiments conducted on certain Indo-European languages that are traditionally claimed to neutralize contrasts word-finally. However, more data might be needed to ensure the validity of the results obtained in the experiment. The cross-linguistic validity of these ‘incomplete voicing neutralizations’ strongly suggests that phonologists should reconsider their traditional position of discounting cases of incomplete neutralization as spurious.

(3)

		Environment	Avg. duration of preceding V	Avg. duration of C closure
Carrier Ph 1 <i>Son. Condition</i>	Alveolar stop	a. (v.less) ot ## l	68.2250	<b>97.1750</b>
		b. (vd.) od ## l	77.6750	<b>70.4250</b>
	Bilabial stop	c. (v.less) op ## l	61.4333	<b>100.9333</b>
		d. (vd.) ob ## l	68.4750	<b>79.1400</b>
Carrier Ph. 2 <i>Obs. Condition</i>	Alveolar stop	e. (v.less) ot ## t	<b>53.6500</b>	109.2750
		f. (vd.) od ## t	<b>89.2750</b>	97.2000
	Bilabial stop	g. (v.less) op ## t	58.9250	116.9750
		h. (vd.) ob ## t	61.9750	108.4250

<sup>1</sup> Fourakis and Iverson (1984) argue that such data is a result of variously experimental confounds like spelling pronunciations, ‘unnaturalness’ or experimental setup.

**References**

Port, R., Crawford, P., 1989. Incomplete neutralization and pragmatics in German..  
*Journal of Phonetics* 17, 257–282.

Teoh, Boon Seong. 1994. *The Sound System of Malay Revisited*. Dewan Bahasa Dan Pustaka.