Affixation, compounding and Singaporean English word-level tone

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Colloquial Singaporean English (CSE) has long been recognized as possessing distinctive prosody, usually discussed in terms of sentence intonation and word-level stress. As independently observed by Wee (to appear) and Siraj (p.c.), I propose that CSE also uses tone at the word level. This paper presents pitch tracks drawn from laboratory and corpus speech, then outlines an optimality theory analysis of tone assignment in CSE content words, focusing on compounding and affixation. Tone transcriptions are based on phonetic measurements as well as impressionistic comparisons to the tone inventories of Singapore's most widely spoken Chinese dialects.

CSE content words consistently end with a high tone:

(1)	'ink	H	(2)	'pattern	MH
	'see	H		'English	MH
(3)	a'muse	LH	(4)	'Singapore	MMH
	an'noy	LH		'elephant	MMH
(5)	hi'biscus	LMH	(6)	res'ponsible	LMMH
	op'ponent	LMH		psy'chology	LMMH

(1)-(6) above suggest that the tone domain terminating in a high tone is the prosodic word.

Suffixes. By these criteria, the vast majority of CSE suffixes appear to be grouped with the stem within the same prosodic word, following the same pattern as (7) below:

(7) a. 'effort MH b. 'effortless MMH c. 'effortlessness MMMH

A few suffixes, however, buck the trend. Their special status seems to be linked to stress[1] (8) and/or analyzability as independent words (9), preferably but not necessarily in the same semantic sense:

(8)	a. 'friend'ship	HH	(9)	a. 'hand'ful	HH
	b. 'child'hood	HH		b. 'careful	MH
	c. 'child'like	HH		c. 'forgetful	LMH

Prefixes. Unlike suffixes, prefixes often form independent prosodic words. In (10) and (11) below we see that stress seems to be the deciding factor. In fact, some prefixes behave differently depending on whether they are stressed, for instance *un-* in (10) below:

(1) _____

[1] Note that CSE stress is not very salient, but is generally agreed to differ from British English stress in certain respects. Here I transcribe CSE compounds with multiple primary stresses. I have also found that within the lexical word, weaker stresses to the right are deleted, hence *'butterfly* and not *'butter,fly*.

(10)	re'look	LH	(11)	ˌanti-'drug	MH H	(12)	un'likely	LMH
	re'cover	LMH		ˌanti-'racism	MH !MMH		ˌunin'telligent	H !LMMH

[Note that post-high downstep has been transcribed but will not be discussed in this paper.]

Compounds. As a rule, compounds and acronyms form one prosodic word per meaningful element:

(13)	'pen'knife	H H	(14)	IR	H H
	'pain'killer	H !MH		ACS	H H H
	'table'cloth	MH H		PLMGS	H H H H H

Here again stress seems to play a role. The most familiar compounds apparently undergo stress demotion, a well-attested crosslinguistic process (Peperkamp 1997:145; Gouskova & Roon 2008), and their meaningful components cannot support separate prosodic words:

(15) a. 'butterfly MMH b. 'PE MH

Finally, CSE tone displays significant inter-speaker variation, for instance in the following:

(16) a. PAP H H H or H !MH b. IC H H or MH

(17) a. postpone MH, H H, or LH b. Frankfurt MH or H H

These are usually fairly familiar acronyms (16) or forms with unfamiliar stems or affixes (17).

The simplest explanation appears to be that in addition to the Strict Layer Hypothesis (Selkirk 1984; Inkelas 1990), requiring all material to be parsed and also requiring prosodic words to dominate stresses (i.e. feet), CSE prefers to make the left edge of the stem to be salient by aligning it with the beginning of a prosodic word, a common cross-linguistic tendency (Peperkamp 1997: 34). This explains the prosodically independent suffixes of (8) above if speakers have interpreted stressed suffixes as stems, and it is hardly surprising that speakers might not always agree on which part of the word is the stem, as in (17) above.

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