NZE Phonology

1 Vowels

Table 1 gives lexical set words (Wells, 1982) for New Zealand English (NZE) vowels, together with suggested transcription symbols (for further details see Bauer and Warren, 2004). NZE has 19 stressed vowels, though not all speakers distinguish them all.

Table 1: NZE vowels											
Short vowels		Long vowels		Diphthongs		Unstressed vowels					
KIT	е	FLEECE	iː	FACE	æe	hаррY	i				
DRESS	e	START	e:	PRICE	ae	treacLE	ш				
TRAP	3	NURSE	θ!	CHOICE	oe	commA, horsES	е				
STRUT	в	THOUGHT	O!	GOAT	eu						
LOT	D	GOOSE	u :	MOUTH	æu						
FOOT	υ			NEAR	iə						
				SQUARE	eə						
				CURE	u ə						

1.1 Short vowels

NZE is characterized by a short front vowel shift – TRAP, DRESS and KIT are moved one place clockwise compared to the equivalent vowels in conservative RP (British English). This can lead to confusion for non-NZE speakers, who might hear NZE *sacks* as *sex*, *sex* as *six*.

KIT is centralized. Australian English has a high front KIT, so this vowel is a shibboleth for distinguishing the varieties – compare *feesh and cheeps* (Australian) and *fush and chups* (NZE), for *fish and chips*.

STRUT is central-front, i.e. is further forward than in RP. Similarly, LOT is more centralised.

FOOT also has an innovative central unrounded variant, as found for instance in *good* – compare the greeting written informally as *gidday*. There is some overlap with KIT.

1.2 Long vowels

FLEECE and GOOSE can be diphthongized, with a short relatively open first element. A more exaggerated diphthongal GOOSE is sometimes heard in the phrase *Thank you*. GOOSE itself is very front, except when it precedes a vocalised /l/, as in *school*, when it becomes back.

NURSE is also front, with some overlap with GOOSE, though the two are still clearly distinct for most speakers.

THOUGHT is also often diphthongized, with a marked off-glide, particularly in open syllables, as in *more*, *saw*, etc., which are sometimes even bisyllabic. THOUGHT is probably the backest of NZE vowels.

BATH is central-front. Most NZers have BATH in both *palm* and *dance*, differing in this respect from some Australians who have a TRAP vowel in *dance*.

1.3 Vowel length

It should be clear from the above descriptions that there are some short and long vowels that are qualitatively highly similar. Thus the pairings KIT and NURSE, DRESS and FLEECE, STRUT and START, FOOT and THOUGHT may for many speakers differ only in vowel length.

1.4 Diphthongs

Relative to RP, NZE shows a diphthong shift, moving FACE, PRICE and CHOICE anti-clockwise in the vowel system. For example, the starting point for FACE is more open than in RP, so that British speakers sometimes perceive it as PRICE. NZE PRICE is in turn similar to RP CHOICE.

The starting position of GOAT is very open and central. The second element has the position of the NZE GOOSE vowel, but for some speakers is unrounded. This is particularly noticeable on emphatic instances of the word *no*.

MOUTH has a close starting position, particularly in broader NZE.

CURE tends to be found only following /j/. It has a similar starting point to GOOSE, and an open central final target.

There is a change-in-progress affecting the centering diphthongs NEAR and SQUARE, the majority of studies indicating a merger on NEAR.

1.5 Unstressed vowels

Three unstressed vowels are indicated in Table 1 for NZE. happY is generally taken to be closer to FLEECE than to KIT. treacLE represents a set of vocalized realizations of /I/, variable in rounding and ranging from central to back and close to close-mid. The third unstressed vowel is often confused with STRUT, particularly when in final position (e.g. in $comm\underline{a}$), but also with KIT (e.g. in $hors\underline{e}$ s).

1.6 Neutralizations and mergers

Many of the contrasts in Table 1 are variably neutralized before /r/ and /l/.

Before /r/ we find neutralization of FLEECE and NEAR, DRESS and SQUARE, GOOSE and CURE, in each case towards the monophthong. Such neutralizations result for instance in *ferry* and *fairy* being homophones.

Before /l/, neutralizations are found involving FLEECE and NEAR, DRESS and TRAP, FOOT and GOOSE, KIT and FOOT, KIT and GOOSE, KIT and STRUT, LOT and GOAT, THOUGHT and GOAT, FOOT and THOUGHT. These neutralizations can result in multiple homophony, e.g. of *poll*, *pole*, *pull*, *Paul*.

The neutralization of DRESS and TRAP before /l/ is increasingly found among younger speakers, for whom *Alan* and *Ellen* are homophones.

The centralization of KIT results in overlap with the unstressed vowels, so that *matted* and *mattered* can be homophonous.

As mentioned above, NEAR and SQUARE are merged on NEAR for many, especially younger speakers.

2 Consonants

The consonants of NZE shown in Table 2 are uncontroversial. Some conservative speakers also have a voiceless labial-velar fricative / M / in words with wh--, so that whales and wales are distinct.

2.1 Plosives

/k/is usually affricated, i.e. has audible friction. /t/ is affricated at the beginning of stressed syllables, but is frequently a voiced tap between vowels in words such as *better* and even across word boundaries as in *bet on*.

Glottalisation of word-final /p/ and /k/ is increasing. The voiced plosives have very little voicing.

Table 2: NZE consonants

			Lal	oio-					Post-					
	Bila	bial	deı	ntal	Dei	ntal	Alveolar		alveolar		Palatal	Velar		Glottal
Plosive	p	b					t	d				k	g	
Affricate									tſ	ф				
Fricative			f	V	θ	ð	s	Z	S	3				?
Nasal		m						n					ŋ	
Lateral								1						
approximant								1						
Approximant		W								r	j			

2.2 Fricatives

Voiced fricatives in NZE are frequently devoiced – *president* and *precedent* can be homophones.

So-called /s/-retraction is frequently heard, in particular in /stj/ and /str/ clusters, so that /s/ is more /ʃ/-like (so more like 'sh'). Words like *student* are often heard with /ʃtʃ/.

The 'th' sounds are usually interdental fricatives rather than post-dental in NZE, and there is some fronting of $/\theta$ / to /f/.

2.3 Approximants and lateral approximants

With the exception of the Southland-Otago area, which has non-prevocalic /r/, NZE is mainly non-rhotic. However, even in Southland rhoticity is variable, being more likely after the NURSE vowel. In other areas, rhoticity is found for specific words such as the name of the consonant 'R', or expressions picked up from American TV and movies. New Zealand hip-hop music has been shown to have fairly consistent non-prevocalic /r/ after NURSE.

/l/ and /r/ tend to be devoiced in initial clusters after a voiceless plosive (e.g. in *please*, *cry*, etc.). /r/ is a fricative after both /t/ and /d/ with voicing matching that of the plosive (try, dry).

Coda /l/ has a notable 'dark' quality, and is frequently vocalised, so that there may be no /l/ at all in *milk*, pronounced [mɪwk], and this vocalised /l/ may even merge with the preceding vowel, giving [mrk].

Dropping of /j/ is variable, but is frequent in *new* (especially in *New Zealand*).

3 Prosodic features

A few words show different lexical stress from RP. For instance, *spectator*, *dictator* and *frustrate* are sometimes stressed on the first syllable.

NZE rhythm is more syllable-timed than other varieties (though not nearly as marked as some varieties such as Singapore English). This is reflected in a more equal weight given to stressed and unstressed syllables, e.g. with full vowels in unstressed syllables.

NZE is well noted for its High Rising Terminal, a rising nucleus high in the speaker's pitch range, on statements. This feature is a positive politeness marker, drawing the hearer into the discourse. NZE also tends to have a relatively 'flat' but high intonation pattern, with extreme and quite sudden nuclear pitch movements.

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