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Are We Still Under England's Spell?[1]

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Abstract
New Zealand writings are usually described as following 'British' norms, and avoiding usage — especially spellings — perceived as 'American'. This paper presents the results of a broad-spectrum survey of spelling variables, comparing a representative sample of written New Zealand English with parallel samples of British and American English. The results confirm that, with a few isolated exceptions, published NZE writings do indeed keep to British spellings.

Principles behind spelling norms
There are several criteria for choosing a 'standard' written form for English words; and these may come into conflict.

- **regular representation of pronunciation**. For example, the spelling of *size* with a *z* implies that the spelling *publicize* should be used rather than *publicise*. Phonetic regularities such as this were the main motivation for Noah Webster's spelling reforms of the late 18th century, which originated many of the current differences between standard British and American spellings. (However, by this criterion alone, the favoured spelling should logically be *publisize*.)
- **regular representation of meaning (or regular morphology)**. Words with meaning units in common should have similar spellings as far as practicable, and conversely, words with distinct meanings should have distinct spellings (even if pronounced the same). This criterion favours the spelling *judgement* (more directly from *judge*) rather than *judgment*, and possibly also *publicise* (by analogy with *publicist*) rather than *publicize*.

[1] Part of this research was presented at the 4th New Zealand National Postgraduate Student Conference (Otago University, November 1997). The present version has benefitted from comments by Laurie Bauer, Gary Johnson and Bernadette Vine. I am also indebted to Andrea Sand, Christian Mair and Laurie Bauer for their assistance in accessing the Frown and FLOB corpora.

- **etymology (derivational history)**. It is sometimes argued that spelling should reflect the word's history: for example, that we should use the spellings *baptize* (from the Greek *baptizein*) but *advertise* (from French *avertissement*). However, this criterion is unworkable in practice, simply because native speakers of English do not know (and cannot be expected to know) word derivations. Moreover, even if we had access to accurate derivations, this criterion would still fail to cover new coinages within English — whether on a Latin base (*publicise*), or not (*Americanise*).
- **consistency (stick with the commonest form)**. This strategy depends largely on what system has already been adopted. Thus for *-iSZe* verbs, in Britain the simplest solution is *-s-* (only *capsize* must be spelt with *-z-*, whereas there are more than 30 verbs like *advertise* where etymology demands *-s-*), while in the USA the simplest solution is always to use *-z-* (permitted by Webster's dictionary, though in practice many American editors reject *advertize* and similar exceptions to the etymological norm).

For most words, one spelling wins out over all others. But where these factors conflict, the outcome may instead be either systematically variable spelling, or else competing standards championed by different institutions or nations. The largest split in spelling standards occurs between 'British English' (BrE) norms — which tend to be more influenced by etymology — and 'American English' (AmE) norms — which often favour the simplest representations of sounds (largely as a result of Noah Webster's reforms). For convenience, I shall contrast characteristically 'AmE' and characteristically 'BrE' variants; but it is important to note that these distinctions are not always absolute. For example, British journalists use *publicise*, whereas *publicize* is used by almost all American editors: but many British academics also use the *z*-spelling (though by reference to etymology rather than phonetics). In practice, the Greek-based etymological norm operates in Britain as a prestige norm (carrying the implication that its users have had a 'proper' classical education), supported by Oxford University Press, but (justifiably) ignored by the majority of the population.

Varieties of English are free to pick and choose from the available standard forms. In particular, Peters & Fee (1989) characterise Australian and Canadian English as displaying "new configurations" of variants drawn from the competing standards. Nevertheless, NZE is usually assumed to favour British norms. Bayard (1995: 210) notes "some signs of a shift toward American-style spelling", but also suggests that the same changes affect BrE.

Differences in spelling, much like differences in accent, are largely cosmetic, with little or no effect on referential meaning. Because of this, they can freely be labelled according to their source, and thus be associated with social judgements regarding that source. As such, to the extent that variation is permitted during the editing process, the distribution of spelling

variants potentially allows the study of language attitudes. In particular, New Zealand usage for variables characterised by differing British and American norms could be interpreted, in part, as reflecting writers' attitudes towards the countries and cultures represented by the competing norms.

The present paper compares spelling choices in NZE with BrE and AmE, using parallel corpora of edited written English.

Method

A. Data sources

Frequencies for selected spelling variants were obtained from five computer-readable corpora of edited written English (Table 1): the Brown University Corpus ('Brown'), representing American English published in 1961; the Lancaster-Oslo/Bergen ('LOB') Corpus, representing British English published in 1961; the Wellington Corpus of Written New Zealand English ('WWC'), representing NZE published in/after 1986; and updates of Brown and LOB compiled by Christian Mair at Albert-Ludwigs-University in Freiburg (hence informally dubbed 'Frown' and 'FLOB' respectively) using texts published after 1990.[2] These corpora each consist of 500 2000-word texts, in a matched stratified sample with fixed proportions representing the text categories Reportage, Editorial, Review, Religion, Hobbies, Popular Lore, Biography, Essays, Official, Academic, and Fiction (see Bauer 1993: 8).

Further matched corpora in this series include the Macquarie University corpus of 1986 Australian English (the Australian Corpus of English, ACE). Some relevant spelling data from ACE is reported in Peters (1995).

Table 1. Corpora compared

Brown	1961 edited written American English (Francis 1964)
LOB	1961 edited written British English (Johansson 1978)
WWC	1986 edited written New Zealand English (Bauer 1993)
Frown	1991 edited written American English
FLOB	1991 edited written British English

[2] All parallel corpora in this series are available on the ICAME CD-ROM (Hofland, Lindebjerg & Thunestvedt 1999). Figures obtained for Frown and FLOB are based on pre-release versions of the corpora, and may differ slightly from the final versions.

In interpreting differences between these corpora, 1961 written NZE is assumed to be identical to 1961 written BrE. (It was *de rigeur* for New Zealand authors and journalists to travel to the UK, and most New Zealand books were still edited and published in Britain, so it would in any case be extremely difficult to separate the two written varieties.) On this basis, differences between LOB and WWC may indicate changes in NZE between 1961 and 1986. However, it would be a mistake to assume that BrE and AmE norms have remained static over that period. Comparisons of LOB and FLOB, and Brown and Frown, offer more direct evidence of change over time in spelling norms; and FLOB provides a closer equivalent for determining whether NZE is still following current British trends. Thus four pairwise comparisons are of particular interest:

- WWC-LOB (possible shifts in NZE);
- FLOB-LOB (shifts in BrE);
- Frown-Brown (shifts in AmE);
- WWC-FLOB (remaining differences between NZE and BrE).

B. Variables

To make useful generalisations about national varieties, it is necessary to consider as wide a range of variables as possible. The present investigation includes all spelling variables distinguishing AmE and BrE which were represented by sufficient data in the available million-word corpora, as listed in Table 2.[3]

C. Quantification

For each variable, a comprehensive list of relevant wordforms in the three corpora was initially derived from wildcard word searches. All, and only, wordforms potentially allowing variation were retained. For rare words where only one variant was attested, the possibility of variation was checked against lists derived from Fowler (1926), Lehnert (1971) and Peters (1995), supplemented by AltaVista searches of the World Wide Web (over 8 billion words — 75-80% following American norms). Concordance lists of the wordforms in context were used to investigate possible institutional and semantic differences between the variants, and to exclude such irrelevancies as foreign words and phrases (French *favorable*, Latin *rigor mortis*), proper nouns (*Honor*, *Louvre*, *Technicolor*, *Stadtheater*), and exact quotations from other varieties and periods of English.

[3] Other possibilities initially investigated were: variable e-retention in words such as *bon(e)y* or *mov(e)able* (commented on below in conjunction with *juDG(E)ment*); *artefact/artifact*; *carcase/carcass*; *plough/plow*; *wag(g)on*; and L-doubling in the stems *appal(l)*, *distil(l)*, *fulfil(l)*, *instil(l)*. See further Carney 1994.

Table 2. Spelling variables distinguishing AmE and BrE

Variable	*'AmE' variant*	*'BrE' variant*
Æ reduction	E (eg *anemia*)	AE (eg *anaemia*)
DG(E)	-DG- (eg *judgment*)	-DGE- (eg *judgement*)
EINquire	*inquire*	*enquire*
EINquiry	*inquiry*	*enquiry*
EINsure	*insure*	*ensure*
ENSCE nouns	-ENSE (eg *defense*)	-ENCE (eg *defence*)
ER/RE	-ER (eg *center*)	-RE (eg *centre*)
grAEy	*gray*	*grey*
homophone mergers[4]	*check, curb, draft, story*	*cheque, kerb, draught, storey*
ISZE	-IZE (eg *criticize*)	-ISE (eg *criticise*)
JAIL	*jail*	*gaol*
L-doubling[5]	-L- (eg *traveler*)	-LL- (eg *traveller*)
LOG(UE)	-LOG (eg *dialog*)	-LOGUE (eg *dialogue*)
LYSZ	-LYZ (eg *analyze*)	-LYS (eg *analyse*)
O(U)L	-OL- (eg *mold*)	-OUL- (eg *mould*)
O(U)R	-OR (eg *color*)	-OUR (eg *colour*)
Œ reduction	E (eg *fetus*)	OE (eg *foetus*)
practiSCe (verb)	*practice*	*practise*
prograM(ME)	*program*	*programme*
S-doubling	-S- (eg *focused*)	-SS- (eg *focussed*)
diSCK	*disk*	*disc*
SCKeptic	*skeptic*	*sceptic*
sulPHFur	*sulfur*	*sulphur*
whisk(E)y	*whiskey*	*whisky*

[4] Only the following meanings are counted: a bank *check*; the noun *curb*; a *draft* of air; a *story* of a building. (Similarly, *insure* is counted only when equivalent to *ensure*.)

[5] Variable doubling of stem-final consonants before affixes with initial vowels occurs in two types of stem: (i) stems ending in a short unstressed syllable (*bias(s)ed*, *target(t)ing*, *travel(l)er*, *worship(p)ing)*; and (ii) stems with (variable) secondary stress on the final syllable (*combat(t)ed*, *handicap(p)ing*, *kidnap(p)er*). It is impossible to generalise across both sets. L-doubling and S-doubling result only from type (i), and show roughly uniform behaviour within each variety; but this is not true for P-doubling or T-doubling.

Results

Overall results for all variables in the three corpora are given in Table 3 (in terms of the percentage of the nominally 'British' variant) and graphed in Figure 1. Based on LOB and Brown, these variables fell roughly into three groups in the 1960s (taking 90% usage as an arbitrary limit for a variant to be considered 'standard'):

(a) **standardised in BrE but variable in AmE:** LOG(UE), *whisky*, Æ and Œ digraph retention, L-doubling, *sulPHFur*, *SCKeptic*, *diSCK*, *EINsure*. Note the surprisingly low use of *-log* variants in Brown, and the difference in behaviour between *EINsure* and *EINquire* (presumably because the 'AmE' form *insure* results in merger and so is more strongly resisted than *inquire*).

(b) **fully opposed BrE and AmE standards:** ER/RE, LYSZ, O(U)L, O(U)R, -ENSCE nouns, *prograM(ME)*, *grAEy*, and the mergers of *cheque*, *draught* (='air current'), *kerb*, and *storey*.

(c) **standardised in AmE but variable in BrE:** ISZE, DG(E), S-doubling, *JAIL*, *EINquire*, *EINquiry*, *practiSCE* (verb).

Standard spellings are convenient for mass media, and receive institutional support. There is often a strong editorial drive towards internal consistency. Hence spelling change usually promotes a standard form, while change away from a standard is resisted. As a result, change in NZE is most likely for group (c) variables, where 1961 NZE would have had no monolithic standard; but it is less likely for group (a) variables, and extremely unlikely for group (b) variables, which have both a clearly-defined initial standard, and a clearly-defined alternative to react against.[6] Conversely, change in AmE is most likely for group (a) variables.

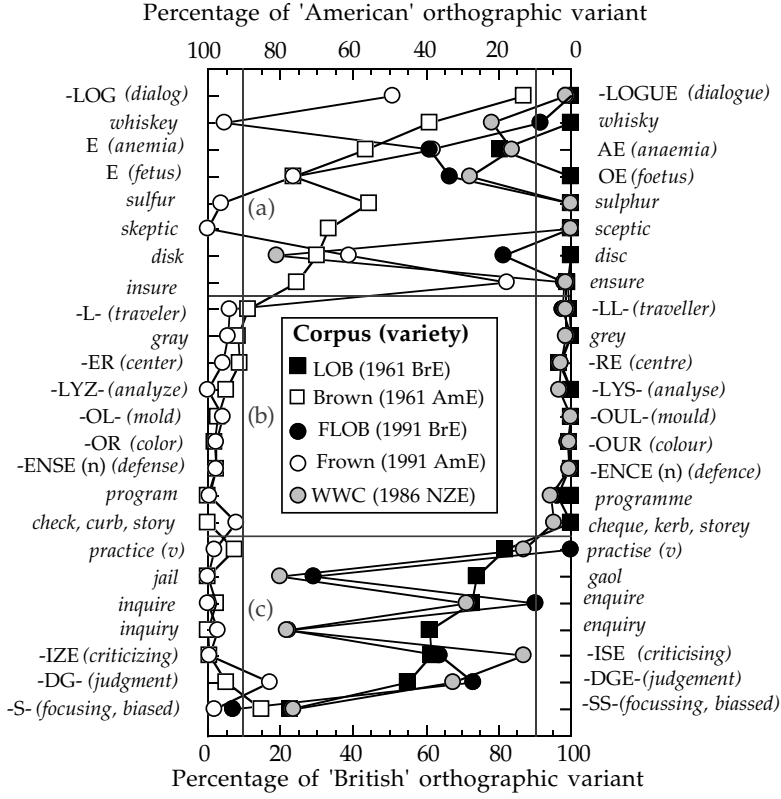
Such predictions are mostly confirmed by the display in Figure 1. The observed changes for group (b) variables are minimal in all varieties. Meanwhile, changes to AmE are most marked for group (a) variables; and, with the exception of *disCK*, large differences between WWC and LOB are limited to group (c) variables. Moreover, in most of the cases where WWC differs from LOB, FLOB provides evidence of a parallel change in BrE.

[6] Categorically 'AmE' variants occur only sporadically in WWC. Only 3 texts (all in the Academic section) contain more than one type of these markers. The two most 'American' texts were, in fact, edited to fit AmE norms (J33, published in *American Speech*, J21 in the *Journal of Clinical Microbiology*).

Table 3. Overall percentages of 'BrE' variants

Variable ('BrE' variant)	*Brown (1961 AmE)*	*LOB (1961 BrE)*	*Frown (1991 AmE)*	*FLOB (1991 BrE)*	*WWC (1986 NZE)*
-LOGUE (eg dialogue)	87.0%/46	100.0%/29	51.1%/131	100.0%/62	98.4%/61
whisk(E)y (whisky)	61.0%/41	100%/13	4.5%/22	91.7%/24	78.3%/23
AE (eg *anaemia*)	43.6%/117	80.6%/191	62.2%/196	61.0%/159	83.7%/141
OE (eg *foetus*)	23.8%/21	100.0%/7	23.5%/17	66.7%/18	72.2%/18
sulPHFur (sulphur)	44.4%/9	100.0%/15	4.0%/25	100.0%/24	100.0%/16
sCKeptic (sceptic)	33.3%/24	100.0%/11	0.0%/32	100.0%/27	100.0%/10
disCK (disc)	30.2%/43	100.0%/21	39.0%/41	81.5%/27	18.9%/53
EInsure (ensure)	24.4%/45	98.8%/83	82.3%/62	98.2%/166	98.6%/139
-LL- (eg *traveller*)	11.0%/272	99.5%/209	6.0%/286	97.7%/311	98.7%/300
grAEy (grey)	8.4%/83	100%/90	5.7%/87	100.0%/61	98.3%/116
-RE (eg *centre*)	9.0%/588	96.8%/431	4.3%/557	97.0%/462	97.1%/548
-LYSE (eg *analyse*)	5.0%/41	100.0%/19	0.0%/66	100.0%/43	96.8%/31
-OUL- (eg *mould*)	3.0%/93	100.0%/34	4.2%/24	100.0%/45	100.0%/47
-OUR (eg *colour*)	2.1%/1456	99.3%/1404	2.4%/1364	99.1%/1133	99.4%/1552
-ENCE (eg *defence*)	2.4%/251	100.0%/209	2.4%/248	99.4%/181	99.3%/295
programme	0.2%/535	100.0%/161	0.5%/614	96.2%/212	94.1%/303
miscellaneous mergers: *cheque, kerb, draught, storey*	0.0%/56	100.0%/19	8.0%/25	100.0%/14	95.2%/21
practiSCe(v) (practise)	7.3%/41	81.8%/44	2.1%/47	100.0%/30	87.1%/62
gaol	0.0%/26	73.9%/23	0.0%/33	29.0%/31	20.0%/20
EInquire (enquire)	2.6%/38	78.0%/41	0.0%/11	90%/20	71.4%/14
EInquiry (enquiry)	0.0%/34	61.3%/62	2.9%/34	22.2%/90	21.8%/87
-ISE (eg *criticise*)	0.7%/1725	61.5%/1359	0.7%/1921	63.9%/1674	86.8%/1489
-DGE- (eg *judgement*)	5.0%/101	55.1%/89	17.2%/128	72.9%/85	67.7%/93
-SS- (eg *focussed*)	15.1%/33	22.7%/22	2.1%/95	6.8%/73	23.7%/59

Figure 1. Frequencies of spelling variants in five corpora



Pairwise comparisons between corpora can be more directly expressed in terms of z-scores (the standard normal variate for the difference in sample proportions, used here as a very rough indication of significance.),[7] as in Table 4 (Figure 2). The conventional level of $p < 0.05$ corresponds to $|z| > 2$; conventionally nonsignificant differences are shaded in Table 4. Negative values of Z correspond to a shift from the 'BrE' variant to the 'AmE' variant.

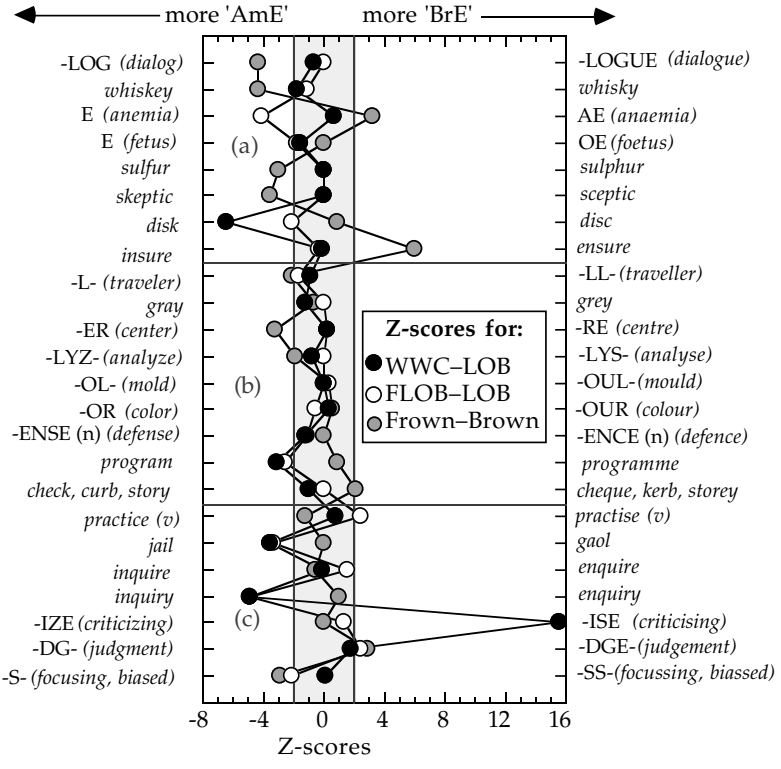
[7] Because spelling choices are usually entirely consistent within each text sample, this test tends to exaggerate significance, so should be regarded as indicative only.

Table 4. Z-scores for pairwise differential comparisons of corpora

Variable ('BrE' variant)	*WWC-LOB*	*FLOB-LOB*	*Frown-Brown*	*WWC-FLOB*
-LOGUE (eg *dialogue*)	-0.683	0.000	-4.282	-1.000
whisky	-1.800	-1.061	-4.338	-1.291
AE (eg *anaemia*)	0.725	-4.053	3.202	4.355
OE (eg *foetus*)	-1.545	-1.736	-0.022	0.358
sulphur	0.000	0.000	-2.986	0.000
sceptic	0.000	0.000	-3.535	0.000
disc	-6.385	-2.078	0.848	-5.410
ensure	-0.126	-0.356	5.991	0.276
-LL- (eg *traveller*)	-0.905	-1.615	-2.124	0.927
grey	-1.242	0.000	-0.689	-1.023
-RE (eg *centre*)	0.272	0.172	-3.176	0.094
-LYSE (eg *analyse*)	-0.785	0.000	-1.839	-1.184
-OUL- (eg *mould*)	0.000	0.000	0.296	0.000
-OUR (eg *colour*)	0.339	-0.566	0.537	0.904
-ENCE (eg *defence*)	-1.212	-1.122	0.000	-0.131
programme	-3.142	-2.500	0.847	-1.072
miscellaneous mergers: *cheque, kerb, draught, storey*	-0.966	0.000	2.160	-0.828
practise (v)	0.751	2.470	-1.171	-2.053
gaol	-3.527	-3.266	0.000	-0.720
enquire	-0.095	1.549	-0.536	-1.403
enquiry	-4.892	-4.878	1.000	-0.064
-ISE (eg *criticise*)	15.518	1.360	0.000	14.783
-DGE- (eg *judgement*)	1.747	2.442	2.839	-0.758
-SS- (eg *focussed*)	0.095	-2.142	-2.846	2.754

WWC shows significant apparent shifts from LOB on 5 variables: iSZe, *jail*, *program(ME)*, *disCK*, and *EInquiry*. Of these, all but iSZe are shifting away from the former British model; but the FLOB data confirms that the British model is itself shifting in the same direction in all of these cases (and significantly so, for all but iSZe). The FLOB figures also suggest a handful of changes to BrE spelling not yet evident in WWC: increased avoidance of *practice* for verbs, avoidance of s-doubling, and reduction of *ae* digraphs. Meanwhile, comparing Frown with Brown indicates several apparent

Figure 2. Differential pairwise comparisons of corpora



changes in progress in AmE: increased standardisation on *-log* forms, *-er* forms, *whiskey*, *sulfur*, and *skeptic*; a decrease in consonant doubling (for both l and s); *ae* digraph retention[8]; and increased differentiation of partly merged forms (ensure, cheque).

Aside from these 'significant' differences (to be examined in more detail below), there is one other trend which suggests a global change in progress. This is the increasing tendency for *judgement* (and similar words,

[8] This is largely because Frown has a disproportionately high frequency of *aesthetic* (one of the few cases where most Americans prefer the digraph: see Peters 1998b: 9)

such as *acknowledgement*, *fledgeling*...) to retain a stem-final -*e*. Significant shifts in this direction are indicated for both BrE (corroborating Bauer's (1994: 135f) study of *judgement* in British newspaper editorials) and AmE. The LOB-WWC difference does not quite reach the conventional significance level, but probably only because it measures change over a shorter period.

Moreover, similar shifts toward *e*-retention also appear for other sets of words, such as adjectives in -*(e)y* (Table 5) and -*(e)able* (Table 6), and a preference for *whiskey* over *whisky*. Such *e*-retention appears to be more frequent, and more generalised, in WWC than in either of the older corpora. However, the FLOB and Frown data shows that e-retention in these environments is a change in progress affecting all three varieties, rather than an identifying feature of NZE. The same preference is also evident in questionnaire data reported by Peters (1998a, 1998b: 11).

Table 5. (E)Y adjectives

Corpus:	*Brown (1961 AmE)*	*LOB (1961 BrE)*	*Frown (1991 AmE)*	*FLOB (1991 BrE)*	*WWC (1986 NZE)*
ey adjectives	5/44 (11.4%)	5/20 (25.0%)	9/41 (22.0%)	16/35 (45.7%)	22/67 (32.8%)
Types attested:	*cagey*	*blimey*	*looney*	*gamey*	*boney*
	lacey	*boney*	*nosey*	*jokey*	*dozey*
	gooshey	*choosey*	*poncey*	*limey*	*jokey*
		horsey	*smokey*	*lovey-dovey*	*looney*
		porridgey	*homey*	*mopey*	*phoney*
				phoney	*poncey*
				pricey	*rangey*
				scaley	*scarey*
				scarey	*spikey*
				shakey	*stoney*
				smiley	*turpentiney*
				winey	

Totals include all, and only, adjectives for which -ey spellings are attested in at least one corpus.

Table 6. (E)ABLE adjectives and derivatives

Corpus:	*Brown (1961 AmE)*	*LOB (1961 BrE)*	*Frown (1991 AmE)*	*FLOB (1991 BrE)*	*WWC (1986 NZE)*
-eabl-	7/89 (7.9%)	24/72 (33.3%)	4/44 (9.1%)	31/65 (47.7%)	19/42 (45.2%)
Types attested:	imburseable nameable rateable sizeable useable	blameable conceiveably likeable mistakeable rateable saleable sizeable	sizeable useable	debateable gradeable handleable likeable moveable rateable rideable saleable shakeable sizeable tradeable	frameable likeable mistakeable moveable rateable saleable sizeable tradeable

Totals include all, and only, stems for which *-eabl-* spellings are attested in at least one corpus, excluding *-ceabl-*, *-eeabl-* —which are invariant — and *-dgeabl-* —see DG(E)

The 5 'significant' differences between LOB and WWC can be treated in two groups:

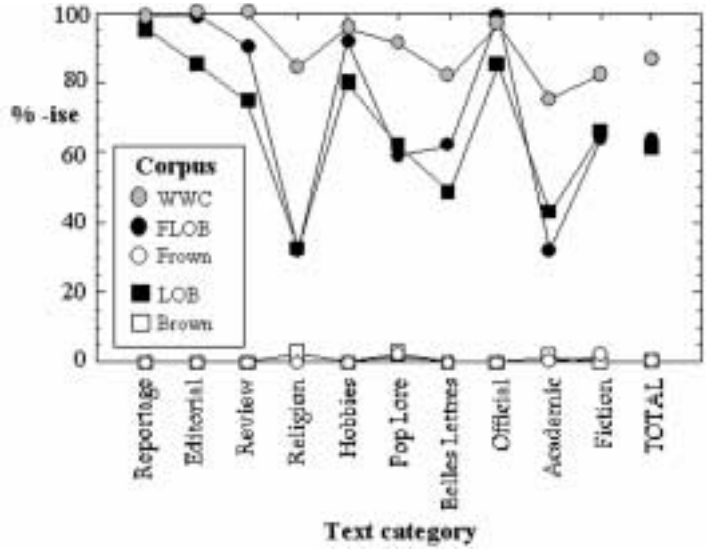
(i) ***JAIL, -ISZE*** — where BrE does not provide an homogenous norm (and, on evidence from FLOB, seems to be changing in the same direction as NZE).

In both cases, the change is linguistically predictable; and in both cases, it has already gone almost to completion in press material (though other texts lag considerably, as shown in Figure 3). The spelling *jail* (used in 19 of 20 occurrences in the FLOB press sections) is a more transparent representation of pronunciation than *gaol*; while the *-ise* variants are increasingly used as the default spelling in British newspapers, as well as in New Zealand (the FLOB press material contains 97.2% *-ise*, compared with 88.3% in the equivalent LOB texts and 99.6% in WWC press) on the basis of maximising consistency.[9] Preliminary figures from ACE (Peters 1995: 405) suggest that

[9] However, in academic texts, FLOB shows a decrease in -ise (32.2%, compared to 42.5% in LOB and 75.5% in WWC).

this change is also affecting Australian English, but is not yet as far advanced as in NZE (for example, 25% of the occurrences of *recognise* in ACE have *-z-*, compared with only 7% in WWC).

Figure 3. ISZE spelling choice by text category



(ii) ***EINquiry, disCK, prograM(ME)*** — where the variants show some differences in domain of use (to some extent resulting from cultural colonisation), which may provide meaning distinctions.

Enquire/enquiry is preferentially used for personal, face-to-face questions, and *inquire/inquiry* for larger-scale official or academic investigations (Table 7). This association could be influenced by AmE usage (since the impersonal domain accounts for most tokens in the AmE corpora); nevertheless it is worth noting that the sole token of *enquiry* in Frown actually has impersonal reference. The domain association has strengthened since LOB, and is evident in both WWC and FLOB. The verb mainly occurs in the personal domain, and so is preferentially *enquire* in all three corpora. (NB: WWC and FLOB contain proportionately more impersonal uses of the noun than LOB, and thus have a higher frequency of *inquiry*. The observed shift in overall spelling frequencies thus reflects a social change towards increased institutional or bureaucratic control, rather than a primarily linguistic change.)

Table 7. Semantic differentiation of EINquire and EINquiry

	LOB		*FLOB*		*WWC*	
EINquire	*enquire*	*inquire*	*enquire*	*inquire*	*enquire*	*inquire*
+personal	30	7	16	0	9	2
–personal	2	2	2	2	1	2
EINquiry	*enquiry*	*inquiry*	*enquiry*	*inquiry*	*enquiry*	*inquiry*
+personal	10	2	5	2	4	2
–personal	28	22	15	69	15	66

The spellings *disk* and *program* are both preferentially used for computer applications (Table 8). Here USA dominance of the computer industry has allowed the 'AmE' forms to become specialised in meaning, and thus to gain entrance into NZE and BrE. The importance of this semantic distinction may be gauged by comparing *disCK* with the same orthographic alternation in *sCKeptic*, where no incursion of the 'AmE' form is observed. Nevertheless, once accepted in this specialised use, *disk* and *program* may spread to other domains of use in NZE.

Table 8. Semantic differentiation of diSCk and prograM(ME)

	LOB		*Brown*		*FLOB*		*Frown*		*WWC*	
disCK	disc	disk	disc	disk	disc	disk	disc	disk	disc	disk
computing	0	0	0	0	0	4	0	2	1	42
music	15	0	11	2	7	0	14	3	4	1
other	6	0	2	28	15	1	2	20	5	0
program(me)	-mme	-m	-mme	-m	-mme	-m	-mme	-m	-mme	-m
computing	0	0	1	20	5	8	0	31	3	15
broadcast	29	0	0	15	74	0	0	18	74	1
other	133	0	3	534	131	0	3	562	210	2

For audio recordings, the *disc* spelling is preferred, even in AmE. The contrast is obvious in the results of an AltaVista WWW search for the phrases *floppy disCK(s)* and *compact disCK(s)* (Table 9). However, with the rise of multimedia CD-ROMs, this distinction between audio and computer domains has already been overtaken by technology, so is probably unstable.

Table 9. Floppy disCK / compact disCK on the World Wide Web

	disc(s)		disk(s)	
floppy _	6707	(4.2%)	152188	(95.8%)
compact _	138475	(84.8%)	24768	(15.2%)

Discussion

These results imply that NZE differs from Australian and Canadian English in having a continued strong attachment to British English norms, and avoiding competing American norms. As a result, NZE has little room to diverge from British spelling norms, and so appears to fit comfortably with Leitner's (1992: 183) prediction that "many smaller E[nglish] N[ative] L[anguage] countries will continue with an exo-normative, native British or American, model for quite some time to come and that their distinctive linguistic features will remain on non-standard levels of speech." Moreover, these divisions seem extremely well-entrenched in the available data. Spelling variation thus appears rather different from lexical choices such as between *biscuit* or *cookie*, and variable pronunciations such as *zed* versus *zee*, where, as Leek & Bayard (1995: 122) report, "Americanization of NZE is proceeding at full speed". But there also, American influence affects isolated lexical items rather than any more systematic phenomena, and in many cases the AmE variants are "gaining admission as apparent natives rather than foreigners" (Leek & Bayard 1995: 123).

Still, NZE spellings might be less stable than they appear on this evidence, and they do not necessarily indicate a pervasive level of anti-American feeling among the New Zealand population as a whole. Firstly, the writings analysed here are now 10 years out of date: the current writing population likely has (proportionately) fewer direct ties to Britain. Secondly, writers are not an especially representative social group. Published writings have an educated middle-class bias, and are likely to be linguistically conservative, so may not yet reflect the recent weakening of political and economic ties as Britain aligns itself with continental Europe. Finally (and perhaps most importantly), these writings have been through an editing process, and may reflect editors' rather than authors' preferences and attitudes. (Editors may tend to be even more linguistically conservative than other middle-class occupational groups.) The link between observed spelling frequencies in published writing, and more general New Zealand attitudes towards the USA, is thus rather tenuous. More direct methods (such as attitudinal questionnaires) will be required to show the continued existence of pro-British and/or anti-American attitudes amongst New Zealanders.

Conclusion

Peters & Fee (1989) claim that Australian and Canadian English should not be thought of as merely following either BrE or AmE practices, but rather as creating new combinations of variants that collectively define and distinguish each variety. But it seems that NZE is still largely following BrE spelling norms, with no systematic influence from AmE. The variables ISZE and DG(E) show exaggerated use of (perceived) BrE variants in NZE in opposition to (perceived) AmE norms: but in both cases, it can be argued that the incoming norm is linguistically preferable. Moreover, British and Australian English are also consolidating on these choices (though for ISZE at least, NZE appears to be in the lead).

The 'AmE' form is being adopted only in isolated cases where the 'BrE' form is already obsolescent (*gaol*), or where the 'AmE' spelling is limited in domain and so acquires a referential function, as in computing (*disk*, *program*) or official processes (*inquiry*). These changes, too, affect BrE as well as NZE, and so are unlikely to be distinguishing features of New Zealand spelling.

Thus NZE is, indeed, still largely "under Britain's spell", at least as far as this implies an opposition to AmE norms. It seems that any "new configuration" separating NZE spelling from BrE will have to involve variables which are not perceived as distinguishing AmE from BrE.

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