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NEW ZEALAND ENGLISH JOURNAL

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Editorial

Welcome to this year's Journal, which will be the last I edit. After seven years in the role, I feel the time has come to hand over to someone else.

One of the pleasures of the role of editor is in being able to encourage and support new and emerging researchers to publish in the field of New Zealand English. This year's issue illustrates that well. Two recent PhD graduates associated with the New Zealand Dictionary Centre at Victoria University of Wellington present papers dealing with aspects of the NZE lexis; Cherie Connor discusses hypocoristics in the language of the sea, and Katherine Quigley investigates metaphor in Government documents. Also in this issue, Mellanie Hodge and Jae Jung Song add to our understanding of grammatical variation in NZE. Finally, this year's issue includes a report by Andreea Calude and Paul James on a work in progress, the construction and application of a new corpus to facilitate future research on our variety of English.

I would like to conclude by thanking all those who contribute to the success of the Journal, both the members of the editorial board and all those who have provided anonymous reviews over the past seven years. So, in no particular order, thanks to Laurie Bauer, Carolin Biewer, Nicola Daly, Alex D'Arcy, Tony Deverson, Katie Drager, Andy Gibson, Elizabeth Gordon, Jen Hay, Janet Holmes, Graeme Kennedy, Jeanette King, Kon Kuiper, Margaret Maclagan, Sharon Marsden, Martin Paviour-Smith, Heidi Quinn, Jane Simpson, Robert Sigley, Derek Wallace, Paul Warren and Catherine Watson for your various input to the journal over the past seven years.

John Macalister
Editor

Recent publications

John Macalister

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Hypocoristics and building the notion of sportsmanship

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Abstract

This paper considers the use of the hypocoristic in New Zealand recreational fishing magazines. It presents a list of hypocoristic forms identified in fishing publications and notes that most of them are names for fish. The paper argues that the application of the -ie/y suffix to fish names extends the solidarity function of the hypocoristic to include marine creatures as part of a group. It is suggested that use of the diminutive suffix, in conjunction with personification, helps to construct fish as willing opponents in a sporting fight.

1. Introduction

Application of the *–ie/y* diminutive suffix is a common means of neologising in many varieties of English. Barbaresi (2001: 316) claims the *–ie/y* suffix is "the most productive and widespread suffix" in English morphology. However, its particular productivity and extended usage in Australian and New Zealand English is well documented (McArthur 2002: 391; Bardsley and Simpson 2009: 49). While Sussex (2004: 1) argues that "no other English runs Australian English even close when it comes to creativity and usage of hypocoristics", Orsman's (1996: iv) reference to the ubiquitous presence of the *–ie/y* ending suggests that New Zealand English may not be too far behind. In New Zealand English, the *–ie/y* diminutive is not restricted to conversation but is increasingly observed in newspapers, magazines and other written documents. For example, a growing number of hypocoristics were present in a recent study of death notices in New Zealand newspapers (Tinkle 2010).

The *–ie/y* suffix is commonly employed in many varieties of English to signal affection, and for interactions with children (Barbaresi 2001). However, within the New Zealand variety of English it also has an extended usage with proper and other nouns. While serving to create a sense of familiarity and informality, it also has a "solidarity function" (Bardsley and Simpson 2009: 54) imparting a sense of friendship and unity between adult speakers. Given

the significant presence of these items in New Zealand English, it is interesting to consider whether they have any additional pragmatic function.

This article comments on the use of the *–ie/y* suffix in recreational fishing magazines. As part of a larger lexicographical study identifying and examining lexical items distinctive to New Zealand English and relating to the sea, hypocoristic forms were collected in a variety of fishing magazines from the 1920s to 2005. It is argued here that neologising via the *–ie/y* suffix has a sociocultural motivation in these publications. That is, it helps to frame the fish as a participant in a fair and friendly battle.

2. Hypocoristics in the Fishing Periodicals

2.1 The recreational fishing periodicals

Three recreational fishing periodicals were used for identifying vocabulary. Firstly, the *New Zealand Fishing and Shooting Gazette (NZFSG*), 1927-1976 was the earliest relevant periodical published. The *Bay of Islands Swordfish and Mako Shark Club* (*BISMC*), 1948-83, provided a long-running data source. *New Zealand Fishing News (NZFN*), 1978- has usurped other recreational fishing magazines and remains a popular publication. Each of these magazines provides informative stories about catching fish, advice on techniques for fishing, and commentary on the how the seasons are progressing. While *NZFN* includes a range of fishing topics and a comprehensive coverage of recreational fishing throughout New Zealand, *BISMC* is more limited in scope, focusing mainly on fishing competitions in selected areas. All three periodicals are characterised by a conversational style.

2.2 Hypocoristics in the recreational fishing periodicals

The *–ie/y* forms presented here were collected as part of a historical lexicographical study which focused on vocabulary distinctive to New Zealand English (Connor 2010). Therefore, the items in the table that follows represent those hypocoristic forms which were identified through lexicographical research as being in some way distinctive to New Zealand English, rather than all such forms present. The tabled items appear at least three times in the written sources examined, in line with historical lexicographical principles which require evidence that a word has wider usage beyond a single person. Hence, the following items are not nonce words, but have written evidence of wider usage.

Table 1: *-ie/y* items present in the recreational fishing magazines[1]

beakie	half-beak
boatie	person who fishes from a boat
bronzie	bronze whaler
doggie	dogfish
flattie	flatfish; flat bottomed boat
humpie	humpback whale
jewie	jewfish
kelpie	kelpfish
kingie	kingfish
livie	live bait
mullety	mullet boat, person who sails a mullet boat
panny	pan-sized snapper
pillie	pilchard
reddie	red cod
schoolie	school snapper
skippie	skipjack tuna
slimie	slimey mackerel
smokie	smoked fish
stripey	striped marlin
swordie	swordfish

A notable feature of these hypocoristic items is that they are most commonly used to name fish. Of the items collected, only a few had non-piscine referents. **Mullety**, and **flattie** both refer to types of boats, while a **boatie** is a

1 The spelling of these words is unstable and seems to alternate arbitrarily between the *–ie/y* options.

person who fishes from a boat. Barbaressi (2001: 318) claims that the *–ie/y* suffix "modifies the speech act as a whole" so that it is not particularly important which word the suffix is applied to. However, in this recreational fishing discourse placement does appear to be of significance, and it is interesting to consider why in these publications the hypocoristic is so frequently applied to fish, rather than for example, the equipment used for fishing (there were no examples of **roddie** for fishing rod). Each of the lexical items in the table above can be seen as an example of lexical innovation. One of the reasons posited for lexical innovation is the need to fill lexical gaps. However, the *–ie/y* forms considered here constitute new labels for established meanings. Therefore, no lexical need is met through their coining and it is necessary to consider the sociocultural motives.

3. Building the notion of sportsmanship

One element to consider is the importance of sportsmanship in New Zealand recreational fishing. A desire to be seen as fair is apparent throughout the history of big game and recreational fishing. When the celebrated big-game fisher Zane Grey criticised the fishing techniques he witnessed while visiting New Zealand and suggested some of them were unsporting, his comments were strongly refuted in the fishing periodicals of the day. Editorials claimed that the methods employed in these waters required all a fisher's "skill and experience … all his resources to outwit the fish" (*NZFSG* 1927 1,2: 10). A fear that the general public have an unfavourable view of sports fishing is apparent in editorial comments such as the following: "the public in general has long held a suspicion that game fishermen were callous, wholesale slaughterers of the giants of the deep" (*NZFZ* 1982 5,3: 20). Such views are dismissed and the sportsmanship of the activity is emphasised. We are told that if inappropriate tackle is used "an enjoyable contest, with an adversary that has more than an equal chance of winning is missed" (*NZFN* 1984 7,7: 8). The desire to be fair is central to the notion of sportsmanship and the editorial line is that a fair battle should be waged upon the fish.

It could be argued that in the recreational fishing magazines examined, a perception of fairness and sportsmanship is aided by the use of particular language features, including the *–ie/y* suffix. The prolific use of the diminutive for fish names functions to create an informal tone and also to draw the reader into a friendly inclusion in the group. But it also manages to establish an affectionate and inclusive stance towards the creature being pursued. The swordfish is a fellow participant in the following: "this 'swordie's' tactics were fairly normal, but twice we thought he was lost" (*NZFSG* 1950 18,4: 22). The flatfish appears an old acquaintance: "one of the

most neglected fish in our coastal and estuary waters to my mind is the good old flattie" (*NZFN* 1979 1,11: 5). There is a feeling of admiration for the kingfish: "and still that gutsy 'kingie' ran and wrestled and fought the hook within" (*NZFN* 1983 5,6: 8). The use of hypocoristics signals a certain affection for or familiarity with the person being spoken with – and in the examples above it has a similar effect. There is a sense that the fish are old friends or valued members of a group.

The effect imparted by the *–ie/y* diminutive is compounded by another feature of the language in these magazines; that is, the fish being chased are male. While boats tend to be "she", the fish in combat are most frequently "he". They are also called "old chap" (*NZFSG* 1929 September: 8), and referred to as a "handsome fellow" (*NZFSG* 1927 November: 15) in early volumes. Later, we can find that a cockabully " is a super-devoted father" (*NZFN* 1981 3,9: 18). Also included in various volumes are wee fellow, noble fellow and little blokes. Fish are moreover, imbued with the ability to act "courageously" (*NZFN* 1979 1, 4: 10) be "gutsy" (*NZFN* 1983 6:5 8) have "mates" (*NZFN* 1984, 7:7 22) and behave "sportingly" (*BISMC* 1980-81: 14). This personification attributes human motivations to the fish and provides a specific way to think and act toward them (Lakoff and Johnson 2003: 33). It allows the fisher to think of the fished as a sporting partner. They are not simply marine life trying to survive. Instead, these fish are men with courage, adversaries to be admired and respected – and incidentally killed. It seems almost an insult to the "good old flattie" that he is "neglected". Painting the fish in such a way, creates the perception that this is an exciting but fair and sporting game among equals, where the fish is complicit in the fight for its life.

As part of the larger study, commercial fishing magazines were also examined for distinctive vocabulary. It is worth noting that while a more formal tone prevails, hypocoristics do appear in the commercial fishing magazines, but are largely restricted to people's names. In the reading of *Commercial Fishing* and *Catch,* for example, no *–ie/y* forms were identified for fish names. In these publications fish are a business and the act of killing is distanced through the language of property. Fish are labelled as **quota**, and **bycatch**. In contrast, in the recreational context, the language does not serve to create a distance from fish as living creatures. Rather, the close proximity of the kill is mitigated by language which imparts an affectionate stance towards a worthy opponent.

4. Conclusion

In the recreational fishing periodicals examined here, the solidarity function of the *–ie/y* suffix, signalling an affectionate link between adults, appears to be extended to include the creatures of the deep. In conjunction with the use of personification, this has the effect of framing the fish as a willing combatant in a friendly fight. Cowie (1998:181) argues that language plays a role in constructing human experience rather than simply reflecting it. From this perspective, language has an impact on how human beings relate to their environment, rather than simply naming what already exists. The use of the hypocoristic in recreational fishing magazines may be seen as helping to shape a particular relationship between the fisher and fished. A relationship is drawn in which they are both participants in a sport, a game which is sporting and therefore acceptable.

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Grammatical variation in New Zealand English: The case of Otago and Southland adolescents

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Abstract

This article reports on grammatical variation among adolescents in Otago and Southland. It also attempts to ascertain, where possible, whether there is any correlation between the observed grammatical variation and extra-linguistic variables such as social class, gender, region and to a less extent, ethnicity. The grammatical features investigated in this article are: (i) participle after the verb *need*; (ii) *youse* as a second personal plural pronoun; (iii) *different from* vs. *different to*; and (iv) double comparatives and superlatives. The findings are: (i) the use of *need* + past participle was widely reported among participants from Southland; (ii) the acceptance of *youse* seemed to correlate with social class; (iii) the non-standard form *different to* was the preferred option for Otago and Southland adolescents; and (iv) double comparatives were judged to be less acceptable in Otago and Southland than reported for North Canterbury and the West Coast, whereas double superlatives were more frequently reported in rural than urban areas.

1. Introduction[1]

This article reports on grammatical variation among year 8 and 9 students from eleven schools in the provinces of Otago and Southland. Thus it follows in the footsteps of previous New Zealand English (NZE) research such as Bauer (1987a and b, 1988, 1989 a, b and c), Hundt (1998), Gordon and Deverson (1985), and Hay et al. (2008) inter alia in documenting NZE

[1] This article is based on MH's MA thesis, completed under JJS's supervision. MH, with JJS's assistance, wanted to develop her thesis into an article (for *NZEJ)*, but unfortunately, this did not happen for a long time because of their other commitments. They have finally managed to find the time to put the article together. It should be noted that the research reported here belongs to MH, and JJS's role is largely that of an editor, although he has undertaken some interpretation of the findings in view of other NZE research. Both MH and JJS are grateful to two anonymous NZEJ reviewers for their helpful comments and suggestions. The article is dedicated to the memory of Donn Bayard, who devoted much of his academic life to NZE research and who also offered valuable input into MH's thesis. Last but not least, words of gratitude must be expressed to the participating schools and students, without whose generosity this research would not have been possible.

grammar. More in common with Bartlett (1992) and Quinn (1995, 2000), however, it deals with grammatical variation within NZE rather than similarities and differences between NZE and other varieties of English (e.g. Bauer 1987b, 2007), and in so doing, it aims to replicate for Dunedin, Otago and Southland the research that Quinn (1995) carried out on the grammatical variation among adolescents in Christchurch, North Canterbury and the West Coast. Moreover, the article attempts to ascertain, where possible, whether there is any correlation between the observed grammatical variation and extra-linguistic variables such as social class, gender, region (i.e. urban vs. rural) and, to a less extent, ethnicity (Pakeha and Māori). The primary purpose of the article is to bring some of Hodge's (2001) findings to a much wider audience, who may be unaware of the existence of, and/or who may not have access to, her unpublished work. There is the need to have such research findings published so that future researchers can have a better or more accurate understanding of what has (not) been investigated and documented in NZE. For instance, Quinn (2000: 194) points out that "only Bauer (1987b: 41) and Quinn (1995) have so far collected any systematic data" on the use of *yous(e)*. Indeed this was one of the grammatical features investigated in Hodge (2001). Moreover, "the number of existing studies on variation in NZE grammar is comparatively small" (Quinn 2000: 173), and this situation does not seem to have since changed much, highlighting the need for studies such as the present one.

For purposes of this article and in the interests of space, a careful selection has been made so as to strike a good balance between those grammatical features that have previously been well investigated and those that have so far received insufficient attention. The rest of the article is organised as follows. In section 2, a brief description will be provided as to how schools and participants were selected and how the questionnaire was decided upon and constructed. Section 3 will discuss the main findings of the investigation. The article closes in section 4 with a brief conclusion.

2. Participating schools, participants and questionnaire

In 1997/8, Hodge contacted schools in Otago and Southland to seek permission to conduct her research in their year 8 and 9 students. These students would come from both co-educational and single-sex schools. They would be aged between thirteen and fifteen and would be of a comparable age to those tested in Quinn (1995). The schools were chosen from Dunedin, Otago and Southland. Choosing schools to participate in the study was, needless to say, constrained by the goodwill of the school in question as well

as time. The following eleven schools kindly agreed to participate, with a total of 328 participants:

Dunedin: Otago Girls' High School (OGHS), Kings High School (KHS), St Hilda's Collegiate (SHC), John MacGlashan College (JMC), and Logan Park High School (LPHS).

Otago Province: Dunstan High School (DHS), Waitaki Girls' High School (WGHS), and Waitaki Boys' High School (WBHS)

Southland Province: Northern Southland College (NSC), Central Southland College (CSC), and Southland Girls' High School (SGHS)

The Socio-Economic Status (SES) decile rating was used to draw inferences about the participating schools' socio-economic areas (and also about the participants' (parents') socio-economic status); the idea of using Elley and Irving's (1985) Socio-Economic Index was abandoned because of the tendency of a number of students to provide blatantly false information about their parents' occupations. The statistical details for the participating schools and participants are presented in Table 1 (i.e. first from Otago and then from Southland, but otherwise in no particular order).

Table 1: Details for schools and participants in this study

school	SES decile	region	urban/ rural	location	type	Māori roll	male	female	total
JMS	10	Otago	urban	Dunedin	boys	1.7%	21	0	21
LPHS	6	Otago	urban	Dunedin	co-ed	6.6%	18	8	26
KHS	5	Otago	urban	Dunedin	boys	10.1%	23	0	23
OGHS	7	Otago	urban	Dunedin	girls	5.0%	0	20	20
SHC	8	Otago	urban	Dunedin	girls	2.3%	0	45	45
DHS	7	Otago	rural	Alexandra	co-ed	9.3%	6	13	19
WBHS	6	Otago	urban	Oamaru	boys	0.2%	23	0	23
WGHS	5	Otago	urban	Oamaru	girls	3.9%	0	11	11
CSC	6	Southland	rural	Winton	co-ed	3.4%	56	27	83
NSC	7	Southland	rural	Lumsden	co-ed	8.0%	14	14	28
SGHS	4	Southland	urban	Invercargill	girls	15.0%	0	29	29

N.B. SES decile ratings and Māori roll percentages based on New Zealand 1995 Statistical Annex

The questionnaire was drawn up to test eight grammatical features (see §3), and was inspired by earlier NZE researchers (Bauer 1987a and b, Quinn 1995 in particular). It was designed primarily to test acceptance rather than actual usages. However, instead of Bauer's (1987a) five-point acceptance scale, the present study opted for Quinn's (1995) three-option questionnaire format (i.e. (a) *(Some) New Zealanders would say this*; (b) I *would say this myself*; and (c) *I would have said* _____). While Quinn's three options seemed to be suitable for ascertaining acceptance levels, it was felt that (a), compared to (b) and (c), was more about reporting on other New Zealanders' usage than about one's own. Thus the following revised three-option questionnaire format was used:

Please tick the option that best describes your use of the above sentence:

[ ] I almost always say this.

[ ] I sometimes say this.

[ ] I never say this.

Change the sentence (if necessary) to the form that you would have used yourself:

As in Bauer (1987a) and Quinn (1995), the participants were also invited to offer corrections or alternatives if they felt that the given form was incorrect or if they would have said it differently. Thus the questionnaire was also designed to collect data on the participants' actual usages. The test sentences used in the questionnaire were drawn largely from Bauer (1987b), Quinn (1995) and Leek (1997), with other test sentences provided by the investigator. There were thirty-six questions in total, involving eight grammatical features, and they were put in random order so that it was not easy for the participants to detect the feature under investigation. The questionnaire was completed in anonymity, as in Quinn (1995). The data were analysed statistically by using the programme SPSS^{X} version 7.0, with the variable subjected to chi-square tests and then both Pearson and Spearman correlation tests. Statistically tested results will be presented in §3, if and when they are of importance to the discussion.

3. Grammatical variables

The eight grammatical features tested in Hodge (2001) were: (1) past tense verb forms (e.g. *sneaked* vs. *snuck*, *dived* vs. *dove*); (2) participle form after the verb *need* (e.g. *The car needs washed* vs. *The car needs washing*); (3) *youse* as a second person plural pronoun; (4) use of subject vs. non-subject pronoun forms (e.g. *between Sue and me* vs. *between Sue and I*); (5) use of prepositions (e.g. *different from* vs. *different to*); (6) intrusive *have* (e.g. *if only I'd have known about the party* vs. *if only I'd known about the party*); (7) double comparatives and superlatives (e.g. *gentler* vs. *more gentler*, and *the prettiest* vs. *the most prettiest*); and (8) *have*-deletion (e.g. *You gotta press the button* vs. *You've gotta press the button*). For the purposes of this article, the grammatical features in (2), (3), (5) and (7) will be taken up in the present section.

3.1 Participle after the main verb *need*

The questionnaire items testing this variable were:

(1) *The car needs washed*.
(2) *The rubbish needs emptied*.
(3) *The carrots need to be cooked*.
(4) *The floor needs cleaning*.

Bartlett (1992: 12) identifies *need* + past participle in (1) and (2) as a grammatical feature probably inherited from Scottish English (cf. Hughes and Trudgill 1987), reporting that the grammatical feature has been attested in both urban and rural Southland, and also outside Southland (i.e. Oamaru in North Otago). Overall, (1) proved to be fairly well accepted with 35% always saying the form, and around 33% reporting that they would either sometimes say or never say the form. When the schools were looked at together, it was easy to see that students from some schools reported a far higher usage than those from others. The schools that showed the highest reported usage were either from Southland or were all boy boarding schools (NSC 39%, JMC 43%, SGHS 61%, WBHS 52%, CSC 34%).[2] These results contrasted sharply with the (other) Dunedin schools (LPHS 4%, OGHS 15%, SHC 18%). Testing for correlations between the usage and gender did not produce any significant results. However, the statistics suggested that females in the Southland and rural Otago area were far more likely to use this variable than those in the urban Otago schools. Moreover, when the results were examined in terms of who changed the Scottish English variant in (1) to the standard one (i.e. *The car needs washing* or *The car needs to be washed*), it was the Dunedin schools that were sensitive to this form. At OGHS, 80% changed the form, as did 73% from LHPS and 59% from SHC. In particular, it was female participants who were more likely to correct the non-standard form (overall, 37% of the females compared to 24% of the males). Sentence (2) had more or less the same acceptability rating as sentence (1). Again, it was the Southland schools that reported the highest usage of the variant, and in particular females, with the probability of this happening by chance at only $p<.007$. What was intriguing here was the increased number of Dunedin participants who reported always saying this form, with 42% of SHC, 30% of OGHS and 12% of LPHS.

[2] The Dunedin boarding schools (e.g. JMC) had a large number of participants who did not say where they came from. Thus some correlations might have been more or less significant if their origins had been taken into account as well. Unfortunately, little could be done about the reluctance of many boarding students to reveal their origins.

Sentence (3) was rated slightly higher than the Scottish English variant overall with 52% reporting that they would always say it and 17% reporting that they would never say it. Far more females reported using sentence (3) than males, with only 10% of the females reporting that they would never say it, compared to 23% of the males. This was statistically significant. The usage appeared to vary from school to school, with three urban Dunedin schools reporting a very high usage of the form (LPHS 73%, SHC 71% and OGHS 75%). The changes that the participants made to the sentence were examined and eight students changed the sentence to the Scottish English variant of *need* + past participle. All eight were females from Southland schools, with four from SGHS and two from CSC.

In contrast, sentence (4) did not have any schools/regions reporting higher use than anywhere else, and in fact, this sentence was rated slightly lower overall than sentence (3), with 50% always saying it and 20% never saying it. The schools with the highest percentage of participants who claimed that they would never say it tended to be from Southland. Males tended to accept (4) less than females, with 24% of the males reporting that they would never say it, compared to 16% of the females. Sentence (4) also had far more participants changing it to the Scottish English variant than sentence (3). Overall, 6% of the participants changed the form, with females (11%) more likely to do so than males. Again, the females from Southland schools were more likely to make the change than the females from Otago.

3.2 *Youse* as second person plural pronoun

The test sentences for this feature were:

(5) *I don't really trust youse*.
(6) *Youse won't win the game*.

For sentence (5), both males and females reported equally (22%) that they would always say this form. Males reported sometimes saying it 4% more than females did, and also slightly more females reported never saying *youse* (41% of the females compared to 37% of the males). The gender differences here were not statistically significant, however. What was significant was that the schools in higher socio-economic areas tended to accept *youse* less. For instance, only 13% of students from SHC reported using it, contrasting with 37% at DHS and 40% at WBHS. Indeed some students from the high-decile schools (i.e. SHC and OGHS) went so far as to comment that "Ewes are out in the paddock eating grass", implying that *youse* was a non-standard form to be avoided. Most of the participants in Bauer (1987a: 41) rejected *yous(e)* in favour of the standard form *you*. In Quinn (1995: 146), in contrast, more than

half of her 179 participants accepted *yous(e)* in at least one of the two test items. Thus the results of this study seem to agree more with Quinn (1995) than with Bauer (1987a) in terms of *yous(e)* usage. While there were very few Māori students in this study (less than 10%), fewer Māori participants (17%) than Pakeha participants (23%) reported always saying *youse*. The Māori participants (45%) were also more likely to report never saying *youse* than the Pakeha counterparts (38%).

Youse as a subject pronoun (i.e. (6)) had a higher number of participants reporting that they would use it than *youse* as an object pronoun (i.e. (5)). Females (22%) were far less likely than males (32%) to report using (6) all the time. More female participants reported that they would never say (6) at 49%, compared to 35% of the males. There also appeared to be a significant correlation between schools attended and the acceptance of *youse*. The two Dunedin all girl schools, namely SHC and OGHS, reported a very low use of this non-standard variant, especially in comparison with all the other schools (e.g. SHC always saying it at well below 10% and OGHS at just over 10%, compared to DHS at just over 40%, WBHS at just under 40% and JMC at well over 30%). Similar numbers of both Māori and Pakeha students reported that they would always say (6) at 21% and 27%, respectively. Similar numbers also reported never saying (6), with Māori at 41% and Pakeha at 42%.

Overall, the present study seems to support Quinn's (1995: 146) conclusion that "socioeconomic status is probably the most important extralinguistic factor influencing the acceptance of *yous*".

3.3 Use of different prepositions with *different*[3]

The two sentences used to test this feature were:

(7) *Your book is different to mine.*
(8) *Your project is lots different from my own.*

Both males and females reported sentence (7) as very acceptable. Slightly more females, at 55%, reported that they would always say (7) than males, at 49%. The number of participants who said that they would always say (8) dropped by around 20% in almost all cases. For example, 61% of LPHS participants reported always saying (7), contrasting with 40% always saying (8), SGHS 72% to 45%, WBHS 68% to 27%, and so on. More females (44%)

[3] The other prepositions investigated in Hodge (2001) included *in*, *on* or *at* (e.g. *in/ on/ at the weekend*; cf. Bauer 1987c) and *off* or *from* (e.g. *I got the games off Tim* vs. *I got the games from Tim*).

reported saying sentence (8) than males (35%) did but this was not significant. What proved significant was the gender of those who changed *from* to *to*. Females (23%) were more likely to make the change than males (8%).
What was also particularly interesting about these two sentences was who made the changes. In sentence (7), only seven students changed *to* to the prescribed preposition *from*. These students were all from Dunedin schools (i.e. four from SHC, two from LPHS and one from JMC). In contrast, sentence (8) had 23% of the females (compared to 8% of the males) changing the standard preposition *from* to the non-standard *to*. Otherwise, there appeared to be no differences between the regions or schools. Incidentally, none of the students changed the preposition, either *to* or *from*, to *than* (i.e. *different than*), which is thought to be a North American English feature.

While *different* is usually used in conjunction with *from* or sometimes with *to* in British English (Trudgill and Hannah 1985: 74), the present study shows that it is the other way round among Otago and Southland adolescents. In fact, it seems safe to conclude that the preposition *to*, not the prescribed preposition *from*, when used in conjunction with *different*, is the preferred form in Otago and Southland schools.

3.4 Double comparatives and superlatives

The test sentences were:

(9) *What is needed here is a more gentler approach.*
(10) *Could you come more earlier?*
(11) *That's the most nicest thing anyone has ever said to me.*
(12) *She was the most prettiest girl in the class.*

Sentence (9) was judged to be very unacceptable by both male and female participants who reported that they would never say it at 74% and 82%, respectively, although OGHS stood out from the rest in that all its participants reported that they would never say (9). Overall, the Dunedin schools were more likely to reject the non-standard double comparative and, with the exception of KHS at 17%, also had relatively high numbers of students changing (9) to the standard form (i.e. *What is needed here is a gentler approach*), i.e. LPHS (27%), JMC (29%), SHC (36%), and OGHS (47%). It was the females that were more likely to make this change at 25%, as opposed to 13% of the males. Sentence (10) was more acceptable than sentence (9), with 29% of the male participants claiming that they would always say it, compared with only 14% of the females. The results were fairly uniform although the all boy schools had higher percentages of participants who reported always saying (9) (JMC 38%, WBHS 48%, KHS 31%).

The changes that were made to the sentences were again the highest in all girl schools, SGHS (66%), SHC (54%) and OGHS (75%). Overall, the females were more likely to change (9) or (10) to a standard form, with 57% doing so, compared with 33% of the males. Thus the correlation between gender and correction of the non-standard double comparatives was strong.

Quinn (1995) also investigated the use of the double comparative among adolescents in Christchurch, North Canterbury and the West Coast, and her results showed, for instance, that 42% of lower socio-economic groups fully accepted sentence (10), and 35% of both males and females accepted sentence (9). Thus Quinn's findings diverge from those of the present study, in which the acceptance level of double comparatives was much lower, e.g. 82% of the females and 74% of the males rejecting sentence (9), although in both Quinn (1995) as well as this study, there was generally greater acceptance of double comparatives by males than females.

As with the double comparatives, the double superlatives were not rated as very acceptable. Only 8% of the females and 11% of the males reported that they would always say *most nicest*. This non-standard double superlative had 62% of the males reporting that they would never say it, with a sightly lower percentage of females at 56%. Three Dunedin schools had high percentages of students reporting never saying (11) (LPHS 77%, JMC 74% and OGHS 80%), although the other schools did not show such marked results. It was the females who changed the non-standard double superlative in (11) to the standard form (i.e. *the nicest*) far more often than the males at 52% and 25%, respectively. Thus once again, there was a strong correlation between gender and the correction of the non-standard to the standard form, with all girl schools showing the strongest tendency to do so, i.e. SGHS (69%), SHC (58%), OGHS (75%) — along with co-ed LPHS (62%).

Sentence (12) also revealed a strong correlation between gender and usage. Males were three times as likely to accept (12), with 30% reporting that they would always say it, contrasting with only 9% of the females. Again, this was reflected in the response by all girl schools (and interestingly enough, LPHS also) showing a higher number of participants rejecting the non-standard form. Again, the females were more likely to change (12) to the standard form at 54%, compared to 23% of the males. Sentence (12) was taken from Quinn (1995), and the findings of this study do not diverge from hers in that it had a very low acceptability rating among the females as opposed to the males.
While Quinn (1995) found that the lower socio-economic groups were more likely to use double comparatives and superlatives, there is nothing in the present study to suggest a correlation between social class and the acceptance

of double comparatives and superlatives. If anything, the usage in question may not have so much to do with social class as with the degree of being urban or rural, since students from Dunedin schools tended to reject double comparatives and superlatives more often than those from the other schools (i.e. Dunedin being more urban than all the other locations included in this study).

4. Conclusion

The acceptance of the Scottish English form *need* + past participle was widely attested among participants from Southland and also from all boy boarding schools (probably because of students originating from Southland). *Youse* was more preferred as a subject than an object pronoun. The acceptance of the non-standard second person plural pronoun seemed to correlate strongly with social class, with female students in higher SES decile schools more likely to reject the form than students from other schools. The preposition *to*, not the preposition *from*, when used in conjunction with the adjective *different*, clearly was the preferred form among Otago and Southland adolescents. Double comparatives were less accepted in Dunedin, Otago and Southland than had been reported by Quinn (1995) for Christchurch, North Canterbury and the West Coast. Double superlatives, in contrast, were judged to be more acceptable than double comparatives, albeit more so in rural than urban areas. Also noteworthy is the fact that female students were generally more likely than male students to make corrections or offer alternative forms.

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Terms of physical motion as a metaphor for economic change[1]

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Abstract

Some of New Zealand's government documents are surprisingly rich in figurative language. The extent to which metaphor is employed by Treasury writers, for example, is particularly noticeable. This paper presents the main metaphor used in the Treasury's Briefings to the Incoming Governments during the ten year period of 1984 - 1994. It will be seen that the Treasury used the metaphorical construct of physical motion to represent changes taking place at this time in the national and international economies.

1. Introduction

In the context of New Zealand Treasury documents from the decade of 1984 – 1994, one metaphor stood out as of striking importance, as measured by both frequency of occurrence and quantity of discrete linguistic instantiations: namely figures of speech associated with physical motion. These metaphors are powerful and often-used tools for talking or writing about economics, which can be found in the business section of any daily newspaper, yet have been little recognised or studied to date. Apart from the physical motion metaphor, a number of others occurred in the Treasury corpus of just under one million words. They are equally colourful and expressive, but are minor players in the discourse of economics when compared to that of physical motion. One of those minor metaphors however is important to mention here as it sets the context for what follows. The idea of the economy as a machine arose in the seventeenth century, and was found to be reasonably frequently instantiated in this dataset. This particular metaphor is obviously closely associated with the use of language drawn from the laws of motion which is the subject of this paper.

[1] This article is based on one published in 2007 as "The Metaphors of Economic Change", in *Wellington Working Papers in Linguistics* 18: 1 – 30.

2. Identification of Metaphors in the Dataset

This section addresses the question of how the metaphors in this dataset were identified in the first place. In the words of Cameron (1999:105), "Applied metaphor studies cannot avoid the issue of rigorous identification of metaphorical, in contrast to non-metaphorical, language. Identification through defining, by setting up necessary and sufficient conditions for metaphoricity, produces apparently insuperable problems; identification through knowing and describing, in the manner Wittgenstein suggests, would seem a more promising approach." That said, Cameron nevertheless goes on, having formulated the identification question as "*Is X a metaphor*?, where X is a stretch of language in a particular discourse context" (1999:107), to attempt to produce a definition of metaphor, or a list of necessary conditions for linguistic metaphoricity, as follows.

> A stretch of language is said to be a linguistic metaphor if:
> N1 it contains reference to a Topic domain by a Vehicle term (or terms) and
> N2 there is potentially an incongruity between the domain of the Vehicle term and the Topic domain and
> N3 it is possible for a receiver (in general, or a particular person), as a member of a particular discourse community, to find a coherent interpretation which makes sense of the incongruity in its discourse context, and which involves some transfer of meaning from the Vehicle domain. (1999:118).

These principles have been adopted for the purposes of this study. The metaphor described in this paper meets Cameron's criteria of domain incongruity and potential transfer of meaning. It will be seen that its lexical instantiations "include at least one lexical item (the Vehicle term) referring to an entity, idea, action etc. (the Topic), and that the Vehicle term belongs to a very different, or incongruous, domain from the Topic" (Cameron, 1999:107). It is noted that what Cameron refers to as incongruity between the topic and the vehicle, other writers on metaphor (Ortony, 2001:10) have termed *tension*, which is also a helpful term in trying to explain this as yet not fully understood aspect of language.

3. Methodology and Validation

Having defined the pre-conditions for identifying metaphors in this dataset, the next question is how this was done, and how the process was validated. For this study the researcher examined the texts and decided what was and

was not metaphorical. Low (1999:49) has described this method as the most common approach to metaphor identification. Its advantages are "ease and speed" and that "it is possible to be highly responsive to the text being studied and to bring a wide range of experience from areas such as linguistics and literature to bear concurrently on identification decisions. There can, however, be serious dangers with unilateral identification. For example, there is always going to be a measure of subjectivity or randomness in identifying expressions which are not actually referred to…as metaphoric.…A second danger involves a recency effect; metaphor researchers are likely to have a heightened sensitivity to metaphors with which they have been working in the recent past. This may lead to consistently *over*-interpreting expressions which are only peripherally relatable…to the metaphor concerned" (ibid.).

These two possible drawbacks were borne in mind throughout the course of this study. To counter the first one, a validation procedure was applied whereby a sample document from the dataset was given to an experienced colleague to read and mark all the metaphors noticed. The results demonstrated a high level of agreement between the researcher and the second reader as to what was metaphoric, and so confirmed the findings described in this paper. To counter the second danger mentioned by Low, the lists of metaphors which follow underwent several purges of any terms which could be considered only peripherally related to the metaphor of physical motion. These decisions as to which terms to include are discussed in detail below each part of speech list.

Low also raises two problems relating to familiarity, namely that increasing familiarity with specific terms could lead to those words being perceived as progressively less metaphoric and so becoming decreasingly tagged the more the researcher encounters them, and the opposite scenario whereby frequent repetition of certain lexis within a text might in fact heighten its salience and cause the researcher to become increasingly aware of its metaphoric nature (1999:50). Another issue is the fact that the more the researcher reads the text, the more metaphors tend to be identified – thus the number of readings and the time spent reflecting on the text could become variables to be taken into account (Low, *ibid*.). This researcher was certainly aware of these possibilities as this dataset was examined, and it is acknowledged that all these eventualities were potentially applicable to this study. Every effort was consciously made to treat jargon words and high frequency items consistently throughout the dataset. Documents were deliberately read carefully but only once, to avoid an increasing familiarity effect.

4. Terms of Physical Motion as a Metaphor for Economic Change

It is interesting that while the Treasury *Briefings to Incoming Governments* from 1984 – 1994 are relatively rich in figurative language, their *Annual Reports* and *Corporate Plans* for the period contain almost none. The section below deals with by far the most striking image to emerge from a complete reading of this document type across the ten years: the use of the lexis of physical movement to express change in the economic domain. This phenomenon was first noticed, and pointed out in passing, by Kennedy in an article on first language processing in 1978, and Lakoff (1987:321) makes this one brief mention of it: "For example, the MORE IS UP metaphorical model constitutes conceptual scaffolding for, say, discussions about economics – price rises, depressions, downturns, etc." However apart from these two cursory references, no one seems to have taken the idea up or studied it in any depth. Deignan (1999:196) when discussing future possibilities for metaphor research, wrote that more genre studies of metaphor which analyse a very specific type of text such as business, law or politics, would be useful. It is hoped that the empirical data in this paper will make a useful contribution to existing knowledge in the field of metaphor research.

Lists follow of all the lexical instantiations by which this conceptual metaphor is realised in this dataset. The metaphor lists are arranged by part of speech as used in the original context, with the largest category, which as might be expected, is verbs of motion, first, then nouns, adjectives and adverbs in decreasing order of frequency. These words have only been collected if they were used in a metaphorical sense, and if they also occurred in a context relating to economic change, i.e. to money in real terms, or to funding models or systems. Where words to do with motion occurred either literally or metaphorically but in a more general context, i.e. unrelated to economic change, they have not been included in the following lists. An example of this is *labour shedding*; *shedding* was not included in the list of nouns of motion which follows because in this context it was labour being shed, not funds or loans.

References are to the New Zealand Treasury *Briefings to the Incoming Government (BIGS)* unless otherwise labelled as from an *Annual Report* (*AR*), and give the year of publication, volume if relevant, chapter, and page number.

4.1 Verbs

accelerate *v.i.* (90.1.9)

accelerate *v.t.* (87.I.4.203)

advance *v.i.* (84.2.14.313)

advance *v.t.* (91.*AR*.58)

arise *v.i.* (87.II.10.272)

arrest *v.t.* (87.I.4.207)

attract into *v.t.* (87.I.4.196)

balance *v.t.* (87.II.10.271)

bind *v.t.* (84.2.4.154)

boost *v.t.* (87.I.6.363)

bottom out *v.i.* (87.II.1.11)

break away from *v.i.* (87.II.1.9)

break down *v.i.* (87.II.6.195)

broaden *v.i.* (93.2.32)

broaden *v.t.* (90.1.9)

bundle *v.t.* (87.II.6.178)

bundle together *v.t.* (87.II.10.271)

capture *v.t.* (87.I.2.114)

channel *v.t.* (84.2.5.163)

close down *v.i.* (90.2.20)

close off *v.t.* (87.I.4.202)

constrain *v.t.* (87.I.4.195)

construct *v.t.* (87.II.10.294)

contract *v.i. & v.t.* (84.1.3.57)

counterbalance *v.t.* (87.II.6.196

cram *v.i.* (87.II.6.196)

crowd out *v.t.* (84.2.7.176)

curb *v.t.* (84.2.3.136)

cushion *v.t.* (84.2.1.104)

cut *v.t.* (90.1.4)

cut back *v.t.* (90.3.35)

dampen *v.t.* (84.2.1.104)

decelerate *v.i.* (87.I.6.391)

decentralise *v.t.* (87.II.6.193)

decline *v.i.* (90.2.17)

deliver *v.t.* (87.I.2.94)

depress *v.t.* (84.2.3.135)

destabilise *v.t.* (84.2.7.182)

devolve *v.t.* (87.I.2.91)

disburse *v.t.* (87.I.2.91)

disinflate *v.i.* (87.I.4.204)

displace *v.t.* (84.2.7.176)

distort *v.t.* (87.I.4.201)

diverge *v.i.* (84.2.5.165)

divert *v.t.* (84.2.15.321)

divert into *v.t.* (87.I.4.196)

double *v.i.* (87.II.1.11)

draw away *v.t.* (84.2.4.153)

draw out *v.t.* (84.2.3.137)

drive *v.t.* (87.I.6.372)

drive down *v.t.* (90.9.154)

drive out *v.t.* (87.I.2.105)

drop *v.i.* (84.2.7.184)

drop *v.t.* (84.2.6.171)

drop back *v.i.* (90.2.15)

drive up *v.t.* (84.2.3.137)

ease back *v.i.* (84.2.3.140)

ease-out *v.t.* (87.II.9.262)

ease up *v.t.* (84.2.3.137)

emerge *v.i.* (84.2.1.108)

enter *v.i.* (84.2.11.236)

erode *v.t.* (84.2.5.159)

escape *v.t.* (90.3.32)

evaporate *v.i.* (93.5.99)

even up *v.i.* (87.II.6.196)

exercise *v.t.* (84.2.3.139)

exit *v.t.* (93.3.58)

expand *v.i.* (87.I.6.373)

expand *v.t.* (87.I.6.366)

fall *v.i.* (84.1.3.56)

fall back *v.i.* (93.2.31)

fall behind *v.i.* (93.1.11)

fall off *v.i.* (87.I.4.209)

feed through to *v.i.* (87.II.6.196)

flatten out *v.i.* (84.1.3.55)

float *v.i.* (84.2.3.137)

float *v.t.* (87.I.4.197)

flow *v.i.* (87.II.10.273)

fluctuate *v.i.* (84.2.6.171)

freeze *v.t.* (84.2.3.140)

go *v.i.* (87.I.2.93)

grapple *v.i.* (90.1.2)

grapple with *v.t.* (93.1.26)

group *v.i.* (87.I.2.94)

grow *v.i.* (84.2.4.146)

halt *v.i.* (87.I.6.365)

halt *v.t.* (90.2.17)

hamstring *v.t.* (84.2.1.106)

hold *v.t.* (84.2.9.208)

hold down *v.t.* (87.I.2.101)

hold up *v.t.* (84.1.3.56)

impact on *v.t.* (84.2.4.153)

impede *v.t.* (87.I.2.90)

increase *v.i.* (84. 2.3.140)

increase *v.t.* (84.2.3.137)

interpose *v.refl*. (87.II.10.272)

invert *v.t.* (87.I.4.204)

lag *v.i.* (87.II.5.144)

lag behind *v.t.* (87.II.9.268)

lean against *v.t.* (90.1.13)

leave *v.i.* (84.2.11.236)

lengthen *v.i.* (84.2.11.236)

level off *v.i.* (87.I.6.366)

level out *v.i.* (87.I.6.390)

level up *v.t.* (87.II.5.149)

lift *v.t.* (84.2.4.154)

loosen *v.t.* (90.4.44)

lower *v.t.* (84.2.3.139)

lump together *v.t.* (90.7.86)

mesh *v.i.* (87.II.10.289)

moderate *v.t.* (84.1.3.59)

move *v.i.* (84.2.1.108)

move away from *v.i.* (87.I.2.102)

move back *v.t.* (90.1.8)

move up *v.i.* (90.4.42)

narrow *v.i.* (93.1.25)

narrow *v.t.* (87.I.2.103)

offset *v.t.* (87.I.2.102)

open up *v.i.* (84.2.11.236)

outstrip *v.t.* (90.1.9)

overlap *v.i.* (90.9.147)

pass *v.i.* (87.I.2.97)

peak *v.i.* (87.II.1.11)

phase-in *v.t.* (87.II.9.263)

pick up *v.i.* (90.2.24)

pitch *v.t.* (87.II.9.261)

plug *v.t.* (84.2.10.210)

point *v.i.* (87.I.6.386)

precipitate *v.t.* (87.I.4.204)

protect *v.t.* (84.2.1.107)

pull *v.t.* (90.1.5)

pursue *v.t.* (84.2.8.195)

push forward *v.t.* (87.I.4.205)

push up *v.t.* (90.4.42)

raise *v.t.* (84.2.4.142)

ratchet up *v.t.* (84.2.1.112)

rebalance *v.t.* (90.1.6)

rebuild *v.t.* (87.I.6.366)

reconstruct *v.t.* (87.I.2.100)

redeploy *v.t.* (87.II.9.262)

redirect *v.t.* (84.2.4.151)

reduce *v.t.* (84.2.3.140)

re-emerge *v.i.* (90.1.13)

relax *v.t.* (87.I.2.88)

release *v.t.* (84.2.11.235)

remove *v.t.* (87.II.10.277)

restrain *v.t.* (84.2.4.143)

restrict *v.t.* (84.2.4.154)

restructure *v.t.* (87.I.2.101)

retard *v.t.* (87.I.4.194)

reverse *v.i.* (87.I.4.213)

reverse *v.t.* (90.1.5)

revert *v.i.* (87.II.9.262)

revolve *v.i.* (84.2.5.165)

rise *v.i.* (87.I.4.201)

roll back *v.t.* (84.2.8.196)

run *v.i.* (87.I.4.206)

run *v.t.* (84.2.7.179)

run down *v.t.* (87.I.6.366)

scale down *v.t.* (90.3.35)

scrap *v.t.* (90.2.20)

separate *v.t.* (87.I.2.100)

set *v.t.* (87.I.2.101)

shape *v.t.* (90.3.32)

shed *v.t.* (84.2.14.310)

shield *v.t.* (90.3.36)

shift *v.i.* (87.I.4.202)

slip back *v.i.* (84.1.3.55)

slot into *v.t.* (87.II.10.289)

slow *v.t.* (84.1.3.55)

slow *v.i.* (87.I.2.120)

slow down *v.i.* (87.I.4.205)

smooth *v.t.* (84.2.7.182)

split *v.i.* (93.1.13)

split up *v.t.* (87.I.2.108)

spread *v.i.* (87.I.4.202)

spread *v.t.* (87.I.4.210)

squeeze *v.t.* (87.I.6.390)

stabilise *v.i.* (87.I.6.391)

stall *v.i.* (90.4.42)

stand up *v.i.* (87.I.4.192)

stretch *v.t.* (93.1.11)

strike *v.t.* (90.1.11)

subside *v.i.* (84.2.4.147)

support *v.t.* (90.1.4)

suppress *v.t.* (84.2.3.134)

surge *v.i.* (93.2.31)

switch *v.t.* (84.2.11.245)

target *v.t.* (90.1.3)

thrust *v.t.* (87.I.2.113)

tighten *v.t.* (84.2.3.137)

tip over *v.i.* (90.2.29)

transfer *v.t.* (84.2.13.293)

treble *v.t.* (87.II.10.269)

trigger *v.t.* (01.5;*AR*)

turn *v.i.* (87.II.6.177)

turn down *v.i.* (84.2.11.234)

uncover *v.t.* (90.4.42)

unwind *v.i.* (90.2.24)

weigh *v.t.* (87.II.10.273)

widen *v.i.* (84.1.3.57)

wind down *v.i.* (90.2.24)

In the above list there is a subgroup of verbs slightly different in that they may not directly consist of active movement, but they cannot exist without movement. They act in a negative sense to stop, slow or redirect physical motion, and for this reason they have been included in the list. These verbs are *arrest, curb, constrain, cushion, divert, freeze (v.t.), grapple (with), halt, hamstring, hold, impede, restrain, restrict, retard* and *stall*.

A second subset of the verbs listed above is that involving the notion of balance. To be consistent with the "stopping" verbs just mentioned and because some movement is a prerequisite for all of these words too in order to reach an equilibrium, they also have been included here. These verbs are *balance, counterbalance, rebalance, stabilise* and *weigh*. In their semantic notion

they are linked to the set of *level off, level out* and *level up*, and *flatten out*, also in the list. A pair to do with cohesion (*bind*) and dissolution (*erode*) have also been included in the above list as involving some movement.

In addition to these, there were many other verbs in the Treasury *BIG*s which could have been construed from their context as related to movement, but in the end were not included in this list because they were not clearcut cases. Examples of such verbs are *absorb* (84.2.8.198), *conceal* (84.2.1.104), *perform* (87.I.2.102), *reinforce* (84.2.7.181), *underlie* (v.t.) (90.1.9), *undermine* (84.2.7.175), *underpin* (v.t.) (90.1.10) and *weaken* (v.i.) (90.2.24). Interestingly, several of these have to do with the notion of physical strength of structures. The related notion of tensile strength is another similar domain, and accordingly the word *tightness* (84.2.4.154) was omitted from the list of nouns which follows (although *tightening* was included, as the gerund more definitely conveys the feeling of movement). As these examples show, it is sometimes difficult to determine what constitutes motion and what does not, but in the end it was decided to draw the line at verbs like these, which indubitably do include some physical movement, but where that is so slight as to be tangential to the word's primary meaning. Cameron (1999:107) discusses the problem of differential metaphoricity, namely the gradedness of metaphor and the fact that some metaphors are more metaphorical than others – as can be seen in this study, the same also applies to the various lexical instantiations within each metaphor.

4.2 Nouns

acceleration (84.1.3.57)

action (84.2.7.177)

adjustment (90.3.32)

bind (84.2.5.167)

blow-out (93.1.9)

blunting (87.I.2.105)

boost (87.I.6.387)

bottoming out (84.1.3.57)

bounceback (84.1.3.57)

break (90.2.28)

break-up (90.9.149)

broadening (90.6.77)

build-up (84.1.3.56)

carriage (meaning "carrying")(87.I.2.105)

carrier (87.I.2.106)

carry over (87.I.6.388)

clash (84.2.10.212)

collapse (84.2.4.147)

containment (87.I.2.101)

contraction (84.2.5.158)
creep (90.6.80)
crowding out (84.2.7.174)
cut (84.2.7.176)
cut-back (87.I.6.362)
cutting (84.2.15.320)
decline (84.1.3.55)
decrease (84.)
deepening (84.2.5.168)
deflation (87.I.4.202)
deflator (87.I.4.208)
delivery (87.I.2.88)
deposit (84.2.4.154)
devolution (87.I.2.92)
disinflation (84.2.2.132)
dismantling (90.3.32)
divestment (87.I.2.100)
downturn (84.2.3.136)
drain (84.2.5.162)
drift (87.II.6.196)
drop (84.1.4.69)
dynamics (84.2.11.235)
dynamism (87.II.5.126)
easing back (84.2.1.104)
elasticity (87.II.9.259)
emergence (90.1.9)
entry (84.2.4.156)
equilibrium (84.2.5.158)
evening out (87.I.4.193)
expansion (84.2.1.103)
extraction (87.I.2.105)
fall (84.2.4.146)
fall-off (84.1.3.56)
feed-through (93.2.35)
flattening (87.I.4.205)
flexibility (84.2.4.153)
flight (87.II.5.149)
float (84.2.5.167)
floating (84.2.5.168)
flow (84.2.4.145)
fluctuations (84.2.1.105)
freeze (84.2.1.105)
freezing (84.2.5.165)
growth (84.1.3.55)
imbalance (84.2.1.103)
impact (84.2.2.133)
increase (84.1.3.56)
inflation (84.2.3.140)
inflow (84.2.3.137)
input (87.I.2.100)
instability (84.2.7.175)
integration (90.3.32)
lengthening (87.I.4.196)
levelling down (87.II.5.128)
levelling off (87.I.6.367)
levelling up (87.II.5.128

lift (84.2.1.103)

lowering (84.2.5.161)

manoeuvre (87.II.6.195)

mobility (84.2.15.317)

move (84.2.4.154)

movement (84.2.1.107)

narrowing (87.II.10.287)

opening (87.II.9.268)

opening-up (87.II.9.267)

outflow (84.2.4.152)

output (84.1.3.57)

outturn (84.1.4.69)

overlap (87.I.2.107)

overrun (90.3.34)

pace (84.2.12.249)

peak (84.)

pick(-)up (84.1.3.57)

placement (90.1.11)

pressure (84.2.2.132)

progressivity (84.2.10.216)

quadrupling (87.II.1.11)

raising (84.2.3.140)

rapidity (84.2.7.181)

rate (84.2.3.135)

reconstruction (87.I.2.103)

redeployment (87.II.9.264)

reduction (84.2.5.161)

relaxation (87.I.2.94)

removal (84.2.11.237)

restructuring (90.2.21)

resurgence (84.2.1.103)

retrenchment (84.2.1.107)

reversal (84.2.1.105)

reversion (94.*AR*.5)

rise (84.2.5.159)

rollback (90.3.34)

rollout (01.48;*AR*)

run (84.2.4.147)

rundown (84.1.3.56)

separation (87.I.2.88)

shift (84.2.5.164)

shifting forward (84.2.1.104)

slippage (87.I.4.204)

slowdown (87.I.4.205)

slowing (84.2.7.175)

slowing down (87.I.2.105)

speed (84.2.5.163)

spiral (84.2.5.159)

squeeze (84.2.3.139)

stabilisation (84.2.7.178)

step (84.2.10.217)

stoppage (90.9.152)

streaming (87.II.5.135)

swing (84.2.3.134)

takeover (84.2.13.293)

targeting (90.1.9)

tightening (84.1.3.56)
transfer (87.II.10.277)
transition (87.I.2.93)
transmission (87.I.2.105)
turnaround (84.)
upsurge (84.)
upswing (84.1.3.59)
uptake (84.2.3.135)
upturn (84.1.3.57)
volatility (84.2.11.237)
widening (84.1.3.56)
wind-down (87.I.6.377)
wind-up (01.54;*AR*)
yield (84.2.4.155)

4.3 Adjectives; Nouns, Past and Present Participles Used Attributively

accelerated (87.I.4.191)
accelerating (84.2.1.105)
active (84.2.4.154)
arising (87.I.2.96)
attacking (84.2.3.134)
binding (84.2.4.153)
buoyant (84.1.3.56)
centripetal (87.II.4.100)
contractionary (84.2.3.139)
crash (90.6.77)
crawling (84.2.5.166)
cyclical (84.1.3.59)
decelerating (87.I.6.391)
declining (84.1.3.59)
decreasing (87.II.10.270)
deep (downturn) (87.I.4.203)
depressing (84.2.1.115)
destabilising (84.2.7.177)
developing (87.II.9.259)
distorting (90.1.8)
down (87.I.6.388)
downward (84.2.5.159)
downwards (84.2.3.141)
driving (84.)
dropping (84.)
dynamic (87.I.2.98)
escalating (84.2.3.135)
expanding (84.1.3.59)
expansionary (84.2.3.141)
falling (84.1.3.61)
faster (87.I.4.195)
fastest (84.2.8.199)
fixed (84.2.3.134)
floating (84.2.3.134)
flow-on (84.2.4.146)
forward (84.2.5.163)

growing (84.2.5.161)
higher (84.2.5.162)
impacted (84.2.1.107)
increasing (84.2.1.103)
inflationary (84.2.5.159)
inward (84.2.5.163)
levelling off (84.1.3.55)
loosening
low (90.1.7)
lower (87.I.2.103)
lowest (87.I.2.102)
oriented (90.1.9)
output (90.7.86)
outreach (01.60;*AR*)
outward (84.2.5.163)
overarching (90.1.8)
portable (87.I.2.92)
quick (90.1.3)
rapid (84.1.3.56)
reinforcing (84.2.1.105)
revolving (87.I.2.83)
rising (84.2.5.169)
running (87.I.4.189)
simultaneous (action) (87.I.4.197)
slow (84.2.1.103)
slowing (84.)
spiralling (84.2.3.135)
squeezing (84.2.3.136)
stabilising (84.2.7.177)
stable (84.2.3.59)
stagnant (84.2.15.321)
static (84.1.3.59)
stationary (84.1.3.57)
suppressed (87.I.4.201)
uneven (pace) (87.I.4.209)
upward (84. 2.2.132)
widening (84.2.8.195)
winding down (84.)
wrap-up (01.50;*AR*)

In this list the words *centripetal, cyclical, revolving, rollback, rollout* and *spiralling* form a subset relaying circular motion: a metaphor within a metaphor. The other feature of this list is that, predictably perhaps, terms of pace are far more evident than in any other part of speech. While the verbs earlier included the six items *accelerate*, *decelerate, lag behind*, *overtake, pass* and *run,* and the nouns *acceleration, pace, rate*, *slowing down* and *speed*, here the adjectival forms have a far higher ratio of terms related to the pace of physical motion. So although they are a shorter list, they include *accelerated, accelerating, decelerating*, *escalating, faster*, *fastest*, *quick, rapid, running, slow, slowing, static, stationary* and *uneven pace.* A similar proportion of terms related to speed can be seen in the adverbial class following.

4.4 Adverbs

at a moderate pace (87.I.4.195)
at a much faster pace (87.I.4.195)
below (84.2.5.162)
dynamically (87.II.10.270)
fast (87.II.9.263)
forward (87.I.2.117)
freely (84.2.15.317)
quickly (84.2.1.105)
rapidly (84.2.1.105)
sharply (84.2.3.136)
slowly (84.2.11.236)
statically (87.II.10.270)
steeply (84.2.10.217)
upwards (87.I.2.81)

5. Discussion

It could be argued that this metaphor of movement has over time become so embedded in the English language that in its most common representations: words such as *go up, fall, grow bigger* and *reduce*, it has become a "dead" metaphor and there is no other way of saying something than by using these words. This is certainly true to some extent. It is obvious that quantity is represented on a vertical plane in the English language (as well as in other languages such as Mandarin Chinese), so these types of words are to some extent inevitable and their use is constrained, without alternatives. To the extent that there are no non-metaphorical synonyms, it is certain that most users have lost sight of the original metaphor as used in this context. Deignan (1999:182) names establishing the point at which dead metaphor is so well established in the language as to be regarded as a literal sense, as one of the main problems which arise in the study of metaphor using naturally occurring data.

So can a metaphor exist if there is not also non-metaphorical usage to describe the same subject matter? As mentioned earlier in section 4 of this paper, there is little or no metaphor in the Treasury *Annual Reports* or *Corporate Plans*. Furthermore, metaphor in the Treasury *BIGs* is not spread evenly throughout the documents, as there are many chapters with no metaphor in them at all. The lists above demonstrate the quantity and density of metaphorical items found in those sections of the Treasury papers which are concerned with change in economic policies; their pattern of occurrence supports the observation in Cameron and Stelma (2004:108) that "metaphors are not evenly distributed across talk or text, but come in clusters or bursts at certain points,

and may be nearly totally absent at other points…". The lists above also illustrate that there is more going on here than long-dead words which once related to physical motion. In the frequency of occurrence, in the variety of expressions by which the metaphor is represented, and in the sheer force of the metaphorical lexis of movement, these images go beyond ordinary high frequency words which used to relate to motion but have lost their primary meaning.

6. Conclusion

Since Lakoff and Johnson and the emphasis on describing the form of a metaphor as "A is B", the perception has been widespread that the most typical sort of metaphor is those where both component parts, Topic and Vehicle, are nouns. In this study however, it can be seen from the data above that the primary metaphor discovered in the NZ Treasury documents, that of physical motion, consists mainly of verbs. This would suggest that in text types to do with finance and economics, verbal metaphors are more common, and are presented overwhelmingly through the lens of the metaphor of physical movement.

This raises the question of what the Treasury metaphors do. What is the effect of using metaphor in general and this metaphor in particular? I suggest that one key reason for there being a wealth of metaphor in the Treasury papers is that Treasury is writing about abstract entities such as economic theories, the financial markets and rates of exchange: content which places considerable demands on the reader. It seems likely therefore that Treasury economists resort to the metaphorical lexis listed in this paper in order to make their subject-matter more easily understood by their readers, namely the new Minister for their portfolio, and the incoming government. Ortony (2001:20) has said that "Metaphors are necessary as a communicative device because they allow the transfer of coherent chunks of characteristics – perceptual, cognitive, emotional and experiential – from a vehicle which is known to a topic which is less so." Cameron and Stelma (2004:114) have observed that clusters of metaphor arise "when a conceptual, or root, metaphor was needed to talk about something…", and this finding is borne out by the present study. Lakoff and Johnson too contended that metaphor is not just a poetic or rhetorical device, but "is principally a way of conceiving of one thing in terms of another, and its primary function is understanding" (1980:158). Gibbs made the same point (1999: 44): "Many scholars now recognise that metaphor is essential for how people communicate about abstract, difficult-to-talk-about ideas, …. In this way, metaphor is indeed necessary and not just nice or ornamental". It is clear then that "metaphors have a function of organising

systematic concepts" (Cortazzi and Jin, 1999:161). Describing the economy as consisting of various entities in motion transforms the theories into physical images and by creating these pictures in the reader's mind, makes the actual concepts easier to grasp.

Another reason why the vocabulary of physical movement was the primary metaphor discovered in the Treasury papers, is that economics as a discipline is sometimes graphical, and policymaker economists tend to use expositional diagrams to illustrate data (rather than conceptual diagrams like the supply/demand curve) [2]. It is possible that the economists employed in writing these document types were conceptualising economic changes as represented by lines and movements on a graph.

The third explanation I propose here is that economics is often concerned with changes and rates of change. There is a mathematical basis to economics in that velocity and relative rates of change have to do with physics; the maths behind this physics is all calculus. Hence perhaps because of this link – that economics and the physics of motion are both concerned with change and rate of change - similar conceptual structures have led to the adoption of the same lexis.

Finally it also seems possible that the Treasury writers during this period of radical economic reform chose the metaphors they did, whether consciously or not, because they suited their purpose in seeking to persuade the government to follow the courses of action which Treasury was recommending. Cameron and Stelma (2004:115) also, have claimed that some metaphorical clusters function to persuade "through rhetorical repetition."
In conclusion, it is suggested that the trope of physical movement described in this paper, is commonly but to some extent unconsciously used by writers of economic and financial texts. It has been the aim of this article to draw conscious attention to the figurative lexis and therefore the mental schema we use to describe this domain of the human experience.

[2] Charles Tallack, Senior Analyst, NZ Treasury, personal communication, 06.09.07

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A Diachronic Corpus of New Zealand Newspapers

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Abstract

New Zealand English has been recorded synchronically by the two Wellington Corpora (the 1993 written corpus and the 1998 spoken corpus). More recently, a corpus collected by Macalister (2006a) documents changes in New Zealand English between 1850-2000, sampling every 30 years. This paper introduces a new diachronic corpus of New Zealand English which documents more recent language use (1996-2011), at closer intervals (every three years). The samples are taken from four major newspapers, namely *The New Zealand Herald (and Sunday Star Times), The Dominion Post, The Press*, and *The Southland Times*. The corpus is balanced across newspapers and years. In total, it contains approximately five million words. The construction of the corpus was prompted by the desire to study more recent changes in the use of Māori-origin words as part of New Zealand English. As New Zealand English shifts into the final stage of differentiating itself as a New English variety (cf. Schneider 2003), the need to document this process and the new emergent variety becomes ever more important.

1. Introduction

This paper introduces a recent Diachronic Corpus of New Zealand Newspapers, outlining its contents and purpose. This article draws inspiration from a paper by John Macalister describing his corpus of New Zealand newspapers (Macalister 2001) collected during 2000, but not from the corpus itself (the two corpora were put together independently of each other).

2. Creating the Corpus

2.1 Rationale

It is almost twenty years since the production of the first major New Zealand English corpus, namely the Wellington Corpus of Written New Zealand English (Bauer 1993). This one-million-word corpus has remained the principal means for exploring and documenting written New Zealand English.

The Wellington Corpus has been used for various investigations, among which is studying the presence of Māori-origin words in New Zealand English. This issue is important to the analysis of New Zealand English because the use of these words is part of its unique heritage and is closely linked to the identity of the country and people. Recent work in this area predicts a steady increase[1] of Māori borrowings into New Zealand English (Davies & Maclagan 2006, Kennedy & Yamazaki 1999, Macalister 2006b) and a productive integration of Māori loans through compound hybrids, such as *hangi pit* (Degani & Onysko 2010).

Our interest in the prevalence of Māori loans in New Zealand English has prompted the collection of more recent diachronic data[2]. In particular, 24 years after the Māori Language Act (1987), we aim to investigate whether the increase in loanwords continues today, and whether New Zealand English is using the already borrowed Māori words more frequently (same types, more tokens), or whether it is incorporating newly acquired Māori-origin items (introducing more types), or both strategies equally. These questions have prompted the present New Zealand English Press Corpus (henceforth NZEPC).

The data sampled in the NZEPC comes from New Zealand newspapers, specifically broadsheets. Newspaper language is useful for studying (among others) Māori loans and their use because (1) it captures the language of the time in a given community, (2) it "represents people's use of and attitudes towards language" in that community (Garrett & Bell 1998: 3), and (3) it "reflect[s] and influence[s] the formation and expression of culture, politics

[1] The only work which does not report an increase is by De Bres (2006). On the basis of her study of TV news recordings in 1984 and 2004, she concludes that "it is not clear from the data whether Māori language content in the television news increased in frequency between 1984 and 2004" (2006: 31).

[2] See also the diachronic corpus put together by Macalister (Macalister 2006a). This corpus covers 150 years, from 1850 until 2000, sampling at 30 year intervals (i.e., 1850, 1880, 1910, 1940, 1970, 2000).

and social life" (ibid). A further advantage of this type of data is that it is transparent to both the writers and their audiences since media language is heavily influenced by audience design (Bell 1984, Bell 1991). The language we encounter in newspapers is regulated by language ideology and linguistic norms, and allows us to tap into what might be considered a national 'consensus' as outlined by Fowler (1991: 48):

> A key notion here is 'reciprocity' between writers and readers, the negotiation of a style with which targeted readers feel comfortable, and which allows writers the band of flexibility mentioned above. The familiarity of a habitual style has ideological consequences: it allows the unnoticed expression of familiar thoughts. The establishment of this 'normal' style is fundamental to the building of an assumption of consensus, which has been identified by media analysts as central to the ideological practice of newspapers.

These reasons make newspaper language an appropriate arena from which to investigate the presence of Māori loans in New Zealand English.

From a practical collating perspective, newspaper data is relatively accessible since it can be gathered from online databases. However, regardless of how convenient it might be, putting together a corpus is costly in both time and effort. It is therefore desirable that a corpus, once collected, should be able to satisfy as wide a research agenda as possible. Hence the task can be viewed as a balance between minimizing the time and effort required to collect the data, and maximizing the number of potential uses of the data. In analyzing linguistic variation, particularly diachronically, it is notoriously difficult to gather data which holds constant as many of the relevant variables as possible (for instance, formality, length, range of topics discussed, gender of participants, age of participants, background of participants, intended audience). This is required in order to be sure that the characteristics detected are representative of the language analyzed and not artefacts of the nature and conditions of the interaction.

Newspaper data provides the opportunity for analyzing linguistic excerpts produced by writers from a relatively similar background (typically, formally trained writers), writing for the same general audience each day (the wider public in their respective area), within similar conditions (with regards to formality, genre and so on). Throughout the design of the corpus, efforts were made to ensure the linguistic data is comparable across time, geographical region, and newspapers.

2.2. The corpus source – newspapers sampled

The newspapers included were chosen to represent the language of New Zealand in the media as a whole, not just a subset of this language variety. While some still regard New Zealand English as homogenous, lay people (Gordon 1997) as well as linguists (Schneider 2003) suggest that regional dialects do exist. Furthermore, the differences do not confine themselves to a straight North versus South Island divide. Bauer & Bauer (2000) argue on the basis of variation in children's playground vocabulary that "there is more evidence for [a] tri-partite division than an island-based division" (p. 16).

These issues immediately raise the question of how to best capture the variation uncovered. For his newspaper corpus, Macalister includes *The New Zealand Herald, The Dominion Post*, *The Wanganui Chronicle* and *The Otago Daily Times* (Macalister 2001). Davies & Maclagen (2006) use an online tool provided by Fairfax Media group to search thirteen specific Māori loans in the following newspapers between 1994 and 2004: *The Waikato Times*, *The Dominion Post*, *The Press* and *The Southland Times*.

We intended to compile a corpus with balanced North and South Island content (similar to the Davies & Maclagen data), but one which would include *The New Zealand Herald* due to its widespread circulation (more like the Macalister corpus). So in constructing the NZEPC corpus, consideration was given towards balancing the data across geographical regions, such that an even number of North and South Island newspapers were included (two from each island) but also, the newspapers were chosen from the northern, central and southern regions of the country, in order to accommodate the tri-partite divide found by Bauer & Bauer (2000)[3]. Finally, it was decided to only allow newspapers with a reasonable circulation rate (higher than 20,000 readers) so as to ensure a wide-enough audience and thus a more representative sample. Table 1 summarizes the newspapers used.

[3] We prioritised obtaining an equal word count across years, which resulted in the North Island newspapers contributing more words than the South Island newspapers. Total word counts for each newspaper were calculated, so the data can be normalised for geographical comparisons.

Table 1: Breakdown of the newspapers sampled and their characteristics

Newspaper	Geographical Region	Circulation*
New Zealand Herald (and Sunday Star Times)	North Island (top)	170,677
Dominion Post	North Island (bottom)	84,047
The Press	South Island (top)	81,017
Southland Times	South Island (bottom)	28,066

* source: Newspaper Publishers' Association of New Zealand (NPA), figures for 2011 http://www.nabs.co.nz/file/fileid/37077

Excerpts of *The Sunday Star Times* were included instead of *The New Zealand Herald* for years 1999 and 1996, due to availability[4]. *The Sunday Star Times* is a weekend paper and hence its issues are generally bigger (in number of articles), and it covers a broader range of topics. However, we felt that its overall linguistic range (particularly with respect to number of Māori loans) would be similar enough to make it comparable to *The New Zealand Herald*.

2.3 The corpus contents - days sampled and total word counts

The NZEPC corpus was compiled by sampling newspaper articles from six different years, at three-yearly intervals: 1996, 1999, 2002, 2005, 2008 and 2011. The years were chosen to follow on from the existing written corpus of New Zealand English (the Wellington Corpus of Written New Zealand English), compiled in 1993. Sampling every three years provides six makers for investigating the long-term trend in use of Māori loans. Having more markers at shorter time intervals was deemed statistically more useful than having fewer markers at longer time intervals.

In the interest of balancing the corpus samples as much as possible, a number of issues were addressed in compiling the articles from each newspaper. First, we wanted to include the same number of articles from each newspaper on any one given day so as not to bias the data towards a specific date. Fifty randomly selected (in order to not privilege any one newspaper section) articles were chosen from each day sampled. The number fifty is high enough to give a representative spread of the day's write-ups, but not too high to bias against days when newspapers are thinner in content (such as New Year's Day).

[4] The database used did not have issues dating back further than year 2000 for the *New Zealand Herald*.

Unlike the Macalister 2000 corpus, articles were included from all sections of the newspaper: local and international news, features, opinions, letters, reviews and so on. It was felt that having portions from across the entire paper would provide a more accurate vision of which word types New Zealanders are exposed to day to day, and to what frequency. The majority of the corpus is made up of news material (more than half). Table 2 summarises the different newspaper sections included and provides a total word count for each section across all newspapers and years.

Table 2: Breakdown of newspaper sections included

Section	Total word count	Section	Total word count
1. Advertising	32,232	9. News	3,116,975
2. Business	352,208	10. Property	8,192
3. Employment	13,308	11. Racing	30,861
4. Entertainment	82,891	12. Sport	489,155
5. Farming	11,308	13. Story	256
6. Features	816,754	14. Technology	29,612
7. Money	7,619	15. Travel	19,649
8. Motoring	9.097		

Secondly, given that each newspaper varies with respect to the length of its articles, keeping the number of articles sampled each day equal raised concerns with regards to the word counts obtained from each newspaper. This meant that in order to maintain a (roughly) equal total word count across newspapers and years, each newspaper contributed a different number of days. Having unequal number of days was preferred to having more material from a given day because some days would potentially lend themselves to a higher count of Māori loans than others (for example, Waitangi Day), whereas a higher number of days would not bias the total Māori loans count.

Thirdly, consideration was given to the fact that different times of the year would involve different seasonal topics and events, some of which might yield a higher Māori loans count that others (for instance, Waitaingi Day celebrations and Matariki events). To ensure an even spread of days sampled throughout the year, a random number generator was used to work out the dates sampled.

Table 3 below gives the total number of words included from each newspaper in each year. In total, 311 days were sampled and 15,550 articles were included across all newspapers over the fifteen year period.

Table 3: Breakdown of newspapers and the total word counts obtained

Newspaper	1996	1999	2002	2005	2008	2011	Total no of words
New Zealand Herald Sunday Star Times	- 402,726	- 213,065	212,947 -	214,379 -	200,283 -	208,553 -	1,451,953
Dominion Post	410,898	211,118	212,434	203,457	209,031	213,441	1,460,379
The Press	-	202,130	208,412	213,295	211,786	218,192	1,053,815
Southland Times	-	205,935	206,857	202,083	219,426	219,669	1,053,970
Total no of words	813,624	832,248	840,650	833,214	840,526	859,855	**5,020,117**

As mentioned earlier, *The New Zealand Herald* archives accessed only dated back to 2002. Similarly, the archives for *The Press* and *The Southland Times* only go back as far as 1999. Therefore, the South Island records were balanced by an increase in articles from *The Dominion Post* from 1996, and the lack of *New Zealand Herald* articles was matched by articles from *The Sunday Star Times* (more of these from 1996 in order to achieve the same word count as *The Dominion Post*). Finally, *The Press* archives did not contain any 1999 articles, so articles from year 2000 were used instead.

Given the main purpose of the corpus in studying diachronic variation in New Zealand English, we prioritised keeping the word counts as comparable as possible across the six years. This has resulted in more data from the North Island newspapers than the South Island newspapers (about 3 million words vs. 2 million words). Thus before making geographical comparisons, it is advised to normalise the data.

The articles from each newspaper contain a header with the date, newspaper, and section (see sample below):

> "Action to continue" Dominion Post, The, 05/08/1996, p3
> Database: Australia/New Zealand Reference Centre
> Edition: 3, Section: NEWS--NATIONAL, pg. 3

With the help of Python (version 2.7.2) programs, we extracted this information and grouped the articles in different ways, so that they can be searchable by year, by newspaper, or by section (or of course as a complete set). The headers were extracted before obtaining word counts and the corpus can be searched in either mode (with or without the header information).

3. Corpus potential

We give a brief illustration below of what the data can tell us about the occurrence of the Māori words *mana* and *marae* in New Zealand newspapers. As discussed in the previous section, the corpus can be searched in four ways: the entire data as a whole (representing New Zealand English newspaper language), across years (as part of a diachronic study), across newspapers (making comparisons between different geographical regions), and by newspaper section.

3.1 Investigating temporal variation

Figure 1 shows the frequency of use of the Māori words *mana* and *marae* between the years 1996 and 2011. The counts given here (and in all the graphs discussed hereinafter) have been normalised per million words across the different years. The figure shows that *mana* starts out being used more than *marae* in 1996, but by 2011, they are used with roughly the same frequency. At first glance, both words seem to occur slightly more in 1996, than in 2011. However, on closer inspection, the fluctuations observed (particularly if we leave aside the slightly increased occurrence of *mana* in 1996) are just regular up-and-down variation in use, indicative of a stabilizing trend (indeed a statistical analysis analyzing the two curves gives non-significant results for both; p=0.4021 for *marae* and p=0.1651 for *mana*). This does not match the increase in use predicted by previous work (see section 1.1), but it is consistent with the idea that the New Zealand English variety is coming into

its final stage on the scale proposed by Schneider (2003), and thus stabilizing with regard to its use of Māori-origin words.

It is noteworthy that both *mana* and *marae* seem to follow a similar pattern, decreasing in frequency over 1999 and 2002, increasing during 2005, decreasing slightly in 2008 and then increasing again in 2011. There is no reason to expect that the small variations across the different years will coincide for the two words (further analysis would be required to test whether other loans behave in a similar way).

The use of *marae* was also investigated by Davies & Maclagan (2006) in four newspapers (see section 1.2). Contrary to the NZEPC, they found an overall increase in usage over this period. However, the results from the NZEPC are not directly comparable because Davies & Maclagan (2006) use the number of articles in which the Māori words occur instead of raw frequency counts, and because, the total size of the data they consulted is unknown (they performed an online search rather than compiling the total newspaper data).

Figure 1: The use of 'mana' and 'marae' over the period of 1996-2011

3.2 Investigating geographic variation

Turning to the distribution of *mana* and *marae* across newspapers, we can see that they are more prevalent in the North Island newspapers than in the South Island ones (Figure 2). Both words are indicative of a unifying pattern: the newspaper with the highest use is *The Dominion Post*, followed by *New Zealand Herald* and *Sunday Star Times*, *The Press*, with *The Southland Times* having the lowest counts.

These findings concur with Degani (2010) in her analysis of the same loans in three online newspapers collected during one year between 2006-2007. Her data is considerably larger than the present corpus, as she analyzed eighteen million words from *The New Zealand Herald,* nine million words from *The Dominion Post*, and eleven million words from *The Press.* Her normalised (over one million words) frequency of use counts are remarkably similar to the counts obtained from the NZEPC (Degani 2010, 179). It is reassuring to see that the patterns identified in the NZEPC so far hold when increasing the amount of data analyzed.

As far as individual newspapers are concerned, the same trend continues, with the Wellington newspaper having the highest number of Māori loans, followed by the Auckland newspapers, the Christchurch newspaper, and finally, the Invercargill one (Figure 3).

The two words investigated here hint at a tri-partite division of the country, as discussed earlier from Bauer & Bauer (2000), with the central region being the highest adopter of Māori-origin words, followed by the northern New Zealand region, and last, the southern region having the lowest count. Evidently, this analysis (as well as Degani's, which only looks at three Māori-origin words) is only a starting point and more extensive analyses need to be performed in order to be sure that the patterns observed can be generalised to other loans.

Figure 2: The distribution of 'marae' and 'mana' throughout the various newspapers (SST = Sunday Star Times, NZH = New Zealand Herald, DP = Dominion Post, TP = The Press, ST = Southland Times)

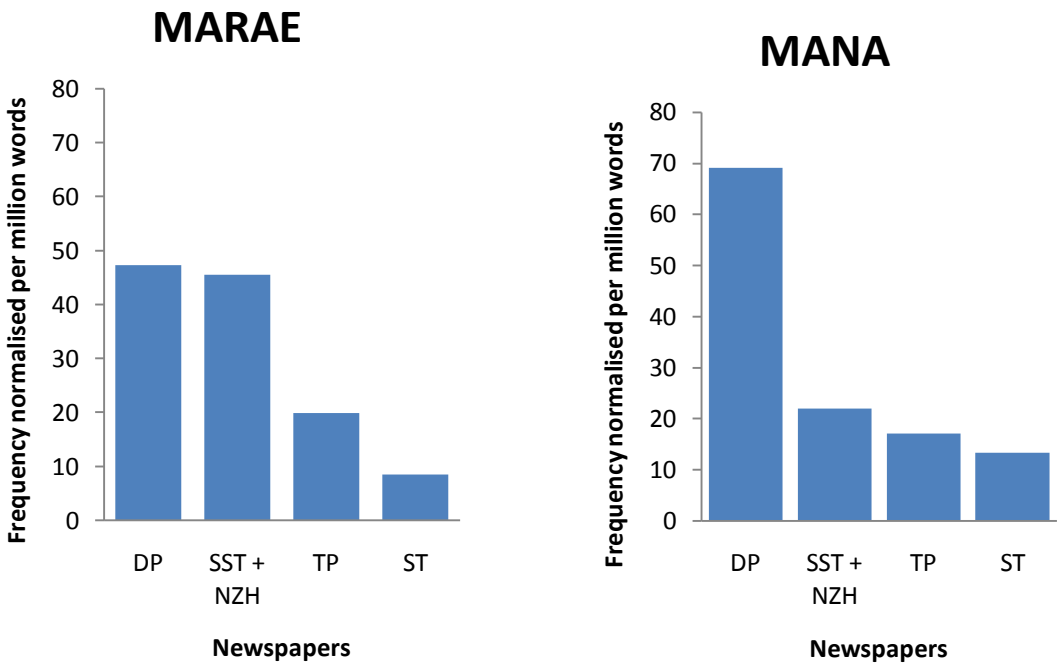
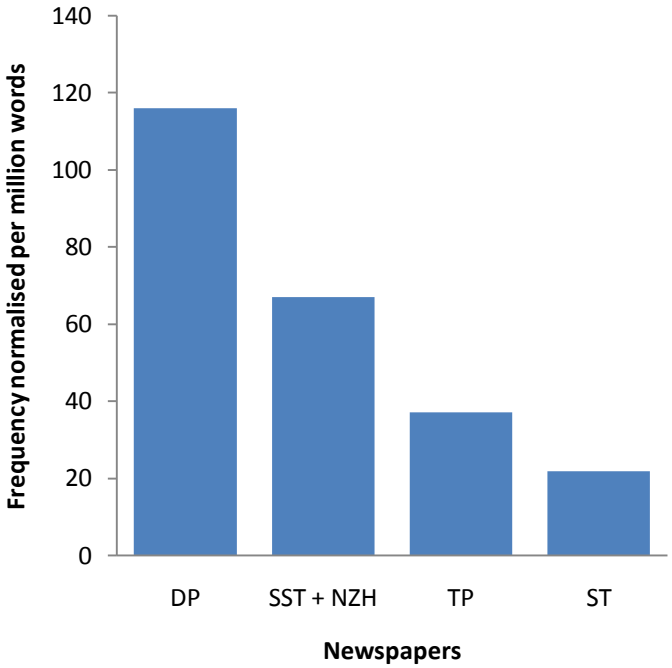


Figure 3: The combined distribution of 'marae' and 'mana' across the various newspapers (SST = Sunday Star Times, NZH = New Zealand Herald, DP = Dominion Post, TP = The Press, ST = Southland Times)

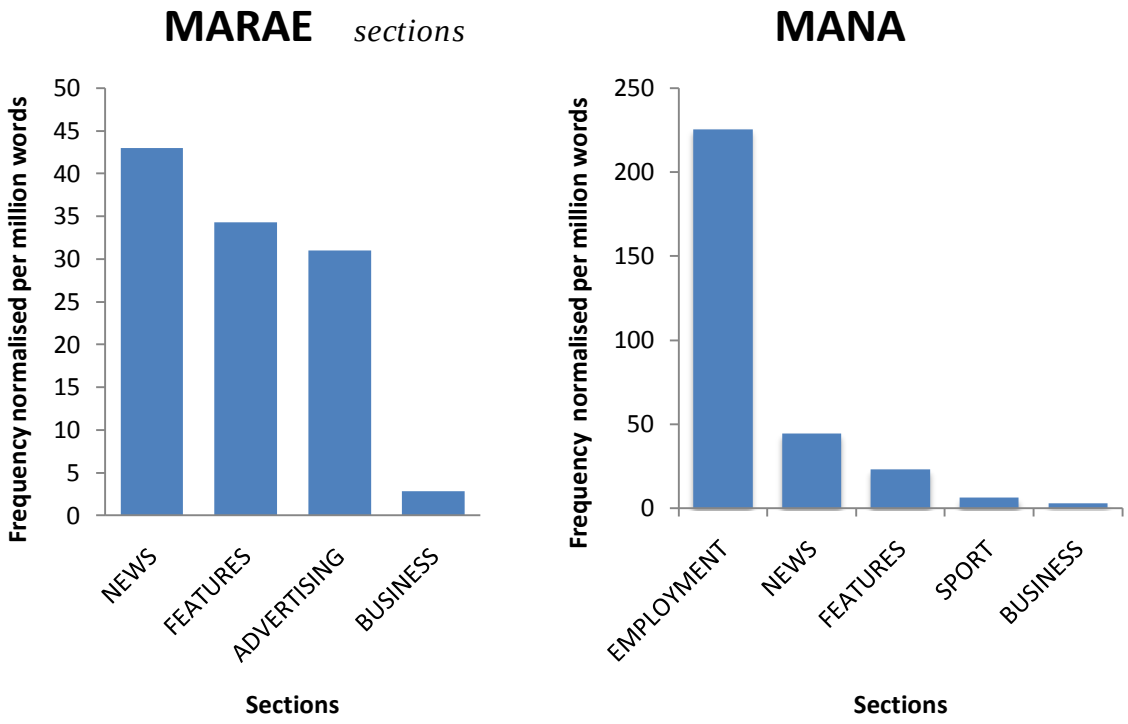


3.3 Investigating section variation

Finally, we can compare the different newspaper sections where the two Māori loans occur (Figure 4). The figure shows that they occur in similar places, both are present in *news*, *features* and *business.*

However, a crucial difference is that *mana* occurs extensively in the *employment* section whereas *marae* does not occur in this section at all (note the two y-axes are different in scale). While the difference appears large, care must be exercised when comparing the occurrence of a lexical item in a section which is not well represented in the data (in this case, *employment*) against others, which are comparatively better represented (such as *news, features* and *sport*). A few occurrences (in this example, three) can incur a disproportionate increase by the normalising process.

Figure 4: The distribution of 'marae' and 'mana' across the various newspaper



The most meaningful comparisons are those across sections of similar size (or at least reasonably large ones). Therefore, it is striking to note that *marae* is more versatile than *mana* since it is used extensively in two of the larger sections (*news* and *features*). This could be because the noun *marae* can function as a proper noun in conjunction with the name of a place (e.g., *Atea Marae*), whereas the noun *mana* is contextually more restricted. Further analysis would be needed to disentangle the distribution of these words. The

examples here serve only as a starting point demonstrating what the NZEPC corpus may be used for.

4. Conclusion

The Diachronic New Zealand English Press Corpus was created to carry on from the 1993 Wellington Corpus of Written New Zealand English for the purpose of investigating changes in New Zealand English over a period of fifteen years. The corpus includes 311 days sampled from two major North Island newspapers and two major South Island newspapers, taken every three years between 1999-2011. This renders a total of just over five million words. It is hoped that the corpus will be of use to researchers[5] of New Zealand English and New Englishes, and those concerned with studying language change.

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[5] I am currently trying to obtain permission to distribute the corpus files for academic purposes and hope to obtain this shortly.

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