School of Linguistics and Applied Language Studies

Wellington Working Papers in Linguistics

Volume 22, 2017

ISSN 1170-1978 (Print)
ISSN 2230-4681 (Online)

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI
VICTORIA
UNIVERSITY OF WELLINGTON

Wellington Working Papers in Linguistics

Volume 22, 2017

Edited by Amy Giles-Mitson and Emily Greenbank

School of Linguistics and Applied Language Studies
Victoria University of Wellington
P.O. Box 600
Wellington
New Zealand

Published 2017

ISSN 1170-1978 (Print)
ISSN 2230-4681 (Online)

Wellington Working Papers in Linguistics
Volume 22, 2017

CONTENTS

Editorial note

This volume of Wellington Working Papers in Linguistics showcases some compelling and insightful papers covering a diverse range of research topics. 2016 produced an extremely accomplished group of Honours students in Linguistics and this collection of their work is a testament to that. We enjoyed having the opportunity to read and comment on the projects before publication and would like to thank everyone who contributed to this issue.

Amy Giles-Mitson & Emily Greenbank

September 2017

The development of Instant Messaging language over time

Danielle Ashby-Coventry and Caitlin Andrews

1. Introduction

Instant Messaging (IM) services have become a part of people's day-to-day lives, particularly amongst adolescents. It is used for a variety of purposes, from discussing serious topics such as homework to just 'hanging out' (Schiano et al 2002:2). With the surge in smartphones and messaging applications, people are now able to connect and communicate with ease. Our research uses IM data in a corpus study of common variables associated with Computer Mediated Communication (i.e. laughter, intensifiers, contractions and quotatives). Computer Mediated Communication is any type of online communication including IM or texting (Herring 2001: 612).

We followed IM conversations with the same five friends from 2010 to 2016. The aim of this study was to discover whether the variables of types of laughter, intensifiers, contractions and quotatives changed over this period and whether that might be indicative of a wider linguistic change, age grading or if they were simply specific to that Community of Practice (CofP) (Wenger 1998). Additionally we analysed the variables to see whether the language used in Facebook IM was more like colloquial speech, standard written language or a new form of discourse as Dabrowska (2013: 120) suggests. We have developed several hypotheses for the previously stated variables based on existing literature in this area.

2.0 Literature Review

This section discusses the existing literature on Computer Mediated Discourse, CofP, colloquial compared to standard language, intensifiers, real and apparent time studies, age grading and contractions.

2.1 Computer Mediated Discourse and Communication

Computer Mediated Discourse Analysis (CMDA) is a framework that studies interaction through networked technology (Herring 2001: 612). It covers a broad range of discourse styles from asynchronous conversations such as email (e.g. Baron 2003), to second life simulators (e.g. Herring et al 2015). CMD is distinct from other discourse mediums because of the ability to edit texts, involve large numbers of participants and communicate with considerable speed (Herring 2001: 612). CMD studies can realise

linguistic approaches in a computer mediated context, explore how users compensate for the lack of physical cues they normally can give in conversation as well as investigate new semiotic phenomena such as emoticons. CMDA is a useful framework to apply to this research as the internet is made of spaces that "create social structures exclusively out of words" (Herring 2001:624).

2.2 Community of Practice

We have used the CofP framework for our analysis in this study. This framework allows for a focus on interactive styles of a particular group and is different from other speech community studies due to the focus on the individual identities within the group as well as the context for their interaction (Bucholtz 1999). The community of practice is defined by "regular interaction, shared repertoire and joint enterprise" (Wenger 1998). Our CofP has a shared repertoire because all the members went to the same high school where they interacted regularly and had a joint enterprise from socialising together outside of school. The small size of this group allowed us to conduct indepth ethnographic research.

2.3 Instant Messaging

IM has the potential for valuable linguistic analysis, as it is synchronous and its frequent use as a one-on-one communication tool makes it distinct from other computer mediated modes (Tagliamonte and Denis 2008). IM is frequently associated with younger people, and a study of Facebook usage in New Zealand corroborates this, stating that over 85% of 18-22 year olds regularly use the website (First Digital). A study of teens' usage of electronically mediated communication tools found that young people preferred IM over other mediums, stating that it is an easy way to "connect and hang out" (Schiano et al 2002:2). Studies in instant messaging have investigated distinctive features that occur such as emoticons (Dresner and Herring 2010, Walther and D'Addario 2001), abbreviations (Werry 1996, Baron 2004) and other linguistic phenomena such as turn-taking (Herring 2010, Anderson et al 2010).

2.4 IM and colloquial or standard language

Numerous studies have compared IM and spoken language (Yates 1996; Werry 1996; Baron 2004; Tagliamonte and Denis 2008). There is a general perception that instant messaging is informal, and that the writing style emulates face-to-face talk (Tagliamonte and Denis 2008). However, researchers have struggled to come to a consensus on the legitimacy of this belief. Werry (1996) claimed in a study of Internet Relay Chat, that the chatroom data mirrors spoken interaction, whereas more recently Baron (2004, 2008) and Tagliamonte and Denis (2008) found IM to have conservative tendencies, leaning toward more standard written forms.

Crystal (2001: 48) took a more moderate approach to the status of IM, arguing that it is a new type of dialect that falls somewhere on the continuum between speech and written language. Crystal (2011: 21) states that "internet language is better seen as writing which has been pulled some way in the direction of speech rather than speech which has been written down". The fact that CMD and IM are written in the first place may mean that this type of language is more standard simply because written language is generally more formal and has certain stylistic features (Dabrowska 2013: 138). Adams (2012: 10) notes that some conventions in CMD include unconventional or no punctuation for contractions and spelling words colloquially (such as *ima* for *I am going to* in the data of this study). This may also be another reason why CMD is considered by some to be a written form that is closer to spoken discourse.

Baron (2008: 69) studied contractions, abbreviations, acronyms and "grammatical makeup of transmission breaks" (ibid: 62) in CMD as a comparison to see if IMs were speech-like. She compared IM and speech and concluded that they were not unalike, as they included some formal writing aspects such as not contracting all possible tokens. However, the register was informal in terms of what the participants were talking about and there were acronyms and abbreviations that would not occur in a formal written text (ibid). Baron's (2008: 70) explanation for this was that with years of using the computer for school and university work, students become used to typing in a formal, more standard style. They then continue doing this by habit when typing out instant messages while talking about informal topics (ibid).

Tagliamonte (2011: 337) makes the interesting argument that "IM is simply mirroring the emergent tendency for all writing to become more speech-like". This is supported by Baron's (2003: 88) argument that "technology often enhances and reflects rather than precipitating linguistic and social change". This is one of the reasons why we chose to use IM as a case study as it could be used to reflect on any linguistic change that might be taking place within this specific CofP.

Dabrowska (2013: 137) backs up that CMD reflects wider patterns in the linguistic sphere and writes that it is possible that these changes being noticed in English are not recent but have been happening for decades because "language is never static" and CMD such as IM may just be helping us to see it in progress.

2.5 Intensifiers

Change is evident in intensifier variables in varieties of English from America (Bakht 2010), Canada (Tagliamonte 2011) and New Zealand (Scandrett 2012). Scandrett (2012: 33) studied the proportion of the intensifiers *pretty, real, really, so* and *very* from

speakers of New Zealand English born from 1851-1984 from the spoken ONZE corpus at Canterbury University. She found that there is a change happening over time that indicates that *very* is becoming less frequent and is being replaced by *really* (ibid). The variable *so* is increasing for the female speakers and *pretty* for the males (ibid: 34). Scandrett hypothesised that *so* will increase in frequency and may even overtake *really* as the most frequent intensifier in New Zealand English (NZE). Since the youngest of her speakers was born at least 10 years earlier than those in the present study, there may already be a change evident in our data.

Bakht (2010: xi) also identifies the adverbial intensifiers v*ery, really* and *so* as linguistic changes in progress with *so* increasing the most and *really* the second most frequent behind it. Tagliamonte and Denis (2008: 17) write that *so* as an intensifier for English in general is still developing although *so* among adolescents is the more favoured in IM and *really* in speech for the Canadian teenagers in their study. Tagliamonte and Denis (2008) do not include *pretty* and *real* as variants (nor does Bakht 2010 in her study of American high school students). However, in Tagliamonte's (2016) study, she did include *pretty* as a variant for the first time, and found it to be the third most frequent intensifier after *so* and *really*, respectively. Our data may be considered a good comparison to see what these variants are doing today and in real time like Scandrett (2012) albeit on a much shorter time scale.

2.6 Real and apparent time studies

Language variation is often studied through apparent time studies such as Labov's 1963 Martha's Vineyard study (Sankoff 2006: 110). Apparent time studies are when people of different ages are studied at the same time and the differences identified may be seen as evidence of language change in progress assuming that the way people speak stays the same over the course of their lifespan (ibid). Real time studies explore language change in the same community over a period of time (although not always the same individuals) (ibid; Bogerb 2004: 250). This is an accurate way of testing language change in progress but is often expensive and time consuming (Sankoff 2006: 110, Boberg 2004: 250). This current study has managed to avoid this limitation as our data had already been saved automatically on Facebook. Furthermore, as the data was collected well after the conversations had occurred, this project avoids the "observer's paradox" (Labov 1972:209) because the participants were unaware the conversations would be used at the time, and gave consent to use the data retrospectively. Because of this, the data can be considered an accurate representation of how the language was being used at the time.

2.7 Age Grading

According to Bakht (2010: 5) adolescents lead linguistic change because they have more linguistic freedom compared to adults. Older speakers on the other hand tend to be more conservative in their speech, using more standard forms or variables (Eckert 1997: 164). This is a sign of age grading and is a possibility in our data given the two time

periods: when the participants were at high school and when they were at leaving home age. It would be expected, based on this, that they would use more innovative language as adolescents, then become more conservative in their language later on, where more standard linguistic variables are expected.

Tagliamonte (2011: 341) claims that *lol* (laugh out loud) is an instance of age grading because in her data where its use peaks at age 15-16 and steadily decreases by age 20, whereas the more standard form of laughter- *haha*- steadily increases from adolescence. However, for variants such as *lol*, it is not possible to say with certainty whether these are age graded data because (as far as we can tell) there has not been any studies on these variants before this generation. Because of this, it is not yet possible to see whether this particular variant will occur in subsequent variations as well or if another non-standard variant will take its place. However, based on these articles and the nature of our group, we predicted that the laughter variants in our study would follow the same pattern as Tagliamonte (2011). Tagliamonte and Denis (2008: 12) found laughter to be the most productive feature in their study, with over 16,000 tokens of *haha* and 4,506 tokens of *lol*. The research also incorporates an apparent time element that shows a decline of usage in *lol* and increase in *haha* as age increases (Tagliamonte and Denis 2008:13).

2.8 Contractions

Contractions have been the subject of several IM studies and are considered a salient feature of IM talk (Baron 2008:70). There is a general sense that IM is low effort, and so features of formal writing such as apostrophes and full forms are neglected (Tagliamonte and Denis 2008).

Squires (2007) studied variation of apostrophes in CMD. This data was collected from IM conversations of undergraduate students at a university in America from 2004. Squires (2007: 7) found that in all possible cases of apostrophe use for contractions, they were used 57.1% of the time, although this number increased to 85% when looking at females specifically.

3.0 Methodology

The data in this research is made up of one-on-one Facebook Message chat conversations from 2010-2016 in a group of six female friends. This data was selected in part because of ease of access by the researchers (as one of the researchers is a member of this group) but also due to the rich possibilities this collection of data offered. It mirrored many of the aspects of Tagliamonte and Denis' (2008) research, and testing the salience of these IM features will add depth to the young field of variationist study in computer mediated contexts. The research is also able to follow a community of young women over six years and examine their language use and change over this

time. This type of corpus has untapped potential as the message data is easy to collect and transcribe. We simply had to go through the message history to find data and transferred it into corpus analysis software AntConc (Anthony 2014). Interestingly, it is also able to be collected over several years to provide a low effort longitudinal study which we have taken advantage of in this project.

3.1 Case study: Context

This case study investigates IM variables across a group of female friends as they transition from high school to university. The case study allows for a thorough investigation of a smaller group, rather than the broad scale of a larger study. The small scale also allows for more contextual information to be applied to the data; as "what is lost at the level of generalization is compensated for by a better view of social and attitudinal factors" (Wagner 2012: 180). The case study does not claim to be representative of any larger groups, rather demonstrating the kinds of productivity that can be realised through instant message talk, as well as demonstrating the potential instant message corpora can provide to future variationist studies.

In 2010, the participants were in year 11, aged 15-16 and attending the same high school. The group had been friends for some time before the data collection period, but 2010 was the year the participants began using Facebook. In high school the group was largely theatre/arts oriented, participating in a lot of the school's extra-curricular music/ theatre opportunities, and the "theatre geek" image was a core part of the group's identity. In 2013 the group began tertiary study in various locations across New Zealand. The participants in this group are all still friends and contact each other regularly, which has allowed the researchers to investigate the chat across this extended time period. The participants were provided with information and consent forms. They were free to withdraw from the study, and sensitive information was removed from the corpus data. All participants will remain anonymous, and the information about who wrote each message was not included in the corpus to ensure this. The researcher is also the constant interlocutor in these conversations so any accommodation effects (Bell, 2006: 648) will be consistent.

3.2 Software

We transferred the message threads into the corpus analysis software programme AntConc (Anthony 2014) after converting them into text files. We then searched for our variables and organised them by year in excel. Following that, we normalised the data (so that the numbers were all on the same scale and were comparable) in respect to the total number of tokens in each specific year since the number of tokens each year was quite variable (see table 1.). Then we analysed the data and looked for patterns.

Year	**Tokens**
2010	472
2011	6888
2012	2821
2013	6685
2014	4557
2015	11 332
2016	8928
Total	41 683

Table 1- number of tokens per year

Everyday speech is the ideal target of sociolinguistic research (Tagliamonte 2011: 2) and while IM is not speech, it shares more similarities with speech than other forms of written language (Crystal 2011; 2006). Furthermore, all of our data was produced by the group before our study began, so it is all natural conversation and was therefore, was as naturalistic a form of CMD as possible.

3.3 Research Method

Tagliamonte and Denis (2008: 10) were a good starting point for us in our methodological process as their methodology was the closest to what we were able to do. Their material came from IM conversations that happened before the study began so they also avoided the Observer's Paradox (Labov 1972: 209) (ibid). Tagliamonte and Denis (2008: 10) believed because of this, their study may be one of the most accurate studies of teen language and CMD in particular. As our study has parallels with this it may be somewhat comparable.

Because of time constraints, our variables are only a sample of the total used in the data and we are treating this as a case study. Dornyei (2007: 152-155) states that although a single case study cannot be representative of a whole population, it is still useful in providing some "insight into a wider issue" (such as age-grading or generational change) and can be good as comparison with other data. However, Dornyei also notes that because of the small nature of case studies, they are best when used as a part of a mixed method study. This is a possible area of further research for us.

The data was analysed quantitatively using the corpus software AntConc (Anthony, 2014). The data sets were normalised to allow for the differences in size per year. Statistical significance was measured in the raw data sets between years using a chi square test (Preacher 2001). AntConc is also useful in selecting data for qualitative analysis, as it makes it easy to find interesting contexts where the variables are occurring by allowing the user to search for the variable and providing the surrounding sentences as context. The analysis used previous literature on IM as a starting point for variables to be examined, but also allows for particular features of the group's talk to be highlighted.

Additionally, the research is warranted through both qualitative analysis and ethnographic information. As one of the researchers is a part of the community of practice that is being researched they were able to provide first hand insight into the community and how they were communicating at the time. Furthermore, as both of the researchers are "digital natives" (i.e., who have grown up using this technology) (Prensky 2001) we have an advantage when interpreting the data, as this kind of talk features in our day-to-day lives. The qualitative analysis will provide extra insight into how the variables were being used, and demonstrate some of the more interesting examples of language use in more depth.

In this discussion, our graphs will not include the 2010 data as it is a significantly smaller corpus and is therefore not as easily comparable to the other years (see table 1.).

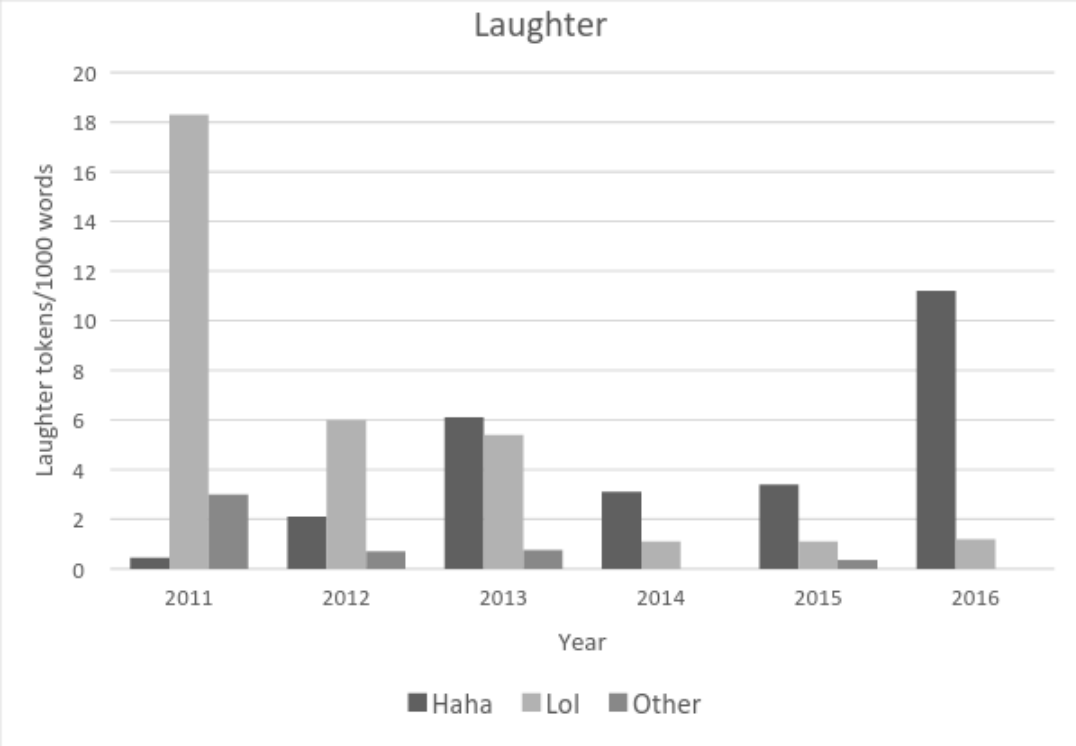
4.0 Results

4.1 Laughter

Laughter is a feature that is particularly interesting and unique to CMD because the inclusion of laughter descriptors may aim to replicate spoken interaction. Laughter has been studied in some depth in the CMD field (Hübler and Bell 2003, O'Neill 2010). Emoticons as a representation of laughter have garnered considerable media attention. However, we have left this out of our study due to the difficulties with processing and analysing emoticon tokens.

Another notable variable to look at which may demonstrate the similarity to speech of CMD is the early creative ways of expressing laughter that were being used in the Facebook messages in our data that reflected how they might sound more than the standard *haha,* such as *bahaha* and *pahahaha.*

4.1.2 Results



Graph 1: Normalised data of laughter tokens

The data in graph 1 demonstrates remarkable similarities to Tagliamonte and Denis' (2008) apparent time study, with a notable decrease in the usage of *lol*, and increase in *haha* as the participants get older. *Lol* also seems to be showing the first half of age grading here, following the pattern in Tagliamonte (2011; 2008), with 2013 seeming to be the transition year where *haha* and *lol* are fairly equal in frequency. This supports Bakht's (2010: 4) and Wagner's (2012: 180) ideas about a split between adolescents and adulthood which seems to be happening here when the participants leave home. However, we are only able to make assumptions here because of the small time frame of data on this variant.

This data is real time, so adds extra weight to this claim. A noticeable difference is between 2013 and 2014, where decrease in use of *lol* is statistically significant (p=>0.05). The *other* variable in this graph contains a number of different variants from *teehee* to *mwahaha,* some of which are outlined below. There was not a consistent enough number of these variants to warrant putting into separate categories, but it is worth noting the high number of other tokens in 2011 which seemed to be a very productive year.

This also seems to support the idea of adolescents being more innovative in language use (Bakht 2010) as the *other* forms peak in 2011 and steadily decreases to 0% in 2016.

These innovative types of laughter are a lot more phonetic and mimic speech more. Since laughter is an important part of spoken discourse, its use in other mediums (such as CMD) may indicate CMD's similarity to spoken discourse so when the data for 2011 is taken into consideration, it shows that IM may have been more speech-like in the earlier years compared to now.

4.1.3 Examples

The examples below are intended to demonstrate how the variants are being used, and give a deeper insight into the writing style of the community.

a) bahahahhhahaha got an app called i swap faces it gets pictures and switches peoplses faces around holeh mother its hilarious (2011)
b) having fun without me? muhahaha (2011)
c) I feel like you're over thinking this haha (2016)

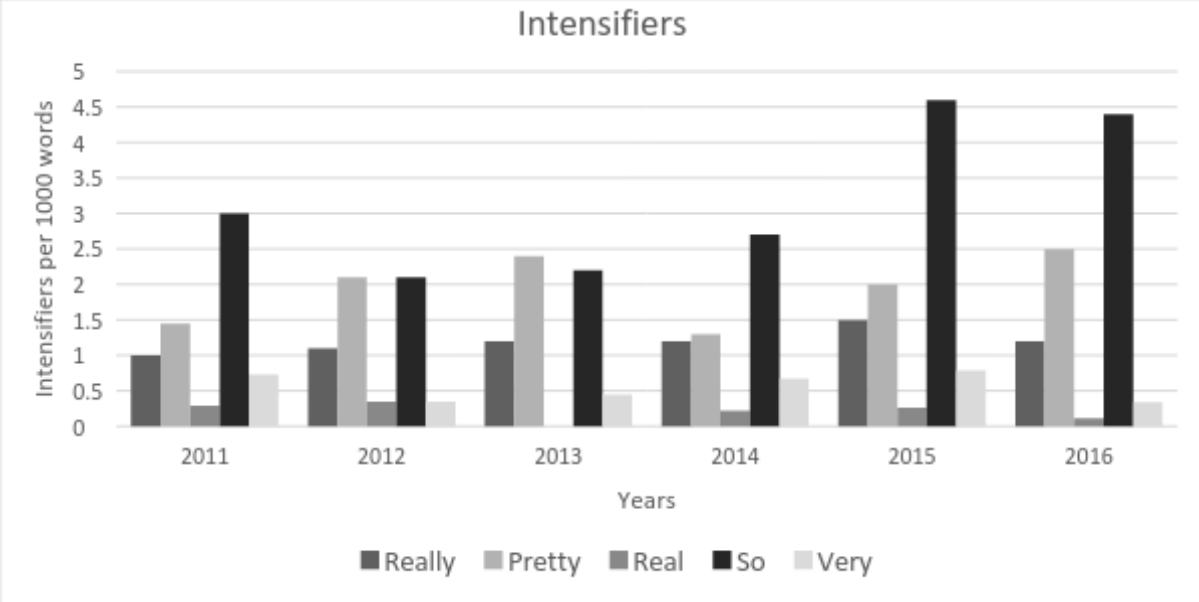
The productivity with laughter tokens was a standout feature of the corpus, particularly in the earlier years. Examples such as a) and b) demonstrate the attempt to represent vocalisations. Example c) shows a more standard use of *haha* that was more common in the later years.

4.2 Intensifiers

Intensifiers are another variable that are associated with younger speakers and have been given considerable attention over the past decade (e.g. Tagliamonte and Ito 2003; Tagliamonte 2008; van Herk 2009; Uscher 2010). Research suggests an increase of the usage of *so*, and a decline of *really* and *very* (Tagliamonte and Denis 2008, Tagliamonte 2016). The results we have found in the current research indicate some specific New Zealand English variants, notably *real* and *pretty*. These variants were identified by Scandrett (2012) in a study of intensifiers in the Origins of New Zealand English (ONZE) corpus, which claimed an increase in usage for *so, pretty* and *real*.

4.2.1 Results

Graph 2: Normalised data for intensifiers



These results (except for 2012 and 2013) show that *so* is used considerably more than the other variants: compare at the most extreme of 52 tokens of *so* in 2015 to 23 of pretty as the second most common and 9 of *very*, the least. There seems to be an increase of usage as time goes on. *Pretty* is also used frequently, and the more formal variants *really* and *very* are used less so.

4.2.2 Examples

These examples demonstrate the variants occurring in different contexts.

d) The shows were absoloutely AMAZING ive been blown away ive never experienced anything like it before ive had a real good time (2011)

e) Hmm yeah I'm only free evenings anyway but you sound pretty chocka so just leave it for a week I think *frown emoticon* (2013)

f) What?! Not even art history? D: oh I'm so gutted for you (2013)

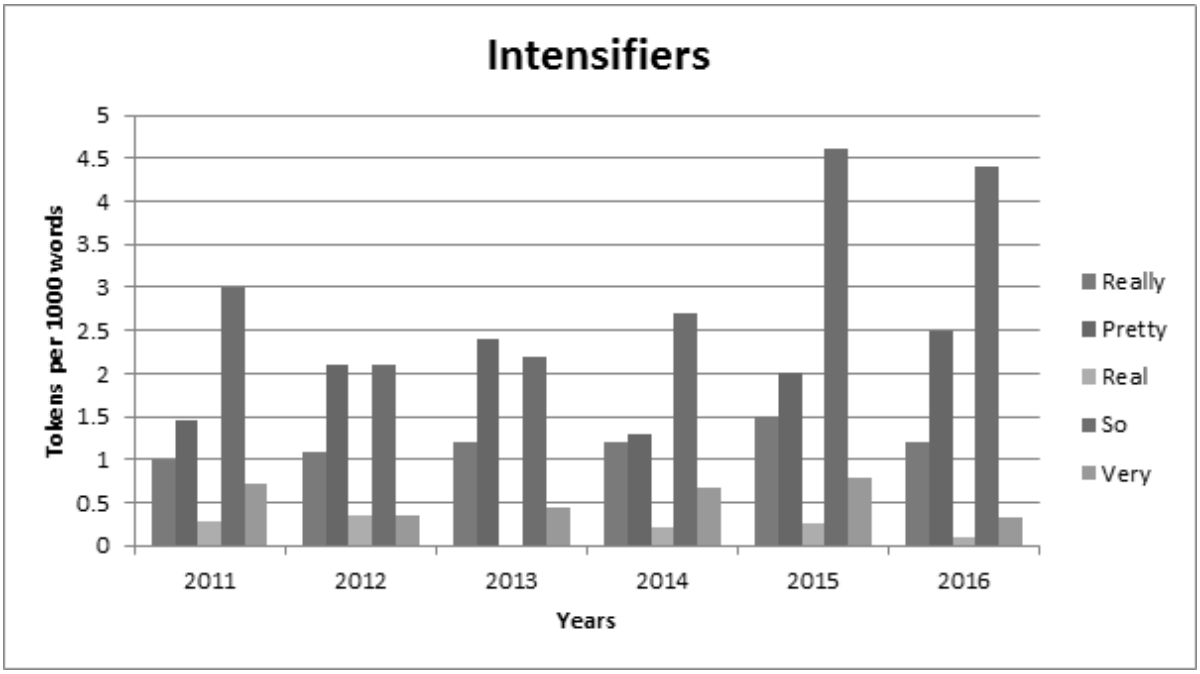
g) Also, I'm really impressed with your country singing voice- the little glottal stop at the end of phrases is on point (2016)

Example d) shows the use of *real*; there were not many tokens of *real* in the corpus, but it is interesting to see NZE variables come through in the IM format, which is something that hasn't been researched in great depth. There is also an NZE flavour with the expression "pretty chocka" (to mean 'busy' in e) which demonstrates the possibilities of distinctive IM styles.

The intensifiers in Graph 2 show a trend of *pretty* increasing in overall frequency which supports Scandrett (2012) and Tagliamonte (2016). *So* is also increasing and is frequently the highest frequency variant for the intensifier variable. However, this finding is not significant. This may be because the time span we are looking at is too small to see any marked change, but it does align with Tagliamonte's (2011) hypothesis that *so* will become more frequent. In our data *pretty* has been consistently the second highest frequency intensifier since 2014. However, while Scandrett (2012) and Tagliamonte (2016) show this variant as increasing in frequency, *really* is still higher frequency in their studies, but is often much lower in our data. This may be an indication that *pretty* is still increasing in frequency, especially in NZE, or it is simply this CofP that uses a high frequency of *pretty* in their shared repertoire.

In terms of time span for change, Scandrett's (2012) study had data from a span of over one hundred years compared to just our six, so this may show that while intensifiers do change in frequency, this is a change that takes place over a longer period of time.

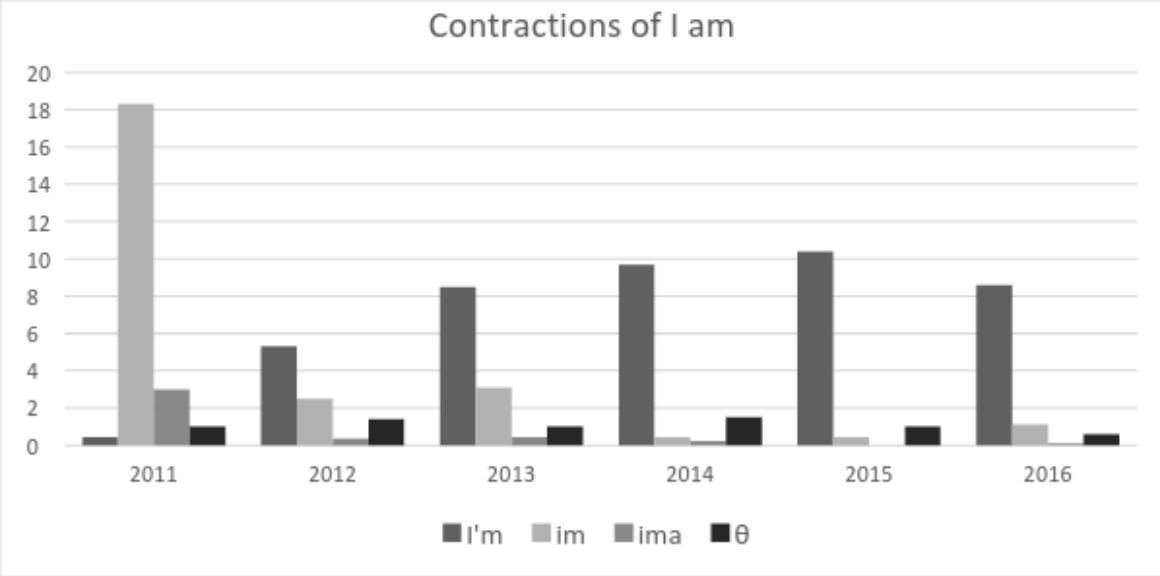
Graph 3. Normalised graph of intensifier tokens



4.3.0 Contractions

We decided to look at the use of *I'm* and its variants to give an indication of how contractions and apostrophes are being used in this group. Given the size of the study, it was not practical for us to go through all contractible forms, and we found *I'm* to be an easy to find variant using the corpus software. We also included the null form- when the contraction did not occur in the data set.

4.3.1 Results



Graph 4: Normalised data showing contractions of I am

This data shows a remarkable decrease in use of *im* (for *I am/ I'm*) around the 2012-2013 mark, after which the variant is almost phased out altogether. The difference between the 2011 and 2016 is statistically significant at p=0. It is worth noting that the 10 tokens of *im* in the 2016 data are all produced by the same participant, so it may be something she does not value in the same way as the other group members. There are also a few instances where the contraction does not occur (i.e *I am*), but this is not as frequent as the contracted variant.

4.3.2 Examples

h) 2010: where r u im sittn owtside the hall on the fence come find me

i) 2011: I think ima gonna be catching me some zs for I is tired

j) 2016: Haha I'm actually pretty excited

These examples show the variants in a variety of contexts. Particularly interesting is the variant *ima/imma*, which despite having a low amount of tokens in the corpus, is still a compelling example of the participants being productive with IM talk.

As is evident from Graph 4, the use of *I'm* with an apostrophe has increased overall over time while *im* has decreased dramatically after 2011. The relationship between the changes in these two variants is very significant ($p>0.00000125$). Again, 2013 appears to be a transitioning year. As can be seen in the data, 2013 was the last year there was still a significant frequency of *im*. There were still some instances of *ima* as well. This increased use of the standard apostrophe in these contractions could also be accounted for by Baron's (2008: 70) theory about "habit strength". That is to say that our CofP would have been using the computer for more school work and then university work which requires highly formal and standard writing which may have contributed to the increased standardisation of the contraction variable over time.

The *ima* variant is interesting because this is a very innovative form and is also more phonetic, which like the laughter variables makes it more speech-like, but again, this decreases in frequency from 2011 and is almost gone by 2014. In comparison to *ima* and *im*, *I am* in its full form is consistently low throughout the years, which shows that the contracted forms are the most favoured forms in this CofP. It is possible that *im* is an example of age grading because it is the less standard form that decreases with age. Furthermore, contractions are more speech-like, which is more informal, but the use of the apostrophe is more standard.

An interesting aside here is if we look at these variations as a percentage of just the total variants for each year (see Table 2) we can see a consistent increase of the use of apostrophe from 2011, except for 2016. In 2016 all instances of *im* that year were from just one person, while everyone else had evidently stopped using it. If these tokens are removed, apostrophe use increases to almost 100%. This table also shows a large difference between 2013 (the proposed transition year) and 2014.

Year	**I'm (% of total contracted)**	**Im (% of total contracted)**
2011	2	30

2012	65	30
2013	70	26
2014	93	4.2
2015	96	4
2016	87	11
2016 N.B	98.7	0

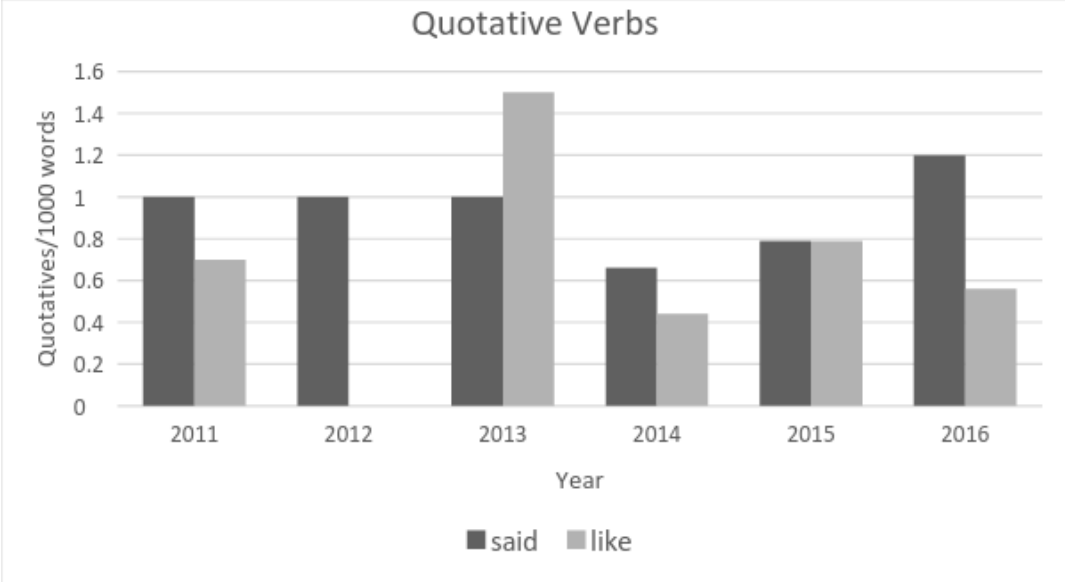
Table 2. Percentage of apostrophe and no apostrophe contractions out of the total *I am* contractions per year.

N.B without one person's *im*'s

4.4 Quotatives

Quotatives such as *BE + like* and *say* are function words that are used to introduce something that has been said. The quotative *BE + like* has been thoroughly researched in spoken corpora, due to the rapid change in action that occurred (Romaine and Lange 1991, Ferrara and Bell 1995, Tagliamonte and Hudson 1999). It is a salient feature of teenagers and university students in particular (Tagliamonte and Hudson 1999), which represents our participant group. Tagliamonte and D'Arcy's (2004) research on quotatives in Canadian youth found that *be like* represented 58% of the quotative tokens and suggest that its usage frequency is rising. However, variation studies in IM corpus studies have found that IM tends toward more formal written styles (Tagliamonte and Denis 2008, Baron 2004, 2008). Tagliamonte and Denis' (2008: 20) study found that the percentage of the use of *be like* (24%) was about the same as *said* (27%). This is strikingly less than the 68% use of *be like* in the spoken corpus (Tagliamonte and Denis 2008:20).

4.4.1 Results



Graph 5: Normalised Data for Quotative Verbs

The above graph represents the quotative tokens that appear per 1000 words (for further data see the appendix). The data shows that there is a similar usage of *be like* and *said*, which reflects the findings of Tagliamonte and Denis' (2008) research.

4.4.2 Examples

The following demonstrate how the quotatives are being used in interactions;

k) I'm always <u>like</u> naaaaaah thats weird (2010)

l) Omg it was so good, my flatmate in the room next to me would have been <u>like</u> wtf haha i was getting so vocal XD (2015)

m) And she <u>said</u> you were looking fab So go easy on the pizza (2015)

5. Discussion and Conclusion

We have found some patterns that appear to somewhat match some wider linguistic patterns such as for intensifiers and it seems that in general, the CofP became more standard in their writing style and less like speech with fewer phonetic examples of laughing (e.g. *lol* or *haha*) and *ima* (for *I'm* or *I am going to*).

The examples and data above provide some insight into the variety of language being used in this CofP. In some of the variables there does seem to be age grading occurring.

Evidence to support this occurring in every generation thus far has largely been taken from apparent time data such as Labov's (2001: 106-109) study in Philadelphia. Wagner (2012: 17-19) completed a longitudinal study on adolescents of the same age as our participants and found a noticeable decline in the use of the non-standard variable [ɪn] after leaving for college. Our research is able to offer real time data that suggests a similar type of age grading is occurring. The transitioning period in our study would be 2013, the year that our CofP left home and began tertiary study. However, at this time they were still very close with each other before they integrated more thoroughly into their new lives and new CofPs which did not include this group of friends from high school.

In this year, there is a discernible change in use of non-standard variables, particularly with the contraction *I'm* and laughter token *haha*. There also seems to be fewer usages of productive forms such as the laughter in examples a) and b) as well as a decrease in irregular spellings such as *needtah* (need to) and *sorreh* (sorry) that stood out in the corpus data in the earlier years. Going to university seemed to trigger this conservative language reform. This could be related to the more formal writing required of university students, and increased independence due to having moved away from home and starting tertiary education, but could also be in part due to the group splitting up. Although all members have remained friends, and in fairly close contact, they have nowhere near the contact time they had in high school, and there may be less of a joint enterprise and shared repertoire. This could result in a more reserved writing style amongst high school friends. Further research could involve testing IM conversations outside of this CofP.

Our data also adds insight into the speech laughter continuum dilemma (how laughter is an integral part of speech so when it is used in CMD it makes it more speech-like) (Tagliamonte and Denis 2008). The data demonstrates some informalities that align with spoken discourse, such as the striking productivity in laughter (examples a) and b)). There are also other indicators in the corpus that the participants are emulating spoken speech, for example *um* is used 26 times in the corpus, and there are numerous other vocal exclamations such as *argh* (to express frustration). However, there are other features in the corpus that are similar to the more conservative tendencies that Baron (2004) and Tagliamonte and Denis (2008) found. Notably the quotatives *said* and *like* are used at a similar rate, which has a higher rate of *said* occurring than in speech (Tagliamonte and Denis 2008). The increase of the use of *I'm* over *im* with age suggests perhaps some awareness of these features holding some kind of meaning. It is striking how all but one of the participants essentially stop using the *im* variant in the 2016 data. There is also an obvious change of tone that can be noticed by looking at the examples provided: the later data is much more coherent and close to the standard written form. Squires (2007) comments on how use of the apostrophe can be a feature of style, and there is an intentional identity that participants are trying to create with their apostrophe use.

There was a high frequency of both *lol* and *haha*, as well as productivity within the laughter variants. The data demonstrates the use of the quotative *be like* and how it is used at a similar rate to *said*, as well as intensifiers, with *so* being used overwhelmingly more than the other variants, and with *pretty* and *so* demonstrating how NZE variants translate into IM. The research also touched on the use of contractions and apostrophes, finding that apostrophe use significantly increased as the participants got older.

This data shows that there may be some possible age grading, although it was hard to tell since there is not much data for the possible variants such as *lol* and *ima/im* for previous generations even if they had still already been in informal writing and speech (Tagliamonte 2016: 3). Further research needs to be done in the future to see if they are continuing to be used or were just examples of slang and colloquialisms that peaked in 2010/2011. This study could also be taken further and survey the participants to make it a more in depth ethnographic study such as Wagner (2012: 180) by considering each participant individually and how they may have changed over the course of the years in the study and how this may have affected their CMD patterns. Although this was a small case study, it had an advantage over other CMD studies such as Tagliamonte (2008; 2011; 2016) and Baron (2008) because it was a real time study. Furthermore, like Tagliamonte (2011), the observer's paradox has been avoided as all the data was created before the study began, making it a very genuine example of how this CofP interacted with each other in everyday, naturalistic (written) conversation.

5.1 Future Research

There are some interesting features that did not fit into the scope of the study. Features such as reduplication (e.g. *ayyyyy*) (Kalman and Gergle 2014) or irregular *eh* endings of words such as *sorreh* (for *sorry*) were present in the corpus but did not have enough tokens to warrant quantitatively analysing them. There are many opportunities for further research using this kind of IM corpus. A larger scale study would be an interesting indicator of language trends happening in a larger community; whereas a small qualitatively focused analysis could dig deeper into how people create meaning through interaction online. It would also be worth looking into perception/intention studies, investigating what kind of identity people perceive to be created with certain IM expressions (Squires 2007). Finally, it would be nice to see IM studies look at more diverse groups; and doing a more NZE focused study could provide some interesting supplemental data on this variety.

The research has expanded upon previous research into the central features of IM talk in a community of high school-aged females as they leave for university. Largely, our research has supported previous findings. This study aimed to demonstrate the rich potential IM has for further study, and dispel notions that it is somehow inferior to other written modes. This was demonstrated in part by providing authentic data, as well as providing a real time study. As messaging services such as Facebook are proving their

staying power, there are great opportunities to obtain real time data from longer periods of time. Instant Messaging has demonstrated its "flagrant mix of formal and fashionable features" in this corpus (Tagliamonte 2016).

Tagliamonte and Denis (2008: 27) state in reference to their own study that “this study of IM language is likely already behind the times and taps only a very small part of what is even now developing” which will almost definitely be the case for our own participants’ IM language use also. This corpus software was not tagged, so we had to think of all the possible iterations of the variants of the variables in order to get data, but it may of course be possible that some have been missed.

This study opens up the door to further corpus-based studies on Facebook messages now that this medium of communication has been around for some time and there is several years’ worth of records of written material that can be easily analysed in any corpus software such as AntConc (Anthony 2014).

References:

Adams, A. 2012. *Humor markers in computer-mediated communication* (Unpublished doctoral dissertation). Texas A & M University, Texas.

Anderson, Jeffrey F., Fred K. Beard, and Joseph B. Walther. 2010. ‘Turn-Taking and the Local Management of Conversation in a Highly Simultaneous Computer-Mediated Communication System’. *Language@Internet* 7 (7), (*http://www.languageatinternet.org/articles/2010/2804*).

Anthony, L. 2014. AntConc (Version 3.4.3) [Computer Software]. Tokyo, Japan: Waseda University. http://www.laurenceanthony.net/

Bakht, M. M. 2010. *Lexical variation and the negotiation of linguistic style in a long island middle school* (Unpublished doctoral dissertation) New York University, New York.

Baron, N.S. 2003. Why email looks like speech: Proof-reading pedagogy and public face. In J. Atichison and D.M. Lewis (eds). *New Media Language*. London and New York: Routledge (pp.85– 94).

Baron, Naomi 2004. See you online: Gender issues in college student use of instant messaging. *Journal of Language and Social Psychology* 23(4), 397-423.

Baron, N. S. 2008. *Always On: Language in an Online and Mobile World*. New York: Oxford University Press.

Bell, A. 2006. Speech Accommodation Theory and Audience Design. In Keith Brown (ed.). *Encyclopedia of Language & Linguistics* (Second Edition). Oxford: Elsevier (pp. 11-648)

Boberg, C. 2004. Real and apparent time in Language change: Late adoption of changes in Montreal English. *American Speech* 79(3), 250-269.

Bucholtz, Mary. 1999. 'Why Be Normal?': Language and Identity Practices in a Community of Nerd Girls. *Language in Society* 28 (2), 203–23.

Crystal, David 2001. *Language and the Internet*. Cambridge: Cambridge University Press.

Crystal, David 2006. *Language and the Internet*. 2nd edition. Cambridge: Cambridge University Press.

Crystal, David 2011. *Internet Linguistics*. Abingdon and New York: Routledge.

Dąbrowska, M. 2013*. Variation in Language: Faces of Facebook English*. Frankfurt: Peter Lang AG

Dornyei, Zoltan 2007. *Research Methods in Applied Linguistics- Quantitative, Qualitative, and Mixed Methodologies*. Oxford University Press: Oxford.

Dresner, Eli, and Susan C. Herring. 2010. Functions of the Nonverbal in CMD: Emoticons and Illocutionary Force. *Communication Theory* 20 (3), 249–68.

Eckert, Penelope. 1997. Gender and sociolinguistic variation. In Jennifer Coates (ed.). *Readings in Language and Gender*. Wiley-Blackwell: Oxford (pp. 64-75)

Ferrara, Kathleen, and Barbara Bell. 1995. Sociolinguistic Variation and Discourse Function of Constructed Dialogue Introducers: The Case of Be + like. *American Speech* 70 (3), 265-290.

First Digital 2015. Website. http://www.firstdigital.co.nz/blog/2015/09/16/facebook-nz-demographics-usage-statistics-2015/

Herring, Susan. (ed) 1996. *Computer-Mediated Communication: Linguistic, Social and Cross-Cultural Perspectives* . Amsterdam: John Benjamins.

Herring, Susan 2001. Computer-mediated discourse. In D. Schiffrin, D. Tannen, & H. Hamilton (Eds.), *The Handbook of Discourse Analysis*. Oxford: Blackwell Publishers (pp. 612-634).

Herring, Susan. 2010. Who's Got the Floor in Computer-Mediated Conversation? Edelsky's Gender Patterns Revisited. *Language@Internet* 7 (8). (http://www.languageatinternet.org/articles/2010/2857)

Herring, Susan, Shaowen Bardzell, Jeffrey Bardzell, and Guo Freeman. 2015 Simulating marriage: Gender roles and emerging intimacy in an online game. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing* (pp. 1191-1200). ACM.

Hübler, Mike T., and Diana Calhoun Bell. 2003. Computer-Mediated Humor and Ethos: Exploring Threads of Constitutive Laughter in Online Communities. *Computers and Composition* 20 (3), 277–94.

Ito, R., & Tagliamonte, S. 2003. *Well* weird, *right* dodgy, *very* strange, *really* cool: Layering and recycling in English intensifiers. *Language in Society,* 32(2), 257-279.

Kalman, Yoram M., and Darren Gergle. 2014. Letter Repetitions in Computer-Mediated Communication: A Unique Link between Spoken and Online Language. *Computers in Human Behavior* 34 (May), 187–93.

Labov, W. 1972. *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.

Labov, William 2001. *Principles of Linguistic Change. Volume 2: Social factors*. Oxford: Blackwell.

Lave, Jean and Etienne Wenger 1991. Situated learning: legitimate peripheral participation. Cambridge: Cambridge University Press.

O'Neill, Brittney 2010. LOL! (laughing online): An investigation of non-verbal communication in computer mediated exchanges. *Working Papers of the Linguistics Circle of the University of Victoria* 20, 117-123

Preacher, K. J. 2001. Calculation for the chi-square test: An interactive calculation tool for chi-square tests of goodness of fit and independence [Computer software]. Available from http://quantpsy.org.

Prensky, Marc. 2001. Digital Natives, Digital Immigrants Part 1. *On the Horizon* 9 (5), 1–6.

Romaine, Suzanne, and Deborah Lange. 1991. The Use of like as a Marker of Reported Speech and Thought: A Case of Grammaticalization in Progress. *American Speech* 66 (3): 227.

Sankoff, Gillian 2005. Cross-sectional and longitudinal studies in sociolinguistics. In P. Trudgill (ed.), *Sociolinguistics/soziolinguistik: An international handbook of the science of language and society*. Berlin: Mouton de Gruyter (pp. 1003–1013).

Sankoff, G. 2006. Age: Apparent Time and Real Time. In Keith Brown (ed.). *Encyclopedia of Language & Linguistics* (Second Edition). Elsevier: Oxford. (pp. 110-116).

Schiano, Diane J., Coreena P. Chen, Ellen Isaacs, Jeremy Ginsberg, Unnur Gretarsdottir, and Megan Huddleston. 2002. *Teen Use of Messaging Media*. ACM Press.

Scandrett, Gina 2012. Intensifiers in New Zealand English. *New Zealand English Journal* 23, 33-42.

Squires, L. 2007. Whats the use of apostrophes? Gender differences and linguistic variation in instant messaging. University TESOL Working Papers 4, (http://www.leadership.american.edu/cas/tesol/pdf/upload/WP-2007-Squires-Instant-Messaging.pdf)

Tagliamonte, Sali A. 2011. *Language in Society : Variationist Sociolinguistics: Change, Observation, Interpretation*. Hoboken: Wiley-Blackwell.

Tagliamonte, Sali A. 2016. So sick or so cool? The language of youth on the internet. *Language in Society* 45(1), 1–32.

Tagliamonte, Sali A. and Rachel Hudson. 1999. Be like et al. beyond America: The

Quotative System in British and Canadian Youth. *Journal of Sociolinguistics* 3, 147–72.

Tagliamonte, Sali A. and Alexandra D'Arcy. 2004. He's like, She's like: The Quotative

System in Canadian Youth. *Journal of Sociolinguistics* 8, 493–514.

Tagliamonte, Sali A. and Derek Denis. 2008. Linguistic Ruin? Lol! Instant Messaging and Teen Language. *American Speech* 83(1): 3–34.

Uscher, Dylan. 2010. Language change or just a phase? A real-time study of intensifiers in teenage blogs. Paper presented at Change and Variation in Canada IV, St. John's, NL, June 19-20.

Van Herk, Gerard, and the Ottawa Intensifier Project. 2006. That's so tween: Intensifier use in on-line subcultures. Paper presented at New Ways of Analyzing Variation 35, Columbus, OH, November 9-12

Wagner, S. E. 2012. Real-time evidence for age grad(ing) in late adolescence. *Language Variation and Change* 24(2), 179–202.

Walther, Joseph B. and Kyle P. D'Addario. 2001. The Impacts of Emoticons on Message Interpretation in Computer-Mediated Communication. Social Science Computer Review 19 (3), 324–47.

Wenger, Etienne. 1998. *Communities of practice: Learning, meaning, and identity*, Cambridge: Cambridge University Press.

Werry, Christopher C. 1996. Linguistic and Interactional Features of Internet Relay Chat. In Susan C. Herring (ed.), *Computer-Mediated Communication: Linguistic, Social and Cross-Cultural Perspectives*, Amsterdam: Benjamins (pp. 47-63)

Yates, Simeon J. 1996. Oral and Written Linguistic Aspects of Computer Conferencing: A Corpus Based Study. In In Susan C. Herring (ed.) *Computer-Mediated Communication: Linguistic, Social and Cross-Cultural Perspectives*, Amsterdam: Benjamins (pp. 29–46).

Appendix

Table 1. Amount of tokens: Contractions

	I'm	**im**	**ima**
2010	3	6	0
2011	3	126	21
2012	15	7	1
2013	57	21	3
2014	44	2	1
2015	118	5	0

2016	77	10	1

Table 2. Amount of tokens: Intensifiers

	really	**pretty**	**real**	**so**	**very**
2010	1			1	
2011	7	10	2	21	5
2012	3	6	1	6	1
2013	8	16	0	15	3
2014	5	6	1	12	3
2015	17	23	3	52	9
2016	11	22	1	39	3

Table 3. Amount of Tokens: Quotatives

	said	**like**
2010	1	0
2011	8	5
2012	4	0
2013	9	10
2014	3	2

2015	9	9
2016	11	5

Table 4. Amount of tokens: Laughter

	haha	**lol**	**other**
2010	7	0	0
2011	3	126	21
2012	6	17	2
2013	41	36	5
2014	14	5	0
2015	39	13	4
2016	100	11	0

“Both a maid and a man”: The use of do-support as a marker of gender in Shakespeare’s cross-dressing plays.

Alexandra Birchfield

Abstract

This study investigates the use of linguistic resources, specifically; do-support, to construct different gender identities in four of Shakespeare’s plays. By analysing the speech of female characters who disguise themselves as men, we can compare the rate of use of this variable in two different gender identities performed by the “same” person. This is also compared to other data (Kroch 1989, Nevalainen and Raumolin-Brunberg 2003) to see how far do-support in Shakespeare was representative of its use in society at the time.

Introduction

I have had a long running fascination with the cross-dressing female characters of Elizabethan and Jacobean theatre. As a female performer there is nothing quite like the agony of having your breasts bound every night coupled with the ecstasy of *finally* being allowed to join in the sword-fighting that makes playing these parts a joy. From a linguistic perspective, these characters offer the rather unique opportunity to explore gender variation in language within one person.

Periphrastic *do* or “do-support” is an extensively documented feature of English. The variation in use of do-support as an incoming variable in the language has been explored by many linguists from different perspectives and for different reasons. The wealth of data on this variation in 16th and 17th century English makes it an ideal first port of call for an investigation into whether and to what extent this particular set of Shakespearean characters might be using language to mark gender. I aim to investigate the extent to which use of do-support by four different characters varies when they are presenting as female versus when they are in their male “disguise”. I am interested in a) the extent to which the speech of these characters varies in their opposite gender personas and b) whether do-support variation is salient enough to be used as a marker of gender.

First, I will review the literature around do-support, particularly regarding gender variation. I will also explore some of the literature on the use of historical fiction data as a resource for sociolinguistic analysis. I will then set out my study and results and discuss what conclusions may be drawn from them.

Wellington Working Papers in Linguistics 22 (2017) 25-34

Background

One of the most comprehensive quantitative investigations of the development of periphrastic *do* is by Ellegård (1953). The information provided by Ellegård in describing the development of *do* as an auxiliary was later adapted by Kroch (1989) to illustrate the varying rates of the development of do-support in different contexts. Ellegård (1953: 162) shows that do-support in affirmative declarative sentences peaked around the middle of the 16th century before declining in the 17th and becoming virtually non-existent by the 18th century. In other contexts, however, do-support survived and increased to more-or-less categorical use as we know from our use of it today in questions; "Do you like Shakespeare?", negative statements; "I don't like *The Tempest*" and negative questions; "Didn't you enjoy Helen Mirren's performance of Prospero?".

Kroch (1989: 22) illustrates that leading the charge in the adoption of do-support were affirmative transitive adverbial and yes/no questions and negative questions, followed by affirmative intransitive adverbial and yes/no questions, then affirmative object questions with negative declarative statements. It should be noted, however, that this is a general trend and there are some deviations. In particular, in the early part of the 17th century where do-support in affirmative object questions drops and is briefly overtaken by negative declarative do-support.

For a more gender specific view of the progression of do-support, we can turn to work by Nevalainen and Raumolin-Brunberg (2003). They use gender variation in affirmative and negative statements to illustrate "switches from male to female advantage" (Nevalainen and Raumolin-Brunberg 2003: 125). For do-support in affirmative statements there appear to be two peaks of two different 20 year periods. The first from 1580-1599 is clearly led by men while the second from 1620-1639 is led by women. A similar case can be seen in negative statements. Men have higher rates of do-support between 1580 and 1599, they drop to a similar or slightly lower rate from 1600-1619 and from then onwards both groups' use increases relatively steadily but with women leading.

Unfortunately, Nevalainen and Raumolin-Brunberg do not explore the variation of do-support in questions according to gender and it is very difficult to find any study that does. This could be because a lot of the corpus data used in looking at this variation is from private correspondence in which, as stated by Kallel (2002), interrogatives hardly occur.

There are several issues to be considered when using data from written fiction for linguistic research. Written sources are the only possible data for historic research. This means that if we want to investigate linguistic features of speech, fiction is arguably one of our best possible resources. This is because, as discussed by Blaxter (2015), writers of fiction are often actively trying to recreate the speech styles of their characters. This means more varied linguistic data than you would likely get from the more exclusively formal styles used in official communication, records and religious texts that make up a large proportion of historic written data. I would argue that this is particularly true of Shakespeare's plays where we see

representations of the speech of a much broader cross-section of society than we would by most written resources, given the literacy rates at the time.

On the other hand, the variation in fiction data cannot always be assumed to be an accurate representation of the variation in society. This is discussed, specifically in reference to the representation of gender in Shakespeare by Froehlich (2012). If the plays were to actively reflect the gender make-up of society at the time, 51% of characters would need to be female and 49% male. This is never the case, male characters are consistently the majority, often by quite a large margin (Froehlich 2012: 56).

There is also the issue when analysing a feature like do-support in fiction of how salient a feature like this was to Elizabethan society in general and Shakespeare in particular. How aware were they of the variation as a marker of gender? Again Blaxter (2015) can allay our concerns here to some extent, having shown that an incoming variant that might be expected to be below the level of conscious awareness did pattern along expected gender lines in Old Norse fiction.

Some scholars would argue that literature in general and Shakespeare in particular cannot be analysed with this sort of quantitative approach. However, Froehlich (2012) as well as Hope and Witmore (2014), suggest that this kind of data can add objective evidence to non-quantitative analysis.

Method

For this study I collected data manually. I went through the plays by hand and recorded each instance of do-support and each instance where do-support could have been used but was not (for a full list of all tokens, including context, interlocutor and the gender the character was performing see Appendix 1). The four plays I used as sources were "Twelfth Night" (1601), "As you like it" (1599-1600), "The Merchant of Venice" (1596-97) and "Two Gentlemen of Verona" (1590-91). While it is difficult to establish an exact date of composition of any of Shakespeare's plays, the dates I have given in brackets are those given in Hope and Witmore (2014), using the Wells-Taylor chronology established as part of the Oxford Shakespeare project (for further information, see Hope and Witmore 2014: 9). I chose this chronology as it is well established and supported by historical evidence and because Hope and Witmore find it suitable for a study of language use in Shakespeare over time which is similar to my purpose. For the text of the plays, I used the website www.shakespeare-online.com which provides the full text taken primarily from the first folio.

I did not include "Cymbeline", another of Shakespeare's plays in which a female character disguises herself as a male, mainly because this play is stylistically quite different in that it cannot be classed unambiguously with the Comedies as the other four can. Also, as

"Cymbeline" is estimated to have been written between 1608 and 1610 it would fall outside of the 10/11-year bracket occupied by the other plays.

I separated instances of potential do-support into questions, negative statements and negative questions. I also recorded all tokens of do-support in affirmative declarative statements. I did not have enough data to be able to further divide affirmative questions as per Kroch (1989) and still make meaningful observations about the results so for this reason I grouped these as one.

Results

In terms of periphrastic *do* in affirmative statements, it is difficult to say how much it is being used proportionally, as if one was to record every instance where affirmative *do* could be used you would end up with a transcript of most of the character's lines. It is possible however to compare the number of times the characters use affirmative *do* when in their female persona versus their male one. For this, my results showed no gender difference. Out of 62 tokens, 3 were ambiguous as to what gender the character was performing at that point and of those that were clear, 29 were male and 30 female.

There were various reasons for classing a character's gender performance as ambiguous for certain tokens. In some instances, while in their masculine disguise, one of the characters may say something aside to themselves or the audience or speak to another character that is aware of the disguise. In these instances, the performance is not clear as the addressee is in on the joke, as it were, but the performance is not necessarily being dropped. In the case of Rosalind, there is a point at which she, while pretending to be a man, pretends to be a woman. There are very few tokens in this state but I deemed them ambiguous as it becomes difficult to determine what the gender performance is from line to line. There is also an ambiguity for some of the characters in the process of their "gender reveal" which I will discuss in greater detail below.

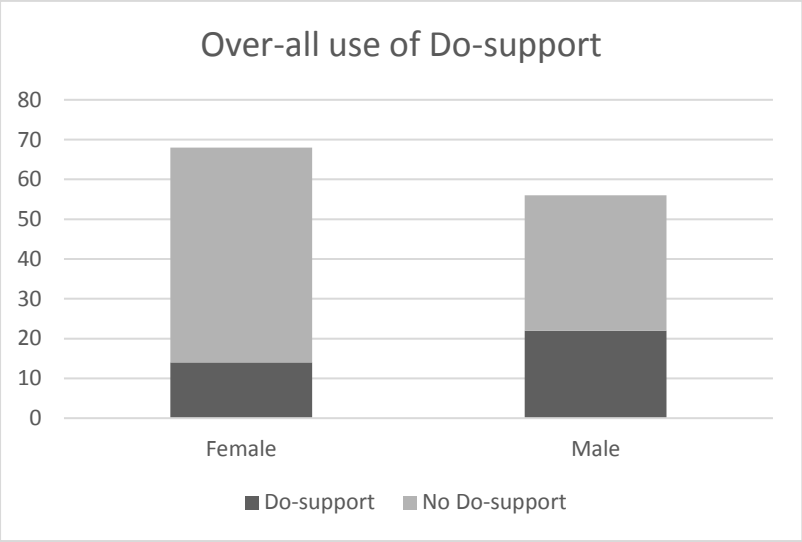
I am sceptical of how much we can read into the use of periphrastic *do* in affirmative statements, particularly in the context of blank-verse. It struck me as I was going through the plays that the inclusion or exclusion of a word like *do* or any of its morphological variations is quite a convenient way of adding or removing a syllable from a line, the better to make it scan.

In the case of negative statements and questions, it is easier to list occasions where do-support does not happen as well as those where it does. This is because in these contexts, when there is no do-support, the verb raises to a position in the sentence either above the negative as in: "I care not who knows so much of my mettle." (Voila: Twelfth Night: Act 3,

scene 4) or, in questions, above the subject: "what think you of falling in love?" (Rosalind: As You Like It: Act 1, scene 2).

Looking at do-support in questions, negative statements and negative questions as a whole across all four plays, it seems that the characters use more do-support when inhabiting their male personas than their female ones (see figure 1). A chi-test showed the difference in use was significant (p=0.022). There were 2 tokens of do-support where I believed the character's gender performance was ambiguous and these were excluded from the results.

Figure 1.



If we look at the data for do-support in each context individually however, we see a much more nuanced picture. Negative questions make up a very small proportion of the data; there were only 5 tokens across all the plays. Of these 5 tokens, there was 1 each of do-support used by a male and female persona, 1 of no do-support by a male persona and 2 by a female persona. So, in as far as we can say anything from such a small data set, there seems to be no apparent gender preference in either direction for negative questions.

Turning to affirmative questions and negative statements, we can see quite a significant difference in the way do-support patterns. In negative statements, do-support was used to a relatively low extent by both genders (see figure 2). A chi-test suggested the distribution was not significant, with the caveat that 2 of the cells lacked enough tokens for a chi-test to be entirely appropriate. For questions however, the results were quite different. While in their male personas, the characters used do-support in 17 out of 22 of their questions compared to using it only 9 times out of 34 when they were being female (see figure 3). A chi-test showed that this was highly significant (p=<0.001).

Figure 2.

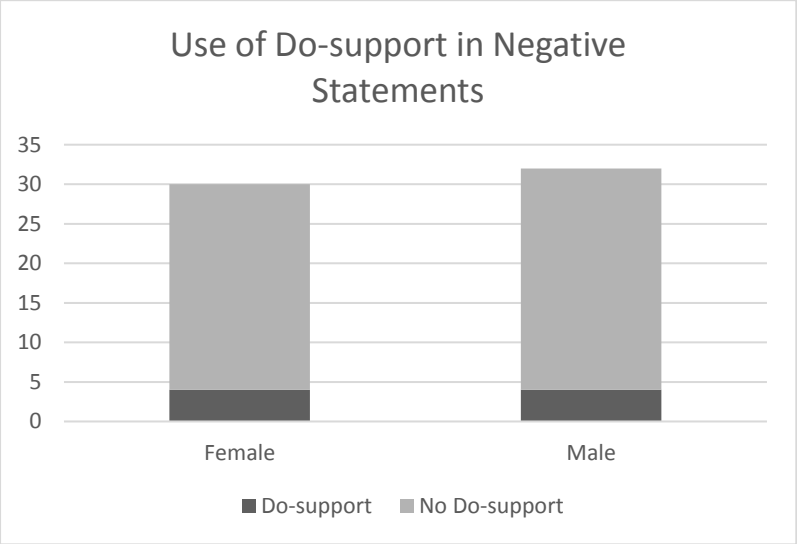
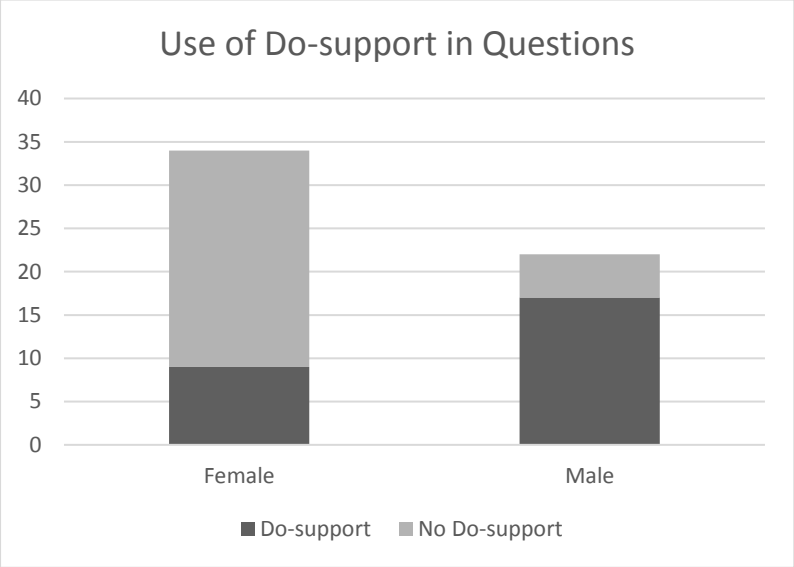


Figure 3.



If we interrogate the data further by examining each character individually, we really do start to have the problem of too few tokens to make any meaningful generalisations. However, provided we are cautious of the conclusions we can draw from them, there are some interesting observations to be made.

In “Twelfth Night”, Viola categorically avoids do-support in negative statements whether she is performing a male or female identity. In questions however, she still consistently avoids it when she is being female, but her male “alter ego”; Cesario, categorically uses do-support in questions. There is 1 token of do-support in a negative statement by Viola which I believed to be ambiguous in terms of gender. It occurs at the end of the play when Viola finds her brother

whom she believed dead and her disguise is revealed. The full line is: "Do not embrace me till each circumstance/ Of place, time, fortune, do cohere and jump/ that I am Viola" (Voila: Twelfth Night: Act 5, scene 1). This is an odd speech in that she is almost stalling in resuming her old identity and, by extension, her femaleness. Without getting into too extensive a dramaturgical analysis, it does strike me as interesting that the only time Viola chooses the do-support construction, rather than saying "embrace me not", is at the moment when she is "hovering" between the two genders she performs.

Rosalind from "As you like it" provides the most data overall across negative statements and questions and as such patterns relatively similarly to the data for all characters combined, as does Julia from "Two Gentlemen of Verona". Portia from "The Merchant of Venice" has the smallest number of question tokens (6) and 4 of these are when she is performing her male persona. 3 out of these 4 male tokens use do-support while neither of the 2 female tokens do, so this pattern seems fairly consistent across all four characters. The small number of question tokens for Portia in her female persona is perhaps unsurprising. Her male disguise has the specific function of allowing her to operate in a court of law which naturally calls for her/him to be interrogative but is also only a short section of the play. As a woman, Portia arguably has the highest status of the four. Having inherited her estate from her deceased father (albeit with the restriction of a rather perverse husband-finding routine to endure) she is essentially her own mistress until her marriage at the end of the play. This may mean that she is more likely to be providing answers or instructions to her fellow characters than requesting them. Portia also has by far the highest use of affirmative/declarative *do* of all the characters.

Discussion

So how does the data from this study fit into the bigger picture of Early Modern English do-support seen in studies like Ellegård (1953), Kroch (1989) and Nevalainen and Raumolin-Brunberg (2003)? The plays were written over the course of roughly a decade from 1590 – 1601. By this time, Ellegård (1953) shows affirmative *do* to be in decline. In these plays, the characters are still using affirmative *do* but at what rate it is difficult to say, and, as previously mentioned, this could be more to do with manipulating the metre of the text as much as any sociolinguistic factor. It is interesting perhaps that the character who uses the most affirmative *do* (Portia) is from the play written second earliest in the chronology. However, the earliest play "Two Gentlemen of Verona", written around 1590-91, does not have significantly more affirmative *do* than the latter two plays. It is possible that Portia, whether performing a male or female identity is just more linguistically conservative in retaining this outgoing variant than the others. It would be interesting to examine other variables in Portia's speech compared to the other characters to see if she has a tendency to be more linguistically conservative across the board.

The lower rate of do-support in negative statements in my data seems to concur with Kroch (1989) which show negative declaratives not only tailing questions but under-going a dip in use in the later part of the 16th century. Kroch however does not go into the gender dimension of this variation so for this we move to Nevalainen and Raumolin-Brunberg (2003). There is very little gender differentiation in my data for either affirmative or negative statements. This more or less agrees with Nevalainen and Raumolin-Brunberg's data which showed men, who had been using more periphrastic *do* in both cases, converging to women's lower usage around the turn of the century before women began to adopt the variant.

The one instance where there is a gender divide in my data - affirmative questions – is unfortunately the area in which previous data on gender variation is conspicuous by its absence. We might assume it would pattern similarly to, and ahead of negative statements as might be suggested by Kroch (1989), but if this were the case we would expect the gender divide to be the reverse of what was found. We can say that at one point, periphrastic *do* in affirmative and negative statements was led by men and it is possible that this was also the case in questions. This is rather unsatisfying and gives no indication as to why it should be only in questions that the four characters I studied are doing something different to mark gender.

One possible avenue for further exploration would be to look at the use of do-support by other characters in the plays to see if they pattern similarly along gender lines. Essentially, are the characters I studied "getting the variation right"? It would also be useful to examine other variables in the speech of all characters to see how consistently the "cross-dressing" characters pattern with the women when they are being women and the men when they are being men. This would give a clearer picture of which variables are salient and available for use as gender identity markers and which are not. It might also help to tease out more of the nuances of the performances of the characters in disguise. By this I mean that Viola, Portia, Rosalind and Julia might not always be most concerned with "doing gender" so much as performing something else such as status or age. All four women not only disguise themselves as male but also as someone of lower status and somewhat younger than themselves. This means that when "Rosalind" can be seen to speak differently to "Ganymede" we cannot say for certain that it is because she is trying to "talk like a boy" rather than talk like someone of a lower social class. Gathering more evidence on the variants used by other characters would make it possible to cross-reference and see more clearly what is going on.

Conclusion

From the data collected it seems possible that do-support was used, to some extent, by Shakespeare to mark a difference in linguistic gender performance by female characters who take on male personas. While it seemed that, at least in the case of affirmative questions, these characters were doing something different when they were performing a male identity,

it would be interesting to investigate this further with other characters and different variables.

I would like to think of this study as something of a pilot test on the possibility of using documented variations in exploring the way characters in Shakespeare overtly perform gender, in this case as a disguise. It seems to me that there is still more for us to learn about the social variation of even such a well-studied variable as periphrastic *do*. Likewise, there is always more to learn from sources as extensively analysed as Shakespeare. Quantitative linguistic analysis, as demonstrated by Hope and Witmore (2014) and Froehlich (2012) can provide new insights as well as further questions.

References

Blaxter, Tam 2015. Gender and language change in Old Norse sentential negatives. *Language Variation and Change* 27(3): 349-375.

Ellegård, Alver 1953. *The Auxiliary Do: The establishment and regulation of its use in English*. Stockholm: Almqvist & Wiksell.

Froehlich, Heather 2012. Do I Put Up That Womanly Defense? This Tune Goes Manly: A Corpus Stylistic Study of Gender-Specific Grammatical Constructions of Possession in Two Shakespearean Plays. Masters Dissertation, University of Strathclyde, Glasgow, Scotland.

Hope, Jonathan and Michael Witmore 2014. Quantification and the language of later Shakespeare. *Actes des congrès de la Société française Shakespeare* 31: 123-149.

Kallel, Amel 2002. The age variable in the rise of periphrastic 'do' in English. *Reading Working Papers in Linguistics* 6: 161-185.

Kroch, Anthony 1989. Reflexes of grammar in patterns of language change. *Language Variation and change* 1: 119-244.

Mabillard, Amanda 2000. Shakespeare Online. http://www.shakespeare-online.com/plays/ (25-27 September 2016).

Nevalainen, Terttu and Helena Raumolin-Brunberg 2003. *Historical linguistics*. Harlow: Pearson Education Ltd.

Gloriavale and the case of the opening MOUTH

Lou Kendall

Abstract

Gloriavale is an isolated Christian community in New Zealand where the residents appear to have developed an interesting MOUTH (Wells 1982) vowel. This study analysed the vowel in various residents of Gloriavale to understand why it sounded different to standard New Zealand English (NZE), and to propose possible reasons for its emergence. Through analysing audio from documentaries about the community it was discovered that the residents were producing an opening MOUTH vowel instead of a closing one. With evidence drawn from the limited number of studies on the MOUTH vowel in NZE it was suggested that an opening MOUTH variant has always been available in NZE. It is proposed that the opening MOUTH found in Gloriavale was present upon the founding of the community, and has become more open due to the isolation of community and imperfect adult language-learning through diffusion of the original residents.

1. Introduction

In recent years the isolated Christian community of Gloriavale has received much attention as a result of the Pacific Screen documentaries, directed and produced by Amanda Evans (2014, 2015, 2016). These documentaries introduced New Zealand to this isolated community living near Lake Haupiri on the West Coast of the South Island. Through these documentaries it has become apparent that the speech of the residents of Gloriavale varied in their pronunciation of the MOUTH (Wells 1982) vowel when compared to standard New Zealand English (NZE). In a country that is known for a lack in dialectal variation this creates an interesting area for investigation. Therefore, the aim of this study was two-fold; first to understand why MOUTH at Gloriavale sounded so different to standard NZE, and secondly to understand possible influences for this unique realisation.

Wellington Working Papers in Linguistics 22 (2017) 35-50

2. Gloriavale Christian Community

Until the creation of the series of documentaries, the Gloriavale community had kept relatively to itself. Before these, the only reliable source of information on the community came from a short chapter in a book by Sargisson & Sargent (2004). As a result, reliable information about Gloriavale is extremely limited. Founded in 1969 by Hopeful Christian, born Neville Cooper, an Australian Pentecostal preacher, Gloriavale was established to allow its residents to live a fundamentalist Christian lifestyle following the teachings of the New Testament (Sargisson & Sargent 2004). These days the community continues to have limited contact with the outside world, and what contact they do have is often censored by the leaders, also known as shepherds. According to these documentaries (Evans 2014, 2015, 2016), the community has over 500 residents living closely together in several shared hostels. An Education Review Office (2016) report in 2015 identifies the school roll as 161, from years 1 to 13. This is thought to be the first study to examine the speech of Gloriavale.

3. Language Change

Language change is often influenced by the interactions people have with others. Through these interactions, processes like accommodation (Giles, Coupland & Coupland 1991; Bell 2006; Llamas, Watt & Johnson 2009) begin to make incremental changes within a language community. The role of accommodation is to 'achieve solidarity with or dissociation from a conversational partner' (Giles et al. 1991: 2). This means that speakers have the ability to converge or diverge their speech with those they are interacting with. Bell (2006: 648) suggests that the most common form of accommodation is convergence, meaning speakers shift their style of speech to be more like their addressee.

Language and identity are two factors that appear to go hand in hand (Quirk 2000; Edwards 2009). In a community like Gloriavale where 'in-group' identity is an important aspect of their daily lives (Sargisson & Sargent 2004), it could be suggested that any language change seen is a result of residents wanting to signal a 'Gloriavale identity' through accommodation. Meyerhoff (1998) and Trudgill (2008) however, caution linguists about using identity to explain accommodative changes in speakers.

Through analysing a conversation between herself and a speaker of Bislama, the creole of Vanuatu, Meyerhoff (1998) demonstrates how accommodation theory can be useful when there are clear semantic meanings behind the variables, i.e. a single, obvious meaning behind a morpheme or lexeme, to show this 'in-group' identity. Meyerhoff (1998) also explains that it is necessary to understand the 'general social and communicative norms of the interlocutors' (Meyerhoff 1998: 223) if wanting to use identity and accommodation to explain

speaker variation. It is unlikely that a speaker will purposely accommodate to a phoneme because they want to indicate a group identity.

Trudgill (2008) takes this argument one step further suggesting that identity plays little to no role in accommodation. He states that accommodation is a result of humans' 'innate tendency towards behavioural coordination' (Trudgill 2008: 252) and an earlier article describing accommodation as occurring because of 'a biological trait that encourages humans to behave the same way as other humans they associate with' (Trudgill 2004: 89). He argues that a common identity is not the driving force for linguistic accommodation, but rather a consequence of it.

This stance is countered by Schneider (2008) who believes that accommodation and identity are two sides of the same coin. He believes that by diminishing linguistic differences, speakers are clearly enhancing group formation and cohesion. He explains that accommodation is a social goal to show similarity between members of a group, whereas identity is an individual stance wherein speakers choose to indicate their belonging to a group by signalling their similarity or dissimilarity with their addressee by altering their speech. This does, however, support Meyerhoff's (1998) argument that the relationship between accommodation and identity needs to be meaningful for interlocutors.

If accommodation happens often enough and over a long period of time we begin to see language change occurring. As Kerswill & Williams (1999) explain, levelling occurs when the accommodation from face-to-face interactions results in the reduction of marked features. If it occurs consistently throughout a population, it is possible that the highly marked features are completely lost from the speech community. This removal of the marked features results in the focussing of the majority forms creating norms and stability within the speech community (Trudgill 1986).

While accommodation would have undoubtedly been occurring between the original residents of Gloriavale, it is highly unlikely that any variation seen in their speech is a result of them wanting to signal a 'Gloriavale identity' as will be explained later. In fact, other studies (Trudgill 1974; Kerswill 2003; Stanford & Kenny 2013; Prichard 2014) on language change within communities highlight the importance of processes such as *transmission* and *diffusion*.

Labov (2007) explores the concepts of transmission and diffusion and how these processes can lead to language change. He describes the main difference between these as transmission being a result of children's exceptional language learning abilities, and diffusion as a result from adult speakers less perfect language learning. Children's language learning abilities allow

them to near-perfectly replicate their parents' and caregivers' speech, allowing for slight incremental changes to slowly alter the original language. This means that children are easily able to learn aspects such as complex syntactic structures. However, as children grow older their language learning ability declines, and this is when Labov (2007) indicates that the process of diffusion begins to take place. Diffusion language changes are more significant, resulting largely from contact between adults, as their language learning is less perfect, i.e. they are less likely to replicate what they are hearing as well as children do. It is more difficult to trace diffusion changes back through a language or dialect because they do not occur incrementally like the changes in children's language. Where transmission 'copies everything' including syntax and structures, diffusion 'is limited to the most superficial aspects of language: words and sounds' (Labov 2007: 349) as a result of the decline and limitations in adult language learning abilities.

An early study by Trudgill (1974) looked at the diffusion of (ae) into the Norwegian spoken on the peninsula of Brunlanes. He discovered that this variable could not be traced back through the transmission of child language learning, but rather was introduced into the community through diffusion. This is a common theme in language change studies, and as Prichard (2014) argues, can even explain some of the irregularities of the Great Vowel Shift (GVS). The GVS saw long vowels in English become diphthongized. While the GVS is typically considered a chain shift there is still debate about the origins of some of the long vowels found in the north of England. Prichard (2014: 101) suggests that these irregularities are as a result of 'the diffusion of fully-shifted forms into an area which had a rather different initial vowel system.' She explains that the long vowel variants found in the north, which appear to be a part of the GVS, are in fact a result of diffusion from southern areas that did not undergo the full shift.

Another study by Mooney (2016) found that in France, the speakers in the southern region Béarn were demonstrating typically Parisienne nasalisation in their speech. As Béarn is hundreds of kilometres away from Paris, Mooney (2016) hypothesised that it was unlikely these linguistic features from the north were a result of contact with Parisienne French alone. Instead he concluded that nasalisation in Béarn was a result of geographical diffusion through medial towns between Paris and the region.

Diffusion often occurs when features from a populous centre spreads outwards to smaller towns and cities nearby (Kerswill 2003: 1). In a study on dialect levelling and geographical diffusion in British English, Kerswill (2003) discusses the need to look at the types of communities where language change is occurring. Often 'the rapidity and nature of language change is linked to a social structure' (Kerswill 2003: 224). Trudgill (2002) suggests that in communities where there is high contact between interlocutors, the imperfect learning of adult speakers through diffusion can lead to a rapid language change itself. Therefore, it is necessary to look beyond the change itself to see what is happening in both the community and the wider population.

These studies on transmission and diffusion shows the importance in understanding not only the community where the language change has taken place, but also the surrounding communities and centres. Therefore, when examining possible influences on the evolution of the MOUTH vowel in Gloriavale, it will not only be necessary to consider accommodation, transmission, and diffusion, but also to look at NZE as a whole as the language changes found here most likely did not just occur from the creation of a 'Gloriavale identity' as noted above.

4. The MOUTH vowel and New Zealand English

The MOUTH diphthong is a relatively recent development in the history of English. The MOUTH vowel has not always been available in English as it emerged as a result of the GVS (Wells 1982). Before the GVS, MOUTH was realised as the monophthong /u:/ which then moved to /ou/ and is now realised as [aʊ] today in some versions of standard English including British English. As Wells (1982: 152) highlights, there are plenty of ways in which MOUTH can vary in dialects of English including: the degree of advancement of the starting point, the degree of openness of the starting point, the second element, the trajectory and the 'speed' of the diphthong. This results in different dialects having realisations such as very back starting points in the Englishes of southern Africa, and mid-central second elements, such as the schwa in Cockney English. According to Wells (1982: 153), there does not appear to be any realisation of MOUTH that features an opening second element, however.

Variation in MOUTH can be found within, as well as between, dialects of English. In NZE variation in the MOUTH diphthong has been present for some time and can be traced back to some of its first speakers. Thanks to the Origins of New Zealand (ONZE) project, a corpus detailing the history of NZE has been established that allows researchers to track changes in NZE (Trudgill, Gordon & Lewis 1998; Maclagan & Gordon 2004; Gordon, Campbell, Hay, Maclagan, Sudbury & Trudgill 2004).

As Maclagan & Gordon (2004) explain, the ONZE project has allowed linguists to analyse recordings from 115 speakers born between 1851 and 1904, including some of the first-born European New Zealanders. Ultimately they display the variability in NZE during its origins as a result of immigrants migrating from a variety of locations in Europe, as well as Australia and Canada.

The variability is further explored in an auditory perceptual analysis of the Mobile Unit recordings by Gordon et al. (2004) from the ONZE corpus. When examining the MOUTH vowel in particular they discovered that speakers produced a number of different variants including:

[æʉ, ɛʊ, æᵊ]. It is important to note that one of these variants included an open second element. Gordon et al. (2004) also found a significant difference between the realisation of MOUTH in male and female speakers. The MOUTH vowel for men in the Mobile Unit recordings started below the TRAP vowel and glided towards the expected close position near the FOOT vowel. Women on the other hand produced a more advanced variant that has a significantly higher starting point and a horizontal glide, with no trace of the diphthong raising towards FOOT.

Today there is still variability in the MOUTH vowel, but according to Hay, Maclagan & Gordon (2008) the distinction is not a result of gender. Today closing diphthongs are above the level of consciousness in NZE and as a result have become associated with social status. The more rounded version of MOUTH with a second element still heading towards FOOT is typically produced by older speakers and has high-status connotations. The less rounded variant that features the second element heading towards schwa, as produced by the female speakers in the Mobile Unit recordings (Gordon et al. 2004), is associated with younger speakers and is considered to be a broad New Zealand accent. In a community like Gloriavale where there is an attempt to restrict social status (Sargisson & Sargent 2004), it is unlikely that their realisation of the MOUTH vowel is being influenced by the perception of closing diphthongs having broad or high-status associations.

More recent research by Hazenberg (in progress) in Auckland looks at how speakers indicate their sexuality and gender through their vowels. An interesting aspect of his data is the existence of an apparent third variant for MOUTH in NZE. While the results show an overall trend of MOUTH moving horizontally towards the schwa (Gordon et al. 2004; Hay et al. 2008), the older participants in the study seem to be producing the beginnings of an opening diphthong. As seen in Figure 1 the older queer men (OQM), the older queer women (OQW), and the older straight men (OSM) are all producing MOUTH vowels where the second element has moved lower past KIT vowel. This is interesting when considering that the average ages for all these speakers are between 53 and 58 years, and that Gloriavale was founded almost 50 years ago. This suggests that the opening variant of MOUTH may have been available to speakers of NZE at this time.

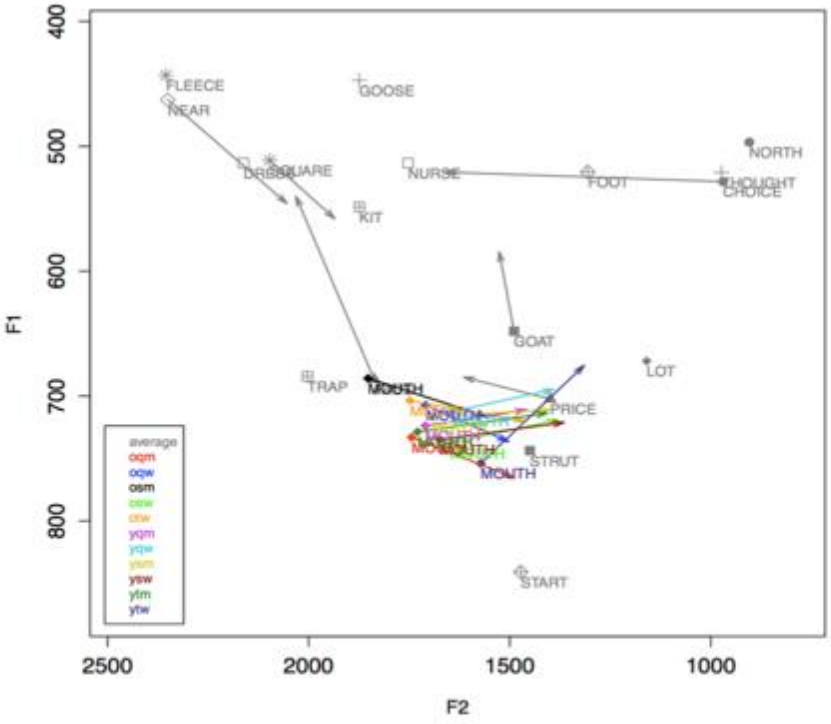


Figure 1: Normalised vowel plot showing the realisations of the MOUTH diphthong (Hazenberg in progress).

The MOUTH diphthong produced at Gloriavale appears to be unlike any other variant in NZE. First by examining how the vowel differs from NZE, then by looking at the origins and social structure of the Gloriavale community, it will be possible to hypothesise some of the reasons for this unique MOUTH vowel. It will be necessary to also look beyond the community to NZE as a whole to see what influences this could have had on Gloriavale, and what the changes in Gloriavale can tell us about the future of NZE.

5. Method

The data used for this research came from the three-part South Pacific documentaries created by Amanda Evans (2014, 2015, 2016). The series was available on the TVNZ streaming website TVNZ OnDemand. The audio was extracted from each video so that the formants were able to be measured and analysed using Praat (Boersma 2001; Boersma & Weenink 2016).

MOUTH was selected as the primary vowel of interest from a preliminary perception analysis of the documentaries which involved simply listening to the speakers. This vowel appeared to be the most salient when compared to standard NZE speakers. Several other vowels were

also analysed so that a small snapshot of the vowel space for Gloriavale residents could be given. PRICE was selected because it is a closing diphthong like the prototypical MOUTH. Three monophthongs, DRESS, TRAP, and KIT were also chosen for analysis due to their saliency and documentation in NZE (Easton & Bauer 2000; Maclagan & Hay 2007).

To maintain uniformity in the vowel environments it was decided that tokens would be taken from words in which the vowel was preceded by a plosive. The following phonetic context was not taken into account so that token numbers were not restricted even more. Therefore, tokens for KIT were taken from the word *bit,* DRESS from *get,* TRAP from *back,* PRICE from *time,* and finally the tokens of MOUTH came from the word *about.* There was an attempt to collect an equal amount of data from males and females so that gender could be excluded as a variable. Due to the limitations of the documentaries other words could not be introduced to analysis without greatly skewing the number of female speakers for each vowel.

Vowels were selected from speakers in Gloriavale who were either the first or second generation born into the community. This was so the speech of the first generation could be used as a baseline norm, and the speech of the second generation could be used as a comparison to show transmission (Mooney 2016). It is assumed that 'the speech of each generation is assumed to reflect the language more or less as it existed at the time when that generation learned the language' (Bailey, Wikle, Tillery & Sand 1991: 412, cited in Mooney 2016: 337). This methodology of using the older generation as the baseline also allowed for an investigation into the role of diffusion in the MOUTH vowel of Gloriavale.

Once the vowels to be analysed were selected, all tokens were identified in Praat and their first and second formants measured. Following methods for formant measuring as outlined in Ladefoged & Johnson (2011) and Zsiga (2012), monophthongs were measured at their central point and diphthongs were measured at 20% and 80% of the total vowel. Information about the speakers regarding which generation they were born into within the community was also recorded.

Following this the vowels were then inputted into NORM, the online vowel plotting and normalisation software (Thomas & Kendall 2010). The Lobanov vowel normalisation method was used for this study. The purpose of vowel normalisation is to preserve the phonemic and sociolinguistic information of the speakers as well as to eliminate the differences in vowels as a result of physiological differences such as mouth size and the length of the vocal tract (Adank, Smits & Van Hout 2004; Thomas & Kendall 2010). Unfortunately for this study when the vowels were normalised the suggested formant values for each vowel were skewed, with the DRESS vowel being placed near the fundamental frequency. This was due to the normalising method stretching the vowels outwards to align with the blueprint for a typical vowel space. This meant that DRESS was being placed were a prototypical FLEECE vowel would be. Following this, vowel plots with un-normalised data were created to compare to

the normalised data. The placement of the vowels in the vowel space between the normalised and un-normalised plots were very similar and the formants on the un-normalised plots aligned more closely with the expected formant values. Therefore, it was decided that for this study it would not hinder the results to continue with the un-normalised vowel plots.

Using NORM, two vowel plots were created that illustrated the difference between the vowels in the first and second generation speakers. One vowel plot showed all the tokens produced by the speakers separated into generations, and the other showed the average vowel produced for each generation.

6. Results

Due to the data collection being limited to the three Pacific Screen documentaries there were only a small number of tokens available per vowel. The number of tokens per vowel are displayed in the tables below. Speakers were divided into categories according to their gender and generation within the community. For this study M refers to male, F is female, GEN1 is first generation, and GEN2 is second generation.

TRAP¤		DRESS¤		KIT¤	
M,GEN1¤	2¤	M,GEN1¤	3¤	M,GEN1¤	0¤
F,GEN1¤	1¤	F,GEN1¤	4¤	F,·GEN1¤	3¤
M,GEN2¤	4¤	M,GEN2¤	5¤	M,GEN2¤	2¤
F,GEN2¤	3¤	F,GEN2¤	6¤	F,GEN2¤	5¤

Table·1:·*Number·of·tokens·for·monophthongs·per·gender·and·generation.*¤

MOUTH¤		PRICE¤	
M,GEN1¤	2¤	M,GEN1¤	2¤
F,GEN1¤	2¤	F,GEN1¤	2¤
M,GEN2¤	4¤	M,GEN2¤	2¤
F,GEN2¤	4¤	F,GEN2¤	2¤

Table·2:·*Number·of·tokens·for·diphthongs·per·gender·and·generation*¤

It was important that the number of male and female speakers for MOUTH were kept equal so that the physiological differences that would have been ruled out through normalisation

did not affect the data. The un-normalised vowel plots also meant that F1 and F2 could not be reliably used for comparison. For this analysis it was the overall shape of the vowel within the vowel space rather than the formants that provided the most information about MOUTH in Gloriavale.

The results and conclusions drawn from these can also only be taken as suggestions for what may be happening in the data. Without the detailed level of research on vowel realisations in different regions of New Zealand as found in studies elsewhere (Kerswill 2003; Prichard 2014; Mooney 2016) it is impossible to say conclusively that diffusion from another area was the driving force for the MOUTH vowel in Gloriavale. Therefore, the data and discussion will be presented tentatively with plenty of room for further research to be completed in the future.

While the vowel plots depict all of the five vowels measured, this analysis will only focus on the MOUTH diphthong and its relation both to other vowels, and to other MOUTH vowel realisations as discussed previously.

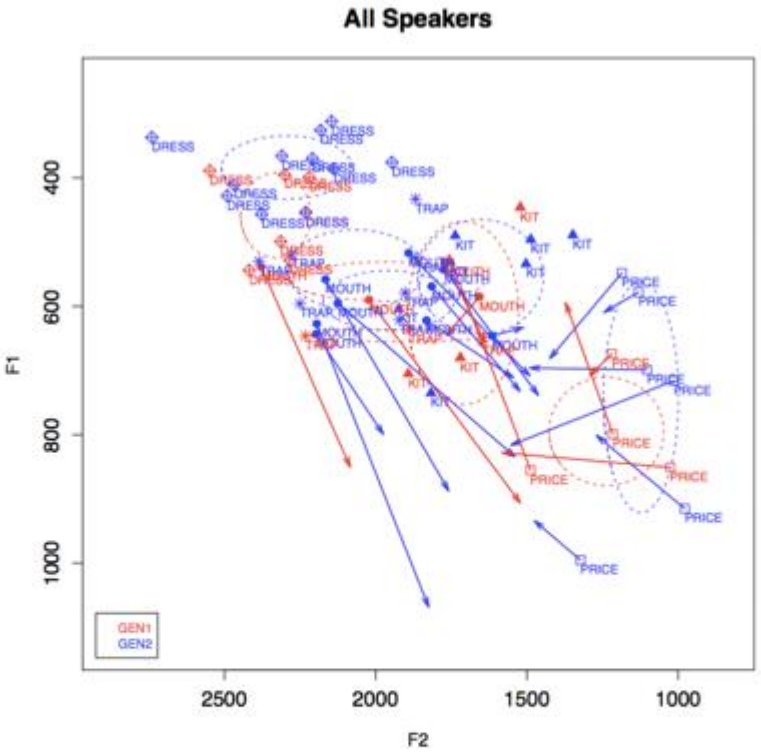


Figure 2: Un-normalised vowel plot showing all tokens of each vowel.

In Figure 2 it is possible to see how the second element of the MOUTH vowel is consistently opening for almost all speakers in Gloriavale. The ellipses do not slope to show the plane the tokens lie on but rather represent one standard deviation. There is only one example of MOUTH moving towards the centralised position for a second generation, and even then it has an extremely short glide. When this consistency is compared to the other prototypical closing diphthong PRICE, this seems to indicate something unique is happing with MOUTH. The onset of MOUTH also overlaps with the TRAP vowel for both generations, suggesting a high onset for Gloriavale speakers. The onset also overlaps with the KIT vowel indicating a very centralised onset.

In Figure 3 it is possible to see how the variation between the first and second generation speakers is minimal in the realisation of the MOUTH diphthong when compared to the other vowels. For DRESS, KIT, TRAP, and PRICE the second generation are producing a much more raised vowel. In contrast, for MOUTH the first generation are producing a slightly higher vowel. When the distance between the onsets of MOUTH is compared with the other vowels however, the difference for MOUTH between the generations does not appear to be as significant.

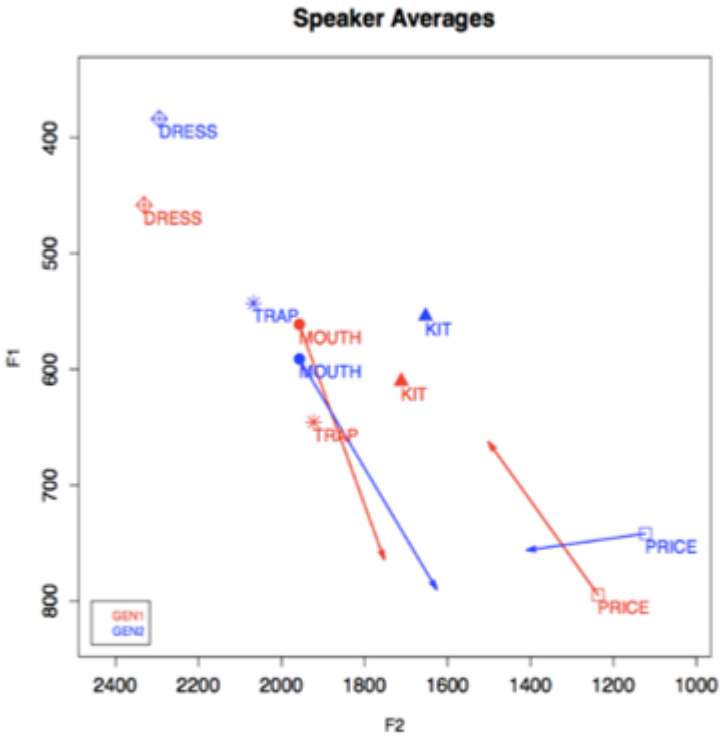


Figure 3: Un-normalised vowel plot showing averaged locations between first

The most interesting result from Figure 2 and Figure 3 is the direction of the glide for MOUTH. MOUTH is clearly still a diphthong in Gloriavale, but it has changed from a closing diphthong

to now a significantly opening one. This indicates that the speech at Gloriavale does differ to that of standard NZE, when referring to the MOUTH vowel in particular. I now turn to discuss possible reasons for this presence of this opening MOUTH.

7. Discussion

Gloriavale presents a unique situation when compared to other studies on diffusion (see Trudgill 1974; Labov 2007; Prichard 2014). As Trudgill (2002) highlights, it is important to understand the community in order to understand the language change. The community was built in 1969 in the middle of the countryside so that the residents could live separately from the rest of society. In his research Labov (2007) uses examples from New Jersey and Albany, (settled in 1609), to explain how variables diffused into these communities. Their role was not to foster the inhabitants' desires to live separately from the rest of society like Gloriavale. This meant that the linguistic variables Labov (2007) discusses could diffuse in and out of these towns along with the movement of the population. While there have been no studies on the quality of the MOUTH vowels in the areas surrounding Gloriavale, judging by the relative uniformity of NZE up to this point in time (Nielson & Hay 2005) it can be assumed these communities would be producing either the closing or centring forms as discussed in Hay et al. (2008). Therefore, given the immobile nature of the residents of Gloriavale and the actual likelihood of the opening diphthong being present in the surrounding communities, it can be suggested that this variable was present in Gloriavale upon its formation in 1969.

When considering Hazenberg's (in progress) data this is a strong possibility. Of the four older participant categories in his study, three of these presented the beginnings of an opening MOUTH diphthong. While none of these are realised with the same degree of opening as the MOUTH vowels in Gloriavale, it does suggest that it is a viable variable for speakers of NZE. Coupled with the fact that the female speakers in the Mobile Unit data were already presenting a horizontal glide (Maclagan et al. 2004), it is not that much of a stretch to assume that the vowel had advanced in that time to have an opening second element. When the average age of these older speakers in Hazenberg's (in progress) data is compared to the age of the Gloriavale community itself, it appears that this variable was available around 50 years ago in NZE. The variable has not remained prominent in standard NZE (the reasoning of which goes beyond the scope of this study). I now turn to some other possible reasons why such an obviously opening MOUTH diphthong has developed in the Gloriavale community.

If we assume that some of the original members of Gloriavale had this variant of MOUTH present in their speech, and that through accommodation it became adopted by the community, we can present an argument for why Gloriavale has this open MOUTH vowel.

Generation transmission is a salient issue to consider here. In Gloriavale the MOUTH vowel is an excellent example of this phenomenon. As we saw in Figure 3 we can see how the second generation MOUTH aligns almost perfectly with the first generation MOUTH, indicating that for this vowel, transmission has played a role in the way it is produced today. However, it is impossible to say why the difference between the generations in the MOUTH vowel is so small when compared to the other vowels studied. Perhaps MOUTH is above the level of consciousness for the community, which relates to the identity argument mentioned previously. As Hay et al. (2008) explain, the closing vowels are above the level of consciousness for standard NZE and can be used to index status. While it is unlikely this variable developed as a result of intentionally signalling an in-group identity (Trudgill 2008), it is possible that the residents now associate this pronunciation with Gloriavale (Schneider 2008) and therefore aim to reproduce it resulting in the first and second generations having a relatively uniform MOUTH vowel. Unfortunately, without a more detailed sociolinguistic analysis such as interviews with the residents, only assumptions can be made about the awareness of this particular vowel for the community. However, it will be interesting to know whether this change will continue in future generations.

This study provides an interesting starting point for further work on the speech in the Gloriavale community. It has shown that the speech of Gloriavale does differ to that of standard NZE and illustrates one particular way in which this happens. An obvious next step would be to investigate other possible variables in the Gloriavale community, phonological or grammatical. I intentionally limited this study to only five vowels, meaning that there are still of number of vowels that could be produced with the same uniqueness of the MOUTH vowel at Gloriavale. Increasing the number of vowels studied would also make it possible to normalise the vowel plots allowing for a more accurate analysis of the difference in formants values between vowels.

More information on the community and the variation of vowels in NZE itself would also allow for stronger conclusions to be drawn about the cause of the MOUTH vowel phenomenon in the community. As the documentaries were the only insight into the inner working of Gloriavale, not much could be said about who the original residents were. A further area to explore would be the realisations of vowels throughout different regions of New Zealand. NZE has been considered very uniform for some time (Gordon et al. 2004), however an increasing number of studies on NZE, such as Hazenberg (in progress) are indicating otherwise.

It would also be interesting to continue to follow the change in the MOUTH vowel in standard NZE. As explained in the results it is possible that this particular realisation of MOUTH in Gloriavale is a result of the high-contact situation of the community (Trudgill 2002). Perhaps Gloriavale is a prediction for the future standard of MOUTH in NZE. With the younger generation producing the horizontal schwa version it is possible for the second element to continue moving downwards. If changes occurs through transmission it is a slow process and any changes like this would not be seen for another few generations.

8. Conclusion

Gloriavale provides a unique environment to observe linguistic phenomena occurring. The aim of this preliminary study was to establish how the MOUTH vowel of Gloriavale differed from standard NZE, and to examine the possible factors that led to this variant. The data collected clearly indicates that the residents are now producing an opening version of the more typical (for NZE) closing diphthong. This contrasts with the two documented variables of MOUTH in NZE, which are closing towards the FOOT vowel and moving horizontally towards the schwa (Hay et al. 2008). From this study we have seen that there is far more variety in NZE than previously thought and that studying communities like Gloriavale provides an interesting insight into how sounds change and variables are produced in an isolated environment. A possible explanation for the Gloriavale MOUTH is presented by Hazenberg's (in progress) Auckland data that shows older speakers producing a slight opening MOUTH diphthong, suggesting the variable was already present in NZE. This study suggests that this variable was available to the residents of Gloriavale upon its formation and that the processes of accommodation, diffusion, and transmission, coupled with the relative isolation of the community has led to rapid language change and this extremely open MOUTH vowel (Giles et al. 1991; Trudgill 2002; Labov 2007).

References

Adank, Patti, Roel Smits, and Roeland Van Hout 2004. A Comparison of Vowel Normalisation Procedures for Language Variation Research. *The Journal of the Acoustical Society of America* 116 (5): 3099–3107.

Bailey, Guy, Tom Wikle, Jan Tillery, and Lori Sand 1991. The Apparent Time Construct. *Language Variation and Change* 3 (3): 241–64.

Bell, Allan 2006. Speech Accommodation Theory and Audience Design. In *Encyclopedia of Language & Linguistics (Second Edition)*, 648–51. Oxford: Elsevier.

Boersma, Paul 2001. Praat, a system for doing phonetics by computer. *Glot International* **5:9/10**, 341-345.

Boersma, Paul & David Weenink 2016. Praat: doing phonetics by computer [Computer program]. Version 6.0.21, retrieved 25 September 2016 from http://www.praat.org/

Easton, Anita, and Laurie Bauer 2000. An Acoustic Study of the Vowels of New Zealand English. *Australian Journal of Linguistics* 20 (2): 93–117.

Education Review Office 2016. Gloriavale Christian Community School – 28/05/2015. http://www.ero.govt.nz/review-reports/gloriavale-christian-community-school-28-05-2015/#about-the-school (15 October 2016).

Edwards, John 2009 *Language and Identity: An Introduction*. Cambridge: Cambridge University Press.

Evans, Amanda (Producer/Director) 2014. *Gloriavale: A World Apart* [Documentary]. New Zealand: Pacific Screen.

Evans, Amanda (Producer/Director) 2015. *Gloriavale: Life and Death* [Documentary]. New Zealand: Pacific Screen.

Evans, Amanda (Producer/Director) 2016. *Gloriavale: A Woman's Place* [Documentary]. New Zealand: Pacific Screen.

Fromont, Robert, and Jennifer Hay 2008. ONZE Miner: The Development of a Browser-Based Research Tool. *Corpora* 3 (2): 173–93.

Giles, Howard, Nikolas Coupland, and Justine Coupland 1991. Accommodation Theory: Communication, Context, and Consequence. In *Contexts of Accommodation*. Studies in Emotion and Social Interaction. Cambridge University Press.

Gordon, Elizabeth, Lyle Campbell, Jennifer Hay, Margaret Maclagan, Andrea Sudbury, and Peter Trudgill 2004. *New Zealand English: It's Origins and Evolution.* Cambridge: Cambridge University Press

Hay, Jennifer, Margaret A. Maclagan, and Elizabeth Gordon 2008. *Dialects of English : New Zealand English*. Edinburgh, GB: Edinburgh University Press.

Hazenberg, Evan. In progress. Untitled. Unpublished PhD thesis, Victoria University of Wellington, Wellington, New Zealand.

Kerswill, Paul 2003. Dialect Levelling and Geographical Diffusion in British English. In *IMPACT: Studies in Language and Society*, edited by David Britain and Jenny Cheshire, 16:223–43. Amsterdam: John Benjamins Publishing Company.

Kerswill, Paul, and Ann Williams 1999. Creating a New Town Koine: Children and Language Change in Milton Keynes. *Language in Society* 29 (01): 65–115.

Labov, William 2007. 'Transmission and Diffusion'. *Language* 83 (2): 344–87.

Ladefoged, Peter, and Keith Johnson 2011. *A Course in Phonetics*. Wadsworth: Cengage Learning.

Llamas, Carmen, Dominic Watt, and Daniel Ezra Johnson 2009. Linguistic Accommodation and the Salience of National Identity Markers in a Border Town. *Journal of Language and Social Psychology* 28 (4): 381–407. doi:10.1177/0261927X09341962.

Maclagan, Margaret A., and Elizabeth Gordon 2004. The Story of New Zealand English: What the ONZE Project Tells Us. *Australian Journal of Linguistics* 24 (1): 41–56.

Meyerhoff, Miriam 1998. Accommodating Your Data: The Use and Misuse of Accommodation Theory in Sociolinguistics. *Language & Communication* 18 (3): 205–25.

Mooney, Damien 2016. Transmission and Diffusion: Linguistic Change in the Regional French of Béarn. *Journal of French Language Studies* 26 (03): 327–52.

Nielsen, Daniel, and Jennifer Hay 2005. Perceptions of Regional Dialects in New Zealand. *Te Reo* 48 (January): 95–110.

Prichard, Hilary 2014. Northern Dialect Evidence for the Chronology of the Great Vowel Shift. *Journal of Linguistic Geography* 2 (02): 87–102. doi:10.1017/jlg.2014.9.

Quirk, Randolph 2000. Language and Identity. *English Academy Review* 17 (1): 2–11.

Sargisson, Lucy, & Lyman Towers Sargent 2004. *Living in Utopia: New Zealand's Intentional Communities*. Aldershot: Ashgate Publishing Ltd.

Schneider, Edgar W 2008. Accommodation versus Identity? A Response to Trudgill. *Language in Society* 37 (02): 262–67. doi:10.1017/S0047404508080317.

Stanford, James N., and Laurence A. Kenny 2013. Revisiting Transmission and Diffusion: An Agent-Based Model of Vowel Chain Shifts across Large Communities. *Language Variation and Change* 25 (2): 119–53.

Thomas, Erik R. and Tyler Kendall 2007. NORM: The vowel normalisation and plotting suite. [Online Resource: http://ncslaap.lib.ncsu.edu/tools/norm/]

Trudgill, Peter 1974. Linguistic Change and Diffusion: Description and Explanation in Sociolinguistic Dialect Geography. *Language in Society* 3 (2): 215–46.

Trudgill, Peter 1986. *Dialects in Contact*. New York: Basil Blackwell Ltd.

Trudgill, Peter 2002. *Sociolinguistic Variation and Change*. Edinburgh University Press.

Trudgill, Peter 2004. *New-Dialect Formation: The Inevitability of Colonial Englishes*. Oxford: Oxford University Press.

Trudgill, Peter 2008. Colonial Dialect Contact in the History of European Languages: On the

Irrelevance of Identity to New-Dialect Formation. *Language in Society* 37 (2): 241–54.

Trudgill, Peter, Elizabeth Gordon, and Gillian Lewis 1998. New-Dialect Formation and Southern Hemisphere English: The New Zealand Short Front Vowels. *Journal of Sociolinguistics* 2 (1): 35–51.

Wells, John 1982. *Accents of English.* Cambridge: Cambridge University Press.

Zsiga, Elizabeth C 2012. *The Sounds of Language: An Introduction to Phonetics and Phonology*. John Wiley & Sons.

Deconstructing 'disabling' discourses: the co- construction of disability identities in interaction

Kaitlyn Vera Smith

Abstract

This study views identity as a creative, negotiated process found in interaction, rather than a description of static categories. This study provides an illustrative account of how disability identity is co-constructed and negotiated in the micro discourses of two focus group interviews, as the participants evaluate topics concerning disability: one group contains institutional representatives of a tertiary institution, the other contains students with so-called 'visible' and 'invisible' disabilities. These interactional sites allowed for discovery of how disability is constructed as a complex identity through discourse, and how the in/visibility of a disability affects the positioning of students. I found that the participants (de)constructed macro 'able-ist' discourses, leading to a dynamic constellation of expert and experiential identities. Additionally, participants subverted ideological expectations of identity categories in relational discursive practices – such as the staff adopting experiential positions and the students adopting capable and enabled positions. This identity construction is directed by stances which also carve societal spheres and divisions of abilities (including visible and invisible, and corporal and mental disabilities). Overall, I conclude that the macro discourses that appear at micro levels lead to the marginalisation of people with disabilities. The presumptions that disabilities are visible abnormalities, alongside legitimacy presumptions render disability a private matter rather than a public matter. While these 'disabling' macro discourses emerge at micro-levels, the participants often deconstruct them, leading to an affirmation of a positive disability identity.

1. Background

Our identities are never static. Rather a constellation of intersecting identities emerges through our interactions with others. The aim of this study is to investigate the discursive co-construction of disability identities in a university setting, from a social constructionist perspective. Hearing about vigilante behaviour on campus grounds sparked my interest in the way people at university talk about disability. In one instance, someone had left a note on a student's car, expressing concern about her inappropriate use of the disability car park, as she appeared not to have a disability (despite a disability sticker being present). In fact, the student was an amputee, which was not obvious due to wearing a prosthetic. This provided an insight into the additional challenges people with disabilities might face; that is, I began to wonder about the extent to which identity categories are thrust upon individuals due to a lack of awareness of varying in/visible disabilities. To explore disability identities in interaction, I held focus group discussions with students and university staff members who work in the field of disability, to whom I posed various questions and scenarios regarding disability. As I was a

part of the university's and Health, Counselling and Disability services' administration and support team, as well as a student at the university at the time of research, it meant that I could be an in-group member of both groups. Due to staff and students both operating within a common university network, this provided grounds for exploration of their shared discourse. In these interactions I found tension between assumed, fixed identity categories based on appearances, and the notion of a constellation of identities. The following excerpt is from the institutional representative group, consisting of a doctor, counsellor, nurse and disability advisor. It begins to illustrate that identity construction involves multiple and complex interactional processes (Schnurr & Zayts, 2011).

Example One

1	Andrea	disability is any condition temporary or permanent which in
2		some way interferes with people functioning [..] being able to
3		fully participate in this context of the university
4	Susan	mm I think it can be physical or mental health
5	Melissa	[...] I think it is a challenge + you have to do extra […]compared
6		to those who don't have disabilities so things take longer +
7		things are harder + you don't have so much
8		independence you're a bit restricted + it's a challenge to cope
9	Linda	[…] disability for me personally means it is a positive part of my
10		identity I consider myself a disabled person and because I have a
11		disability I think I lead a richer and more fulfilling life […]
12		and professionally see disability as complex sort of phenomena
13		[…] and their experiences can be disabling or otherwise
14		depending on how accessible the environment is that they're in
15	Melissa	I want to say too [..] + it's not a negative thing it's a positive thing and
16		I agree with you Lind
17		because I've had the cancer I've had multiple miscarriages I've had
18		multiple surgeries and now I have psoriatic arthritis
19	Linda	kia ora
20	Melissa	but you know I'm still Melissa and I'm still here and I'm not
21		going anywhere + it makes me incredibly grateful for everything […]
22		everything is extra special

Throughout this example, the participants adopt and abandon identities as disabled people (lines 11 & 16), and as professionals in the field of disability (lines 1 & 12). There appears to be a tension between the identities that they and others set up for them. Andrea initially evaluates disability as an inhibiting experience within the university context, highlighting the experience of inability and exclusion, which Susan adds to in agreement. In doing so, they position themselves as experts; distancing them from any personal, lived experience of disability (lines 1-5). Melissa then performs overlapping identities as she also evaluates

disability experiences, but vicariously, through the perspective of a disabled person, describing it as a challenging, restrictive experience (lines 5-10). Linda positions herself as disabled, taking a positive stance towards her own experience of disability (lines 9-11), indirectly challenging the emerging undesirable *restricted, challeng[ing]* (line 8) disabled identity. Whilst Linda aligns with the unfolding professional style of expertise (line 12) she indirectly disaligns with the developing idea that disability is a constant phenomenon (lines 12-14). Afterwards, Melissa makes a stance of alignment (line 15) with Linda's personal evaluation. She performs her identity as a person who has experienced disability, which was previously in the background. She positions herself as someone who is also positively impacted by disability (line 20-22), foregrounding a different experience to the one she previously set up.

This first illustrative example highlights the features I consider throughout my research, exploring the co-construction and negotiation of complex and dynamic disability identities through interaction recorded in group interviews.

In examining such interactions, I aim to contribute to closing the gap in the research into disability identity discourse. As Cochrane (2014: ii) indicates, disability discourse is primarily included under health discourse research. Additionally, research into the social construction of disability is still in its infancy within linguistics. According to O'Malley (2009: 346), as research is focused primarily on media representations of disabled people, research looking at discourse in interaction and how disability is constructed through talk is rare. Thus my aim is to enrich the already widely studied question of disability as being socially constructed, with interactional data.

1.2 Disability

As the first example illustrates, the meaning of "disability" is far from fixed. Although definitions of disability tend to refer to a situation in which a person's abilities have been negatively affected for an extended period of time, research highlights that it is a locally, socially and culturally bound concept (Ingstad & Whyte 2007). At the cultural level, counterparts to 'disability' in other languages, like Japanese, may involve different interpretations with more or less focus on body parts and body functions (Dowe, 2013). At the social level, Galvin (2003) points out the word "disability" is a symbol which evokes negative images, spurred from medical, educational, and policy systems of power which create and disseminate knowledge at local levels. Aligning with Galvin's conceptualisation, this study reveals that disability identity is not fixed to a "dictionary" definition. My study magnifies the local level, examining how disability identity plays out in co-constructed discourse.

In a bid for inclusivity and because of the overlapping nature of 'disabilities', I have included mental, physical and learning disabilities, and multiple impairments (following the New Zealand Disability Strategy [2013]). These categories are treated independently in the context in which my data was collected; at the university there are separate health, disability, learning support, and counselling services. Despite the tendency for them to be researched separately, disability research has been applied to and benefited from research on mental health (Bates et al, 2004: 31). Disability is clearly a complex phenomenon; due to the intersection of different experiences and due to the interaction with different attitudinal, physical and conceptual environments (Boyle, 2010), no two experiences of disability are the same.

1.3 Social and Medical Models of Disability

Opposing models which explain disability have arisen in different academic, political and social spheres. The medical model views disability as internal to the individual. A particular criticism is that it posits the disabled person as responsible for overcoming their inabilities, including physical environmental barriers in the workplace (Grue, 2011a: 110). It has also been argued that the medical model causes oppression and marginalization (Ruiz, 1995: 477). Arising from critique of the medical model, the social model draws on Marxism and frames disability as an external socio-political problem (Grue, 2011a: 110). In this sense "many disabled people take the view that people are disabled by society, not by their own underlying physical or sensory impairment" (Henderson, 2004: 32). This model (alongside minority and feminist models) has been said to empower individuals to move away from the margins and into wider society as equal individuals (Bricher, 2000: 781).

The social model has since been extended. Swain & French (2000: 569) discuss an affirmative model of disability; a positive outlook through which disabled people benefit from their experience, rather than it being viewed as a disadvantage (such as Linda's argument in Example One). In their analysis, the affirmation model responds to the limitations of the social model by asserting that having a disability can be a positive part of a disabled person's identity. However, this model appears to be less accepted than the social model by non-disabled individuals; while people may accept that the social environment that we live in is built for non-disabled people, which restricts accessibility and inclusion of disabled people, "non-disabled people are much more threatened and challenged by the notion that a wheelchair-user could be pleased and proud to be the person he or she is" (Swain & French, 2000: 570). This model forms the rationale for this study.

1.4 In/visibility

Adding to the complexity, an individual's disability can be either visible or invisible (or hidden). Within a narrative methodology, Valeras (2010) researched different invisible disabilities including Juvenile Diabetes, Asthma, Juvenile Rheumatoid Arthritis, Epilepsy, Muscular Dystrophy, and Coeliac Disease. Her goal was to see how the participants personally identify with being 'disabled'. One participant with epilepsy observes that "persons with a hidden

disability "don't have a box," [which] incites the idea that might be more appropriate to look at persons with a hidden disability as bi-abled". This highlights an interstitial, liminal position or a "gray area" of invisible disabilities. It also affords a new way of conceptualising their unique disability. In the participants' narratives they "revolt against the pressure our society upholds to dichotomize, segregate, and place people into clear-cut categories, and reveal the multiplicity and malleability of identity" (Valeras, 2010, paragraph 2). My study extends Valeras' study, with a linguistic focus on the emergence of in/visible disability identities in discourse.

2.1 Theoretical framework: Social Constructionism

Identity research has been influenced by conflicting views: identity can be conceptualised as being housed in the individual or as something that emerges through interaction (Harré and Moghaddam, 2003: 155). As the preceding section highlights, disability has a dynamic nature and is negotiable. This can be explored through a social constructionist framework. A social constructionist approach is particularly beneficial for research about marginalised, collective identities which are "increasingly acknowledged to intersect in multi-dimensional ways" (Eckert 2000 cited in Benwell & Stokoe, 2006: 25). Under essentialism, such collective identities are positioned on the borders of 'true' unmarked categories. For example, whiteness is unmarked and non-whiteness is a collective marginalised identity. Because we do not marginalise those with white skin, it is not recognised as a label. Disability is thus not a social artefact but is authenticated and made legitimate by marginalising social discourses. Constructionism asserts that our view of what is true "may be thought of as our current accepted ways of understanding the world" (Burr, 2003: 7). In fact, knowledge is fabricated and maintained by interaction (Burr, 2003: 7). Burr also provides the example of dyslexia which is created "through exchanges between those who have difficulties with reading and writing and others who may teach them or offer them diagnostic tests" (2003: 4). Adopting this perspective in this study, I expected to find that a constellation of disability identities are co-constructed and negotiated in interaction.

2.2 Sociocultural Linguistic Approach

In analysing the data and presenting illustrative examples, I make use of Bucholtz and Hall's (2005) seminal paper on identity. This paper aimed to provide a cohesive account of frameworks for analysing identity, drawing on previous research. I have chosen to focus on three of their principles, *positionality*, *indexicality* and *relationality*, as they are most pertinent to my study (cf Schnurr & Zatys, 2011). However, the other two principles (*emergence* and *partialness*) surface throughout my analysis. Below I outline the principles and some relevant key concepts.

2.2.1 Indexicality

Indexicality is a concept used across linguistic disciplines (and beyond). It refers to linguistic variants, stances and styles which have specific social meanings for particular groups (Bucholtz & Hall, 2005; Coupland, 2007: 22). Eckert's (2008: 1) understanding of identity construction will contribute to my approach where "the meanings of variables are not precise or fixed but rather constitute a field of potential meanings - an indexical field, or constellation of ideologically related meanings, any one of which can be activated in the situated use of the variable". This "involves constant local re-interpretation and re-positioning" (15) of a linguistic form or action which may index and help construct social meaning alongside a denotational or "literal" meaning (Johnstone, 2008: 133). Ochs (1992) describes indexicality as a property of speech where social identities are constituted and mediated by stances and acts, and activities and therefore there is generally not a direct mapping of social categories. An example of an indexical feature is the word "cripple", which has been reclaimed in certain contexts, indexing group membership when used by members of the disability community (Cochrane, 2014: 222). When used outside of the disability community, it has a different indexical tie, and is generally seen as offensive. Thus, "linguistic features and styles can index more than one dimension of the sociocultural context" (Ochs 1992). Our linguistic choices are ideologically bound and thus index, and construct, our identities.

2.2.2 Positionality

Bucholtz and Hall (2005) assert that higher-level identities emerge through a range of positions we take in interaction, including macro level demographic categories, as well as local, cultural positions and temporary and interactionally specific stances and participant roles (592). Roles also come with expectation of behaviour and enactment, grounded in socialisation. However these roles can be both challenged and supported (Angouri & Marra, 2011: 3). For example in Cochrane's (2014) study of disability, non-disabled participants adopted 'wise' positions. Cochrane (2014: iv) adapts 'wise' (Goffman, 1963) to refer to "people without disabilities who, through social network ties to a person with a disability, are "wise to" disability practices and have a measure of acceptance in the disability community". Such identity positions emerge in discourse. As social actors we adopt roles through assigning and negotiating certain personal rights and obligations to perform certain actions (Harré and Moghaddam 2003: 4 & 162).

2.2.3 Stance

One of the key concepts in Bucholtz and Hall's (2005) paper is stance-taking. This concept is my analytic focus in investigating how we position ourselves in different disability identities. Stance is the social action or orientation an interactant makes to the unfolding discourse. According to Dubois' stance triangle (2002), stance concerns our evaluation of a text, context or idea, the subsequent positioning of ourselves, alongside our intersubjective work as we align or disalign with other interactants or wider discourses. Jaffe (2009) unpacks this theoretical understanding of stance, conceptualising discursive orientations as constituents

of subject positions such as the local roles and identities we adopt; "stancetaking is the act of taking up a position and is central to communication" (2009: 3). Aligning oneself to particular roles and identities create indexical relationships between talk and social identities and categories (Jaffe, 2009: 3-4).

2.2.4 Relationality

Identity is also a relational process, in that identities are intersubjectively constructed. The relationality principle (Bucholtz & Hall, 2005) asserts that identities acquire social meaning by relating to other identity positions and other social actors. This includes relating the similarities and differences, genuineness and artifice, and authority and delegitimacy of identities. O'Malley (2009: 346) studied the institutional discourse of the media in an Irish radio programme and found that disabled people were framed and reinforced as a marginalised 'other' despite the aim of the radio programme to move away from medical models. Through lexical choices, (such as 'suffering from' and 'problem') perspectives of disability as being problematic came to the fore. The presenter's framing of the radio programme had an impact on an interviewee's ability to challenge societal assumptions about disability (350). This is relevant to this study as despite asserting a position, it is through micro-level discourses that positions and identities emerge, including in this case the marginalisation of disabled people.

2.3 Research Questions

Applying Bucholtz & Hall's theoretical perspective and the existing (if not limited) literature on disability as an identity, my goal is to explore the following research questions:

1. How is "disability" constructed as a complex identity?
2. How does the in/visibility of a disability affect the positioning of people with disabilities?

3. Method

Data were collected from two semi-structured focus groups; one containing a group of institutional representatives (from university GP, nursing, counselling and disability services) and a second group containing students with self-identified visible and invisible disabilities. This method benefits a sensitive topic, as some participants may prefer to discuss collaboratively, although it is also important to recognise the potential for conformity to the group atmosphere (Adler & Clark, 2011: 275). The choice for inclusion of professionals was motivated by their involvement in the field of disability in support, guidance, and medical assessment roles (Disability Services, 2011; Student Counselling, 2011; Student Health Service, 2011). The inclusion of students with disabilities alongside these staff members provided valuable perspectives derived from their lived experience of disability, which inform their identity construction.

The semi-structured focus group design was based on Morgan (2002: 147). The format included introductions, statements on ground rules, questions and answers and then case study reflection, the latter being identical for both groups. Additionally, the interview questions were carefully aligned with my research questions. The aim was to look into their emerging identities and therefore my emphasis was on their negotiations rather than a strategic set of 'leading' questions. As the facilitator, I maintained neutrality to their responses and contributed minimally to the discussion, recognising that the interviewer's position can influence the responses given (Adler & Clark, 2011: 275). Case studies were included as starting points for discussion so that participants did not necessarily need to refer to themselves, again accommodating the sensitivity of the topic. This approach was successful as it created lively round-table discussion in which participants could elaborate on and spark off each others' responses and ideas, producing richer data (Oppenheim, 1992: 79; Adler & Clark, 2011: 469; Marvasti, 2004: 23).

Below I present my analysis, in which the above literature becomes critically contextualised. The student focus group consisted of: Ellie, who is blind and has complex regional pain syndrome; Jodie with depression and anxiety; and Laila who has bipolar and fibromyalgia, an arthritic condition. A supplementary student focus group includes Jennifer and Lily who both have dyslexia. The staff focus group consisted of: Linda, who is a disability inclusion adviser; Susan who is a doctor; Melissa who is a nurse; and Andrea who is a counsellor. The participants are referred to with pseudonyms.[1]

4. Analysis

My analysis is organised according to three of Bucholtz and Hall's (2005) principles, as explained previously. Although Bucholtz and Hall's (2005) paper can be critiqued for presenting identity as an elusive concept, it continues to have a strong influence as a framework for analysis of identity. In particular their approach can be critiqued for disregarding other important aspects, such as the effect your body has on your identity (as in Gee, 2000). However, such nature identities "must always gain their force as identities through the work of institutions, discourse and dialogues…" (Gee, 2000: 102), in order to not risk aligning with essentialist conceptualisations of identity (which Bucholtz and Hall argued against). Nevertheless, Bucholtz and Hall's framework provides relevant tools for analysis of identity as a discursive co-construction. Viewed holistically, their principles aim to show how a constellation of experience and expert interactional identities are co-constructed in relational discursive practices, as participants employ and subvert expected discursive practices and their accompanying (indexed) macro structures. These processes involved in the construction of identity are interpreted at the micro-level, where we can observe the emergence of interactional identities and wider dimensions of identity in interaction.

[1] I recognise the participants' disabilities as useful labels rather than suggesting fixed identities

4.1 Positionality principle

Disability identity emerges and is co-constructed through a range of positions that the participants take in interaction, including macro level demographic categories, as well as local, cultural positions and temporary and interactionally specific stances and participant roles (Bucholtz & Hall, 2005: 592). In other words, disability identities are created in interaction as we position ourselves and others and enact different ways of being (Cohen, 2012: 248; Bamberg, 2004; Gee, 2014). In my data, these varying identities are co-constructed as students and staff employ and subvert macro discourses of disability (such as *abnormal* and *can't do* discourses) and orient themselves to ongoing discussion (cf Gee 2011). Thus identity emerges through interweaving discursive practices, which are dependent on context.

4.1.1 Staff group

The institutional representatives adopt, abandon and co-construct expert, educator, and disabled interactional identities, highlighting the nuanced constituents of disability identity and community. Interestingly, they negotiate the expectations of their support and health professions, by not only enacting expert identities but also disabled identities (cf Angouri & Marra, 2011: 3). As illustrated in Example One in the introduction, Linda's positive stance-taking triggers a positive style, which is evident as the discussion continues:

Example Two:

1	Susan	I think some of the most impressive students I've seen as a doctor have
2		been with disability + it is the word *richness* that comes with their
3		experience + I think if you gave them the choice maybe they would
4		choose not to have it + but nevertheless it has become part of them
5		and by overcoming it there are some really special things about that
6	Andrea	It is all very relative to the environment + […] in some environments
7		what might be considered a disability is not in other environments
8		+ very much how people perceive it and how the environment is
9	Susan	I think the Deaf community would be a great example of that

Throughout this excerpt, disability identity is intersubjectively (re)constructed. An initial framing of disability as an inhibiting negative experience (Example One: lines 1-8) transforms into a more affective and positive framing of disability (this example: line 2 and 6). Through stances which suggest their personal investment in their professions, they also challenge the ideology that disabled people are responsible for navigating an abled world (disability as a restriction) (line 6), to instead view disability as a construction of the environment (line 8-9). This frames disability in a way which appeals to the social model of disability, and diverges with the initial framing of disability (Example One: lines 6-8) (Gee, 2004). This further rejects

the macro structure that a disabled person is constantly disabled. Rather the environment that you are in determines disability; Susan's reference to the Deaf community (line 9), aligns with Andrea (line 6). They co-construct disability as being more than a "bodily breakdown" (Ramanathan & Makoni, 2007: 283) and instead complex conceptual, attitudinal and physical environmental breakdowns. For instance, it has been argued that when Deaf people sign together, their experience of deafness is not disabling and in fact creates a collective identity and social bonds (McKee, 2008: 532).

Example Three:

1	Andrea	[…] encouraging and supporting students to disclose their mental
2		health problems to friends, family and staff + one of the big struggles
3		there is that people perceive that there is stigma attached to mental
4		health problems […]because they are feeling they are disclosing
5		something utterly shameful + that's a barrier we have to overcome
6		it is not always well received when do disclose + people feel frightened
7		of it and often university staff don't know how to support or even
8		have that conversation about mental health problems
9	Susan	it's often finding the right people to disclose to + some people are
10		good like John Kirwan national stage but equally others might not
11		it's individual for everyone
12	Melissa	[…] my students with diabetes + I usually ask do your flatmates know
13	Andrea	it's that business of accepting it + before disclosing to others you have
14		to accept what you have
15	Melissa	yes yes
16	Andrea	that's your brother (to Susan who nods) + and my son likewise
17		has post-traumatic epilepsy
18	Susan:	I do know friends with a diabetic child it became hard as no other
19		parents wanted to invite him around for a play date + because of the
20		concern of what was going to happen + there are real downsides to
21		[disclosing] as people start to get worried and the ramifications for
22		the particular person become much larger
23	Linda:	[disclosure is] a catalyst for a disabled person creating a partnership
24		between them and someone who can help get their needs met + we
25		coach students important to disclose in a strengths based way + when
26		I got arthritis my disclosure was elementary + I'm in a shit load of
27		pain and I can't do all these things and since then my disclosure just as we
28		coach with the students this has evolved + poor you response is not useful
29		there's only one area of the university that we advise caution when disclosing
30	Melissa	perhaps not disclosing it is for fear that the people you
31		are disclosing to won't know how to handle it

In the above discussion, the participants discuss the conditions and implications of disclosure in a university setting, drawing on their expertise and personal experience. They negotiate the expectations of their support and health professions, by not only enacting expert, professional identities but also disabled identities (cf Angouri & Marra, 2011: 3). Thus a dynamic negotiation of a multiplicity of identities (Eckert, 2008) occurs through their performances of various disabled or expertise stances, as they respond to the unfolding conversation. The participants also bridge personal and expert identities in positioning themselves in educator interactional identities. Andrea, the counsellor, adopts an *encouraging and supporting* educator role (line 1), using the pronoun *we* which functions to include her in the goals of students with mental illness. Susan likewise affectively empathises with the variability in disability experience (line 9). Together their similar instructive yet emotive stances co-construct educator identities (lines 1, 9, 12, 26). In negotiating the importance of positive disclosure, they are instructive (lines 12, 24) yet aware of personal complications of disability experiences, such as the relationship between disclosure, societal acceptance and personal acceptance (lines 11, 14, 20). Enactment of experiential identities is interwoven; they draw on personal examples (line 16). Through their stances as knowledgeable professionals and personally-invested individuals, at points they emphasise their professional expertise, and at other points, emphasise their personal disabled identities – moreover, often both of these overlap.

4.1.2 Positionality principle: student group

In the student group there is a similar complexity reflected in their interaction. Through their stances, the participants position themselves in local identity positions: as students, advocates, joketellers, and as disabled people. These contribute to wider dimensions of disability identity; demonstrating it as something which is enabling and something that is normal.

Example Four:

1	Jodie	I'm in Can Do, [..] it's focusing on what you don't have rather than what you do
2		have and that's not necessarily a healthy way of looking at things[…]
3		focus on what someone can do instead of oh I can't type because of
4		arthritis + instead focusing on what you can do not what you can't do
5	Laila	I would agree with that […] it makes me really angry when people say
6		buck up + I'm like if I could I would + so think it is really powerful
7		to focus on what you can do and celebrating what you can do + I
8		can't go out today but I can totally just sit on the floor and do some work
9	Ellie	[…] something that society would put it down that someone is too
10		disabled it is the can't do aspect[..] I personally don't like the word +whereas
11		I think a more healthier way and a more productive way of thinking
12		about it is thinking about differences of disabilities and about
13		adapting [..]doing it in a different way [..] I'm legally blind and people
14		are amazed my favourite sport is tennis, on paper how does someone
15		who is blind watch tennis + I listen to tennis + I identify players by
16		the sound of their footsteps
17	Jodie	wow that's so cool
18	Ellie	[..] instead what's a different way of engaging with the same things
19	Laila	I totally understand[..] living through mental health problems gives you
20		superpowers + there are always things that I can do that others can't
21		because they haven't had to deal with the challenges that I have + living
22		gives you empathy organization she takes
23		something that is inherently quite crap and making it into a positive
24		which is the only way to healthily deal with disability

Throughout this example, the students unravel the way in which 'other' non-disabled people negatively frame disability, against their own positive orientations to disability. Their stances mirror each other, using same or similar descriptors in the juxtaposition of in/ability (lines 1; 3; 7; 10; 20) and un/healthy (2, 11, 24) and un/productive approaches to viewing disability. In doing so, they position themselves as advocates for focusing on *and celebrating what you can do* (Laila, line 7), resonating a 'healthy' way of approaching disability. For instance, Jodie initially adopts a role as an institutional member, student and advocate for disability issues (line 1) putting aside her expected role as a disabled person. She performs her advocate role through stressing that disabled people have the right to experience and acknowledge their abilities (line 2), in doing so, challenging structures which view disability as a restriction (lines 9-10). The other students align with Jodie through further 'can do' stance-taking. This reconstructs societal discourses: disability as a case of doing things in a different way, which in the contending macro structures or *on paper* (line 14) they are framed as not being able to do. Thus they position themselves in adaptive roles, and in doing so, frame certain abilities as attainable regardless of disability; Ellie who is blind can listen to a tennis match (line 15), and Laila can positively adapt and positively frame an experience of depression (line 8).

In line 23, Laila aligns with the unfolding 'can do' reconstruction in an interactionally specific stance of resilience: she uses the term *crap* to describe disability experience but interprets it more positively. Their resilient stances towards disability match Linda's discussion about disclosing in a *strengths-based way* (i.e. example 3). Moreover, through stances of empowerment, disability is framed as affording additional qualities (line 20), constructing a positive framework for understanding disability. Laila shares the idea that *living through… mental health problems gives you superpowers,* such as empathy and organization (line 22). This is the construction of 'can do *more'*, 'superpowered' individuals. The tie between disability and superpowers reconstruct something that is conceivably abnormal to be a positive difference. Furthermore, it relates to the idea that people with disabilities are *impressive* (Example Two, line 1)*,* alongside the fact that *you have to do extra* (Melissa, Example One, line 5), just like superheroes. Thus "we perform and (re)negotiate [role] enactment anew in each context and at each time" (Angouri & Marra, 2011: 5).

Example Five:

Context: Jodie has just explained the reactions she got when she disclosed her depression to her high school friends.

1	Ellie	it is the fine balance of treating you normally and
2		then other times knowing when [you can't participate]
3	Jodie	it was them attempting to recognise that something was going
4		on + it was great that they were trying but our society doesn't
5		teach people in our socialisation how to deal with +recognise
6		talk about acknowledge disability + it's always this thing over
7		here + not part of life
8	Ellie	[..] it is something that needs to start young, not just ticking the boxes
9		instead saying this is something that is normal + it is something that
10		should be normalised so people don't feel ostracised from peers + we
11		each have things that are different about us, someone might be an
12		amazing mathematician, a great singer and someone might have
13		depression it should be as normalised as celebrating difference

Throughout this example, the students position themselves as progressive individuals in an oppressive society. They achieve progressive local identities by co-constructing disability as normal, which in turn resists opposing macro structures which assert that disability is abnormal and something to be apprehensive of (lines 8-9; 22-25). In doing so, they evaluate variation in human ability as being 'normal' (lines 11; 19), and a ubiquitous human experience, positioning themselves as stigmatised, within a disabling world. Thus, socialised stigmatising and ostracising macro discourses have top-down influence on role and identity construction which are deconstructed by the participants (Angouri & Marra, 2011: 3).

Laila embraces disability: *it is important to be able to laugh about these things – not in a mean way.* Jodie aligns herself with Laila's laid-back orientation to disability (line 19) by responding with, *in a normalising way?*, co-constructing a normalisation of disability, bridging the divide between those with disabilities and others. Laila adopts the role of a joke teller employing intertextuality; in doing so she rejects the validity of *oh dear this person is mentally unstable*. Ellie aligns herself with this invalidation through continuing the jocular style, in taking the role of non-disabled people (line 23). Thus, bodily breakdowns are reconceptualised as being a normative experience, dismantling the divisions set up in society, which they advocate as merely being interpretation (line 5) (Ramanthan & Makoni, 2010: 288). As they occupy joketeller and advocate roles, they frame ability as a changeable and complex phenomenon. Although some disabilities can lead to debilitating experiences, they interpret this as a part of the 'normal' human experience.

In sum, local level identity construction is an intersubjective matter. Both staff and students position themselves in a myriad of expert and experiential interactional identities, through orienting to the unfolding discussion which accumulates into robust disability identity structures (Du Bois, 2007; 2011).

4.2 Indexicality Principle

Indexicality is regarded as "the mechanism whereby identity is constituted" (Bucholtz & Hall, 2005: 593). The participants' linguistic choices index different identity positions, in relation to the context and the surrounding macro structures (Bucholtz & Hall, 2005: 594). The participants discursively construct identities by overtly referring to identity categories, alongside signalling presuppositions of identity attributes, and the use of linguistic structures which index personas and groups (Bucholtz & Hall, 2005: 594). Thus, discourse of disability is ideologically loaded.

4.2.1 Indexicality principle: staff group

Example Six:

1	Andrea	she got told off for not standing up for an older person on the bus
2		and this was on top of her own disability
3	Linda	those experiences become less terrible with time particularly if a
4		student embraces their disability as a part of their identity they
5		become less terrible and sometimes humorous
6	Susan	[laughter] my brother has a friend with bilateral amputation because of
7		cancer and they were parked in the disability carpark and someone
8		came over and said young man you shouldn't be parking there and
9		so he pulled up his trousers and said I haven't got any legs but he
10		embraced and [..] got on with it and quite enjoyed those moments
11	Andrea	it's that stage of acceptance and integrating it that determines how
12		you respond
13	Melissa	it's a cultural experience
14	Linda	the primary reaction to that is poor them but we encourage the
15		student to own it and get a line it doesn't need to be complex
16		[…] we get people coming in saying people are parking there
17		and [..] say I really want to slash their tyres
18		but we have to let people know about vandalism a little bit
19	All	[laughter]

Through the adoption of joketeller positions, the participants in the staff group shift the conversational style from serious to jocular and laidback. After discussing some of the negative consequences of having a disability which is hidden (line 1-2), Linda takes a stance of knowledgeable expert (line 3). Susan continues this construction, sharing a story about a man who has bilateral amputations who embraces mis-guided vigilante comments about his use of disability carparks. This shift to a jocular style seems to index a normalised orientation to disability. Identity is a social accomplishment; such styles index their knowledgeable positions and challenge "poor you" discourse (line 14). In other words, the staff members position themselves as "wise" members of the disability community in which they personally and professionally identify with disability (Cochrane, 2014; Goffman 1963) with both in-group and out-group status. They produce and reproduce social meaning (Eckert, 2008), and their experiential relations to disability through their professions or social life, allow them to "borrow epistemic authority" (Cochrane, 2014: 273) to take progressive knowledgeable stances.

Conversely, through their professional positions, the staff members negotiated with caution when evaluating the varying experiences and journeys for people with disabilities. This aligns with the expectation that medical professionals have a cautious style in which they avoid directness in order to save face (Gunnarsson, 2009: 68). Later in the discussion, they use the modal *may* (Susan) and sentence adverb *I think* (Linda) to qualify their subjective stances (Johnstone, 2008: 137).

4.2.2 Indexicality Principle: Student group

Example Seven:

1	Ellie	I guess for me mine began as an illness so first and foremost
2		someone with a chronic illness and that has led to disabling
3		experiences + I prefer to think of myself who has a disability rather
4		than someone who is disabled I don't like the idea that my illness and
5		my physical and visual impairments define me + I am resistant to when
6		people discussed disabled persons as that places the disability before
7		the person, emphasising the person is important + you can't deny it
8		but it is not all of what we are
9	Jodie	I agree completely I have two chronic illnesses […] identify with
10		chronic illness which sometimes means I have disabilities + I have a
11		disability but not always disabled it is not something that is constant
12		but my chronic illness is
13	Laila	I have borderline depression[…] when I was younger I
14		thought it was my personality + I don't see myself as disabled but the
15		sum of parts I enjoy music I just happen to have a condition that
16		[…] it isn't who I am it is something that just happens to me
17	Ellie	there's less stigma about being chronically ill than being disabled[..]when
18		you are sick people don't tell you to get over it but when you are disabled [..]
19		people are like oh but you just have to get used to it so therefore you just
20		work through it + which might be part why I identify with that category
21	Laila	chronic illness is a part of the person that you are rather than
22		disability as a value judgement
23	Jodie	I agree to some point + there is a lot of debate whether [fibromyalgia]
24		actually exists […]there's a huge judgement about it + whereas if
25		You said I have a disability which means my hands get sore
26		I don't use the name […] because of the stigma
27	Ellie	I have complex regional pain syndrome, there are symptoms but not
28		diagnostics when a doctor looks at you they see symptoms but not
29		root cause + sometimes I won't disclose [..]part of not letting it
30		define me I want people to know me
31	Jodie	[…] it's not necessarily your chronic illness but has been the catalyst
32		to your personal development?
33	Ellie	I don't deny it + it has changed me but only a part of what has
34		changed me

Throughout this example, the indexical fields of 'disabled' and 'chronic illness' are shaped through the students' reactionary stances to legitimacy and abnormality macro discourses. The participants construct new demarcations of abilities while reconstructing the semantics of 'disabled'. They change the indexical field by "building on ideological connections" (Eckert, 2008: 453) to the affirmation model. Ellie discusses her preference for the typically regarded politically correct linguistic structure (Galvin, 2003), *person who has a disability* (line 3), rather than *disabled person* (line 4). This appears to be in reaction to macro discourses which view individuals as disability personified (line 21). Separation from her disability through a separate clause indexes disability as only a part of her identity, not an all-encompassing identity. Likewise, Jodie and Laila's similar affirming stances have the same index; *it's something that happens to me* (line 16) and at a different point in the interview, *it's not me* (Jodie); *I'm still the same person I've just got this thing* (Jodie). Together their distancing from disability labels co-constructs new disability identities by forging new ways that people with disabilities can linguistically refer to themselves. They subvert role expectations rooted in ideologies that disabled people should use particular sorts of language (Bucholtz & Hall, 2005: 594). Thus emerges a disability identity in which the experience of disability is detached from the individual, which the environment (rather than the person) is responsible for. Thus, the students encounter terminological obstacles in defining what constitutes disability, summed up later on in the interview as *whatever you want to call it* (Laila) and in the staff group as *any condition for want of a better word* (Andrea). Such conceptual obstacles highlight the constraints of language and how identity is shaped by 'able-ist' ideology which permeates macro discourses. Therefore, so-called static categorizations such as ethnicity, gender sexuality (Bucholtz & Hall, 2005: 412) or disability, can be questioned and negotiated in talk, illuminating the fluidity of the indexical field of such labels.

The participants further negotiate indexical fields of disability labels, such as associated illegitimacy ideologies. As both Jodie and Ellie have contested illnesses[2], they draw complex indexical ties between the labels 'disability' and 'chronic illness' and il/legitimacy ideologies. Ellie chooses to identify with chronic illness, rather than disability. This choice is motivated due to hegemonic, presumptive 'learn to live with it' and 'you're making it up' macro discourses, which she posits that 'disability' indexes (line 18-20). However, Ellie discloses with 'chronic illness' rather than specific terminology of her condition (line 29). For her, 'chronic illness' carries the implicature that it is a legitimate condition. Disclosing with 'chronic illness' thus mitigates the potential backlash of stigmatising illegitimacy discourse and increases the likelihood of a productive, supportive societal response. Jodie also frames her arthritis as being a *chronic illness* which *sometimes leads to disabling experiences* (line 10). However, unlike Ellie, despite her overt identification with 'chronic illness' (line 2), she explains that it is through disclosing with 'disability' which mitigates the contestation of her disability (line 24).

[2] Fibromyalgia is contested in America as being an illegitimate chronic illness as there are no diagnostics as it is a neurological condition where pain receptors in your brain do not connect. Ellie's complex regional pain condition is contested due to lack of symptoms for her syndrome.

These findings reinforce the idea that "an index is a linguistic form that depends on the interactional context for its meaning" and for the individual and across discourse contexts (Bucholtz & Hall, 2005: 594). Despite differences, Jodie and Ellie are both influenced by authorising ideologies when framing their disabilities. They do not disclose their specific conditions as a way of mitigating unhelpful responses, and they appear to be affiliating through a common way of performing their identity (Johnstone, 2008: 134, 152). Laila aligns herself with the two and suggests that identifying with disability is a *value judgement*, (line 22) whereas chronic illness separates the individual from the condition. This presumption suggests an attitudinal barrier, as Linda notes: *you can accept but attitudinal barriers are difficult to overcome*.

Overall, the participants' identities are constructed and negotiated through a fluid web of ideologies which they draw from in their situated use of language.

4.3 Relationality Principle

The above discussion begins to reveal that identities are not isolated constructions and are rather constructed in relation to other relevant identities, through showing similarity and difference, and authorisation and illegitimacy (Bucholtz & Hall, 2005: 598). De Fina & Georgakopoulou (2011: 158) argue that the relational aspect of interaction affords a flow of mutual understanding and reacting, constructing identity in various fashions.

4.3.1 Staff group

Adequation and Distinction

One way identity is discursively constructed is through adequation and distinction whereby interactants negotiate similarities and differences (Holmes et al., 2011: 18).

Example Eight:

1	Susan	it's a journey that will take some years + coming to terms + others support
2	Melissa	lucky to have them for 5 years you see the progression + you have to be
3		there for them + you have to keep the door open
4	Linda	and creating environments for them where they want to walk through that door
5	Andrea	[..] accepting who they are and holding the possibility of change +
6		for Tom it shows it's hugely varying gender cultural and ethnicity
7		affecting attitudes that make it harder or easier to disclose
8	Susan	in some cultures there is less language around disability
9	Linda	[maori]
10	Susan	attitudes are the biggest barriers [..]an environment that isn't conducive to
11		disclosing + coming to grips with the fact that you have a disability is a process

In the above example, the participants co-construct disability through a journey metaphor (lines 1-2), and negotiate their degree of involvement in it as dedicated staff members. This journey includes the intersection of personal acceptance and societal attitudes (line 8, 10). Melissa and Linda co-construct and negotiate their roles as advisory yet inclusive facilitators. Melissa suggests that it is a journey that is equally a part of their lives in *keeping the door open* (line 3). Linda's response, *and creating environments for them where they want to walk through that door* (line 4), positions them as responsible for ensuring inclusion. Thus the discursive construction of disability is fluid over time, as they co-author their roles in the journey of disability. They show ways of belonging to several discourse communities; in a collaborative team in the field of disability, in their specific professions, and as advocates in the pursuit of inclusion.

Illegitimation and Authorisation

Identity is also constructed by authorization, which is the process of de/legitimising identities through a body of power (Bucholtz & Hall, 2005: 603).

Example Nine:

1	Andrea	some students would prefer going to health than counselling or disability services
2	Susan	it's an easy way to do it is to talk about their sore toes
3	Andrea	it's kind of legitimate right? [laughter]
4	Susan	legitimate [laughter] then move into other areas
5	Linda	that's interesting the idea of a legitimate disability
6	Susan	yeah it really is
7	Linda	it's huge that phenomenon[…]
8	Susan	I think it is
9	Linda	a student comes in with an acceptable disability whether is
10		a temporary or a specific learning disability but what actually is the
11		disabling experience is [..] performance anxiety
12		or whatever it is and it's not until you unpack that you get
13		to that + and 60% of people with disabilities have multiple
14		impairments but the catalyst is often that acceptable one

There is an overt acknowledgement that stigmatising macro structures lead students to *land at* health services, rather than counselling and disability services (line 1) with a *legitimate* health concern, and then afterwards *move onto the disabling experience* (line 11). The issue indicates an underlying presupposed discourse, where an institutional idea of legitimacy frames the way in which some students begin their journey of disclosing their disability. The doctor, Susan, aligns with this view and downplays her professional, institutional role by referring to *sore toes* (line 2), to which the counsellor, Andrea, adds the word *legitimate* and laughs (line 3), exposing the medical authorisation of legitimacy. When Linda further reiterates the idea of legitimacy, Susan's act of alignment (lines 6 & 9) further challenges the macro discourses of the medical world which define disabilities. They intersubjectively navigate a potentially face-threatening sensitive topic through phrasing which suggests a caring professional role as they refer to the hardship experienced through attitudinal barriers (Bucholtz & Hall, 2005: 126). Disability thus moves from fixed category to an intersubjectively negotiated one. The institutional representatives indirectly scrutinise the thriving illegitimatation of disabilities; they discuss how disabilities perceived to be on the margins of disability such as 'performance anxiety' (line 11), only get talked about through the catalyst of a legitimate disability in doctor-patient interactions.

4.3.2 Relationality principle: Student group

At points the students position themselves as ex/included, mis/represented, un/acknowledged minorities by distinguishing and authorising self and other.

Adequation and Distinction

In the student group, participants construct shared knowledge by aligning themselves with each other; at the end of the interview, Laila noted that they were all on the same *wave length*. This ability to take the role of the other in interaction, leads to conversational

coherence and maintenance of mutual face in the co-construction of identities (Hamilton, 2005: 420). Thus adequation allows interactants to build solidarity and claim group membership (Johnstone, 2008: 129), through shared experiences of living with disability. They also make a clear social distinction between people who do not have disabilities, and those who do, by referring directly to 'people with disabilities' and 'other people' (i.e. example five). Thus, "the perception of shared identity often requires as its foil a sense of alterity, of an Other who can be positioned against those socially constituted as the same" (Bucholtz & Hall, 2004: 371). This is further exemplified later in the discussion when Ellie speaks as a representative for outside voices, drawing on macro discourses such as in *people with disabilities are seen as not fitting the mould of what would be considered the norm.* It evokes a visual image of a clearly defined idea of normality, and disabilities as a collective group with an abnormal shape, which they scrutinise.

Authorization and illegitimation

Expert discourse embeds illegitimating definitions (Bird, 2003). In the students' interaction, 'other' is also positioned to be the authority of illegitimation. The participants separate self and other as they position themselves as being limited by institutional discourses: *there is a disparity with the way other people talk about disability and the way that people with a variety of disabilities talk about disability* (Ellie). However, the students highlight how people who are seen as having disabilities are subject to illegitimacy and marginalisation within their own cultural group (i.e. example six: lines 17, 23, 27). Thus they transgress macro discourses which perpetuate the marked and unmarked nature of certain identities, which constrain them (Bucholtz & Hall, 2004: 373; Bucholtz & Hall, 2005: 606); they become authorities of disability identity.

Illegitimation of disability is authorised through harmful indexical fields of terms and diagnoses entrenched in wider ideological discourses. For instance, Laila talks about the relation between personality defect and mental illness: *when I was younger I thought that this depressive aspect was my personality* (i.e. example six). This is self-illegitmatising and relates to macro illegitimation discourses; Andrea acknowledges that *people frequently think [mental illness is] actually a personality defect or some inadequacy in them that has made them have this problem and that's a barrier to overcome to encourage people to disclose*. This draws on the visibility of disability plays a role in the positioning of students such as the dismissal of certain disabilities which constructs ignorance about the multiplicity of disability experiences. Thus disability identity construction is a relational accomplishment, where our positions are subject to institutional authorisation and the discursive acts of solidarity and distinction.

I hypothesised that distinctive expert and experience macro discourses would divide how students and staff construct their identities in relation to disability, thereby justifying my separation of them into two groups. However I found a myriad of experiential and expert (advocate, educator, expert, disabled and friends of disabled people) identities emerged in both groups, pointing to the ubiquitous nature of disability. While the students advocate for

disability rights, the staff members positioned themselves as 'wise'. Bucholtz and Hall's (2005) principles therefore provide important tools for the analysis of disability identities.

5. Discussion

The findings are part of a larger context in which the in/visibility of a disability affects the positioning of disabled people. As I have outlined, disability identities are discursively constructed by challenging and supporting macro discourses which impose presumptive expectations of disability. These 'disabling' macro discourses construct disability as a private matter which renders people with disabilities invisible. The presumption that disability is a visible abnormality has marginalising implications for both people with hidden and visible disabilities. Secondly, ideologies about the legitimacy of a disability can marginalise those with contested disabilities. In particular, these deeply entrenched perspectives impede disabled people's autonomy and agency in acts of disclosure. However, evidenced in both the group discussions, these wider discourses can be deconstructed at micro-levels. They authenticate a positive disability identity by articulating disabled people's actual disabling experiences – which are found to be as much tied to ideology as to their 'disability'.

5.1 'Disability as a visible abnormality' discourses

As indicated in the analysis (specifically examples 3, 5, 6), when a disability is hidden, there is no reference point with which to attribute this person's disability. Visible disabilities are thus often the 'symbols' of disability. The macro structure that disabilities are visible is evident as the students evaluate circumstances in which their invisible disabilities go unrecognised (examples 5, 7, 9). Additionally, it is mentioned that someone with an invisible disability like autism may look *perfectly normal* (Susan). This can lead to more judgement when behaviour expectations are not met, compared to if the person *had been in a wheelchair* (Susan). Such phrasing (i.e. examples 3, 4, 7) indexes the presumption that disabilities are visible abnormalities, illustrating that *we are an ocular-centred society* (Ellie). These macro discourses perpetuate normality divisions and have marginalising implications for disabled individuals; what is visible can lead to ostracism as they are immediately judged; whilst undisclosed invisible disabilities are threatened by expectations for normality, therefore their needs go unrecognised.

The discourses surrounding people with visible disabilities resonate with other corporeal differences, such as ethnicity. For instance, to be African American "is seen as an identity that is produced and reproduced in the ways in which people – Black and White – talk about others in the discourse and dialogue" (Gee, 2000: 108). Likewise, those with visible disabilities are often restricted to other people's preconceptions about disability (i.e. example 5; example 7: Ellie). For instance, Jodie shares a story about how when her and her friend (who has a visible disability) are on the bus, the language used around her friend is that she is *disabled* and needs to be *prayed for* – thus the in/visibility of a disability reveals how local discourses can disable people.

Invisible disabilities can be compared to the potential invisibility of homosexuality, in that they both often require a way of disclosing which communicates personal experience. This often appears in the form of a justification, in order to mitigate the discourses of illegitimacy, since they appear to be unmarked categories. Aligning with Samuels (2003), it seems that 'coming out' for both disabled people and homosexuals redefines their identities through rejecting imposed oppressive normative expectations. These able-ist preconceptions place invisible disabilities in a liminal position; caught between 'disabled' and 'normal' macro identities (i.e. Jodie's experience on the bus). Although the staff group positioned students with invisible disabilities as having agency (examples 7, 8, 9), the pressure to conform to mainstream able-ist discourses often means that they do not disclose (i.e. example 3) (cf Ramanthan & Makoni, 2010: 288). Furthermore, these ideologies lead to feelings of isolation. As found in my additional student focus group, Lily and Jennifer, who both have dyslexia, demonstrate how the invisibility of a disability can lead to a *lonely* (Lily) experience, as you cannot visually tell apart those who are like you.

5.2 Illegitimation discourse

Disability identity is context-specific – in the student group, disability is emphasised as a normal experience, and in other contexts, disability is subject to institutional authorisation and illegitimacy (cf Gee, 2000). Illegitimation can marginalise those with contested disabilities, which likewise has reverberating implications on decisions to disclose (example 3, 7) (Okada, 2011: 145). Laila, for example, hides symptoms of her mental illness because it's *anti-social* and seen as *not quite right.* Hidden disabilities may be delegitimised as *people do not always take your word for it*. The ideology of illegitimation, which sustains divisions of abilities, appears to be enacted by acts of expert diagnosis of a disability (example 9). Staff members demonstate their capacity for de/legitimation and authority (Johnstone, 2008: 129), but their discourses favour an inclusive legitimation of disability experience.

The above expectations which are inherent in wider discourses render disability a private matter, subsequently marginalising people with disabilities. This is particularly salient as the students advocate for *moving minority narratives in the support group into the mainstream…it's not about saying you have a disability it's about saying you have a disability but also a […] university student* (Ellie). For instance, she points out mainstream university campaigns exclude people with disabilities, whilst Disability Services' campaigns solely focus on disabilities. Furthermore, the students intersubjectively evaluate the barriers in the education system, as the university does not accommodate to a different way of learning. The two students who are dyslexic noted the biggest barrier was getting them to university, suggesting that the education system currently impedes the advancement of people who learn in a different way to the mainstream education system. They are thus excluded from the public sphere – disability is a private matter. Likewise, areas of the university feel ostracising to students or have a lack of awareness (i.e. Linda and Andrea in Example 3) for

instance, *university staff don't know how to support or even have that conversation about mental health problems* (Andrea).

5.3 Deconstructing 'disabling' discourses

It is evident in the group discussions, that rather than being a social artefact, disability is authenticated, imposed and made legitimate by marginalising able-ist social discourses. However, the deconstruction of these discourses can also be a micro-level discursive achievement; as disabled people are placed on the margins, they are in a position to subvert ideologies (Galvin, 2003). The participants in this study work against wider societal discourses which marginalise them, in order to deconstruct essentialist ideologies that corporeal breakdowns mean 'disabled'. As Cameron and Kulick (2003:29) illustrate, "when people argue about words, they are also arguing about the assumptions and values that have clustered around those words [over time]." The participants deconstruct the terminology's (indexed) macro discourses, such as 'disabled', in order to provide an accurate description of their actual experiences of ability. Disability can be authenticated as a journey of self-development (i.e. example 6 & 2). However, the participants highlight that the identification with 'disability' is not the only way to authenticate oneself as having genuine disabling experiences, particularly through censuring the terminology (i.e. example 6 and 7). As Bucholtz and Hall (2005: 588) point out, the emergent nature of identity is obvious in cases which "sever the ideologically expected mapping between language and biology or culture; that is, they subvert essentialist preconceptions of linguistic ownership".

It becomes apparent that it is the wider macro discourses which is disabling – and is a result of socialisation (examples 5, 8, 9), yet there appears to be a tension between normalising discourses and discourses grounded in their knowledge of lived experience (i.e. example 5: line 20; example 7: line 27). However, this appears to be the case so that both groups construct a positive framing of support, bridging the divide between disabled and non-disabled people. For instance, Ellie's self-repair in *deal with…work with people with disabilities*, shapes an aspiration for a more equal partnership between the person with disability and others (i.e. example 3). Such micro level discourses 'fashion' and authorise disability (as is found in Bülow, 2004).

As the directors of discourse, the participants co-construct and re-construct new meanings – exhibiting the unstable fluidity of indexical relationships (Coupland, 2007: 23). As terms such as *disabled* and *illness* index marginalising wider discourses, the students reconstruct normalised meanings which also interplay with discourse of extended capabilities such as the coalescence of superpowers and disabilities. They also adopt terms like *difference* (example 4: line 10) and *symptomatic*, in hopes of mitigating such responses indexing a normalised cline of ability rather than the two static categories: disabled and abled. There is an obvious search (in the student group) and recognition (in the case of the staff group), for positive normalising descriptors of disabling experiences, and discontentment with the current negative

connotations which originate in stigmatising ideologies. The network between staff and students creates a common discourse as they collectively create meaning by sharing (Bülow, 2004: 34). Interactional sites proved important in discovering how disability is constructed as a complex identity (Bucholtz and Hall, 2005: 412). This is achieved through the participants' subversion of ideological expectations of identity categories – such as the staff adopting experiential positions and the students adopting 'enabled', 'can-do' positions. This further demonstrates that discourse is ideologically bound and that disability identity is negotiable.

A possible limitation of the present study is that the discussion took place in a contrived setting. Nevertheless, this provides avenues for future research, evoking questions about how disability is talked about in other contexts and groups within the university, such as between those who do not have disabilities.

6. Conclusions

The social identity categories with which we divide society are restrictive; the reality includes a multiplicity of identities, which emerge in interaction. Through this creative and transactional process, participants from both groups co-construct their expert and experiential interactional identities through the stances they take, which accumulate to construct wider dimensions of disability identity. During the discussion between staff members, at some points emphasizing one's personal relation to disability was more relevant than one's professional expertise, pointing to the ubiquitous nature of disability. The students adopted progressive roles in which they evaluated disability as normal in relational discursive practices. These ideas were also embedded in the staff discussion while they negotiated disability as being a journey of self-acceptance and societal-acceptance. Although positive and empowering macro discourses emerge at micro-levels, which cater for lived disability experience perspectives, participants still resist outdated competing able-ist discourses.

These findings are part of a bigger picture in which the in/visibility of a disability affects the positioning of students. Evidenced through both group discussions, disabled people are marginalized by macro illegitimacy discourses, and discourses which presume disability is a visible abnormality. The fact that these macro structures constrain their ability to articulate their perspectives of their disabilities to some extent, leads me to conclude that the discourse itself is disabling. Nevertheless, through the participants' interactional identities, I found that they deconstructed these deeply entrenched marginalising macro discourses. Students rejected part of the terminology's more 'disabling' indexical field whilst orienting themselves towards able-ing 'can do' and enabling 'can do more' indexes (Eckert, 2008), co-constructing a normalised disability identity. Therefore, through a social constructionist approach, my findings also reveal how cultural and social structures are illuminated through interactional practices (Bucholtz & Hall, 2005). This contextually specific focus affords a more dynamic approach, compared to other conceptualizations of identity which sustain static categories such as race, gender and ethnicity (Gee, 2000: 99) – and to which I add disability.

References

Adler, Emily Steir & Roger Clark. 2011. *An Invitation to Social Research: How It's Done*. 4th edn. Belmont, CA: Wadsworth.

Adler, Emily Stier & Roger Clark 2011. *An invitation to social research: how it's done.* 4th edn. Australia: Wadsworth Cengage Learning.

Angouri, Jo and Meredith Marra (eds) 2011. *Constructing Identities at Work.* Basingstoke: Palgrave.

Arkwright, James 2011. *Discourse, narrative and agency: A contribution of local stories to disability theory, research and professional practice.* Unpublished PhD thesis, University of Waikato, Hamilton, NZ.

Bamberg, Michael 2004. Narrative discourse and identities. In J C Meister, T. Kindt, W. Schernus, & M. Stein (eds.), *Narratology beyond literary criticism*. Berlin & New York: Walter de Gruyter. 213-237.

Bates, Peter, Helena Priest & Michael Gibbs 2004. The education and training needs of learning disability staff in relation to mental health issues. *Nurse Education in Practice* 4: 30-8.

Bell, Alan 1984. Language style as audience design. *Language in Society* 13: 145-204

Benwell, Bethan & Elizabeth Stokoe 2006. *Discourse and identity*. Edinburgh: Edinburgh Press.

Bird, Lise 2003. Seen and heard? Moving beyond discourses about children's needs and rights in educational policies. *New Zealand Journal of Educational Studies* 38: 37-48

Boyle, Malcom, Brett Williams, Ted Brown, Andrew Molloy, Lisa McKenna, Elizabeth Molloy & Belinda Lewis 2010. Attitudes of undergraduate health science students towards patients with intellectual disability, substance abuse, and acute mental illness: A cross-sectional study. *BMC Medical Education* 10: 71-79

Bricher, Gillian 2000. Disabled People, Health Professionals and the Social Model of Disability: Can there be a research relationship? *Disability and Society* 15: 781-793

Bucholtz, Mary & Kira Hall 2004. Theorizing identity in language and sexuality research. *Language in Society* 33 469–515.

Bucholtz, Mary & Kira Hall 2005. Identity and interaction: A sociocultural linguistic approach. *Discourse Studies* 7: 585–614.

Bülow, Pia 2004. Sharing experiences of contested illness by storytelling. *Discourse & Society* 15: 33-53.

Burr, Vivien 2003. *Social Constructionism*. 2nd edn. London and New York: Routledge.

Caldwell, Kate 2010. We Exist: Intersectional In/Visibility in Bisexuality & Disability. *Disability Studies Quarterly* 30 (no page numbers).

Cameron, Deborah & Don Kulick 2003. *Language and Sexuality.* Cambridge: Cambridge University Press.

Charmaz, Kathy 2010. Disclosing illness and disability in the workplace. *Journal of International Education in Business* 3: 6-19.

Cochrane, Leslie 2014. Telling Disability: Identity construction in personal and vicarious narratives. PhD thesis, Georgetown University, Washington, USA.

Cohen, Leor 2012. An identity structure in narrative: Discourse functions of identity-in-practice. *Narrative Inquiry* 22: 247-266.

Coupland, Justine & Nikolas Coupland 2009. Attributing Stance in Discourses of Body Shape and Weight Loss. In Alexandra Jaffe (ed), *Stance: Sociolingusitic Perspectives*. New York: Oxford University Press. 227-249.

Coupland, Nikolas 2007. *Style: language variation and identity.* Cambridge: Cambridge University Press.

Creswell, John 2014 *Research Design Qualitative, Quantitative, and Mixed Methods Approaches.* 4th edn. London: Sage Publications.

Davies, Bronwyn & Rom Harré 1990. Positioning: The social construction of selves. *Journal for the Theory of Social Behaviour* 20: 43–63.

De Fina, Anna & Alexandra Georgakopoulou 2012. *Analyzing Narrative: Discourse and Sociolinguistic Perspectives.* Cambridge: Cambridge University Press.

Disability Services, 2011. http://www.victoria.ac.nz/st_services/disability/(22 July, 2014)

Dowe Amelia 2013. Conceptualising disability in Australian English and Japanese: a lexical semantic analysis. Australian Linguistics Society (ALS) conference, University of Melbourne, 4th October 2013.

Du Bois, John W 2011. Co-Opting Intersubjectivity: Dialogic Rhetoric of the Self. In C. Meyer and F. Girke (eds.), *The rhetorical emergence of culture*, 52-83. Oxford: Berghahn.

Du Bois, John W. 2007. The stance triangle. In R. Englebretson (ed), *Stancetaking in discourse: Subjectivity, evaluation, interaction*. Amsterdam: John Benjamins. 139-182.

Eckert, Penelope 2000. *Linguistic variation as social practice*. Oxford: Blackwell.

Eckert, Penelope 2008. Variation and the indexical field. *Journal of Sociolinguistics* 12: 457-476.

Galvin, Rose 2003. The Making of the Disabled Identity: A Linguistic Analysis of Marginalisation**.** *Disability Studies Quarterly* 23: 149-178.

Garland-Thomson, Rosemarie 2002. Integrating Disability, Transforming Feminist Theory. *National Women's Studies Association Journal* 14: 1-32.

Gee, James Paul 2000. Identity as an Analytic Lens for Research in Education. *Review of Research in Education* 25: 99-125.

Gee, James Paul 2004. *Situated language and learning: A critique of traditional schooling*. London: Routledge.

Gee, James Paul 2011. *How to do Discourse Analysis: A Tool Kit.* New York: Routledge.

Gee, James Paul 2014. *An introduction to discourse analysis*. 4th edn. London & New York: Routledge.

Goffman, Erving 1963. *Stigma: Notes on the management of spoiled identity*. New York: Simon & Schuster.

Grue, Jan 2011a. False dichotomies of disability politics: Theory and practice in the discourse of Norwegian NGO professionals. *Journal of Language and Politics* 10: 109–127.

Grue, Jan 2011b. Discourse analysis and disability: Some topics and issues. *Discourse & Society* 22: 532–546.

Gunnarsson, Britt-Louise 2009. *Professional Discourse.* London & New York: Continum International Publishing Group.

Hamilton, Heidi Ehernberger 2005. *Conversations with an Alzheimer's Patient: An Interactional Sociolinguistic Study.* Cambridge: Cambridge University Press.

Harré, Rom & Fathali Moghaddam 2003. *The Self and Others: Positioning Individuals and Groups in Personal, Political and Cultural Contexts*. Westport: Praeger.

Henderson, Jeanette. 2004. Mental illness... or disability? *Nursing Management* 11: 32-5.

Holmes, Janet, Meredith Marra, Bernadette Vine 2011. *Leadership, Discourse, and Ethnicity*. Oxford: Oxford University Press.

Human Rights' Commission 2014. New Zealand's human rights commission act http://www.hrc.co.nz/enquiries-and-complaints-guide/what-can-i-complain-about/disability/ (30 July).

Ingstad, Benedicte & Susan Whyte 2007. *Disability in local and global worlds.* Berkley and Los Angeles: University of California Press.

Jaffe, Alexandra 2009. *Stance: Sociolinguistic Perspectives*. New York: Oxford University Press.

Johnstone, Barbara 2008. *Discourse Analysis*. 2nd edn. Malden, MA: Blackwell.

Marvasti, Amir 2004. *Qualitative research in sociology: an introduction*. London: SAGE Publications.

McKee, Rachel 2008. The Construction of Deaf Children as Marginal Bilinguals in the Mainstream. *International Journal of Bilingual Education and Bilingualism* **11**: 519-540

Ministry of Health 2001. The New Zealand Disability Strategy: Making a World of Difference: Whakanui Oranga. http://www.odi.govt.nz (August 2)

Morgan, David 2002. Focus group interviewing. In J.F. Gubrium & J.A. Holstein (eds.), *Handbook of interviewing research: Context & method.* London: Sage. 141–159.

Ochs, Elinor 1992. Indexing Gender. In Alessandro Duranti & Charles Goodwin, eds., *Rethinking context: Language as an interactive phenomenon*. Cambridge: Cambridge University Press. 335-358.

Office for Disability Issues, Ministry of Social Development 2013. Towards an inclusive and non-disabling New Zealand: The annual report from the Minister for Disability Issues to the House of Representatives on implementation of the New Zealand Disability Strategy. http://www.odi.govt.nz (August 2)

Okada, Hanako. 2011. Negotiating the invisible: Two women making sense of chronic illness through narrative. In P. McPherron & V. Ramanathan (eds.)*, Language, body, and health*. Berlin: Walter de Gruyter. 146-169.

O'Malley, Mary P. 2009. Falling between frames: institutional discourse and disability in radio. *Journal of Pragmatics* 41: 346-356.

Oppenheim, Abraham 1992. *Questionnaire Design, Interviewing and Attitude Measurement.* London and New York: Pinter Publishers.

Pable, Adrian & Marc Haas 2010. Essentialism, codification and the sociolinguistics of identity. In Junodm, K and Maillat, D (eds.), *Performing the self.* Tuebingen: Narr. 47-60.

Paltridge, Brian 2012. *Discourse analysis: an introduction*. 2nd edn. London: Bloomsbury.

Park, Julie 2000, "The worst hassle is you can't play rugby": Haemophilia and masculinity in New Zealand. *Cultural Anthropology* 41: 443-453

Parker, Ian 1999. *Critical textwork: An introduction to varieties of discourse and analysis.* Buckingham: Open University Press. 1-12.

Ramanathan, Vaidehi & Sinfree Makoni 2007. Bringing the body back: The (mis)languaging of bodies in bio-medical, societal and poststructuralist discourses on diabetes and epilepsy. *Critical Inquiry in Language Sciences* 4: 283-306.

Ruiz, Nadeen 1996. The Social Construction of Ability and Disability: I. Profile Types of Latino Children Identified as Language Learning Disabled. *Journal of Learning Disabilities* 28: 476–90.

Samuels, Ellen Jean 2003. My body, my closet invisible disability and the limits of coming-out discourse. *GLQ: A Journal of Lesbian and Gay Studies* 9: 233-255.

Schnurr Stephanie & Olga Zayts 2011. (Be)coming a leader: a case study of co-constructing professional identities a work. In J. Angouri and M. Marra (eds), *Constructing Identities at Work.* Basingstoke: Palgrave. 40-61

Shakespeare, Tom. 2006. *Disability Rights and Wrong.* London. Routledge.

Student Counselling Service, 2011 http://www.victoria.ac.nz/st_services/counselling/ (22 July, 2014)

Student Health Service, 2011. http://www.victoria.ac.nz/StudentHealth/ (22 July, 2014)

Swain, J., & French, S. 2000. Towards an affirmation model of disability. *Disability & Society* 15: 569-582.

Thomson, R. 2005. Dares to stares: Disabled women performance artists & the dynamics of staring. In C. Sandahl, & P. Auslander (eds.), *Bodies in commotion: Disability and performance*. Ann Arbor: University of Michigan Press. 30-41.

Tolich, Martin & Carl Davidson 2011. An introduction to research methods: Getting started. Auckland: Pearson

Valeras, Aimee 2010. "We don't have a box": Understanding hidden disability identity utilizing narrative research methodology. *Disability Studies Quarterly* 30 (no page numbers)

Transcription Conventions

+	pause
[…]	deleted fragment of discourse
Italics	emphasis

Attitudes to Samoan English and Pākehā English

Caleb Stone

Abstract

This paper describes a small project investigating the attitudes of two New Zealand adolescents towards two varieties of New Zealand English, namely Samoan English and Pākehā English. Following a review of the literature on socialisation and language acquisition, and attitudes to language, an innovative methodology developed to elicit and interpret attitude data is described as well as the results. The contribution to sociolinguistic methodology is highlighted as well as the potential for collecting data with useful educational implications.

Introduction

People tend to be judged by the way they present themselves, including their dress, their posture, and the way they talk. Language attitude research dating back to the 1960s indicates that the majority group in a society tends to be regarded as having greater social status as well as competency status (eg. Anisfeld et al., 1962). Thus when aspects of behaviour identify an individual as a member of a minority group, they are often evaluated negatively, with potentially harmful effects on the individual's social and educational success (Flunger & Ziebertz, 2010: 1). This paper explores the way that speakers of a minority dialect, Samoan English, are evaluated compared to speakers of the majority dialect, New Zealand Pākehā Standard English. In particular, I was curious about the possibility that young people's attitudes to these varieties might affect their self-image and impact negatively on their educational performance and employment prospects.

The Samoan ethnic population has steadily grown to approximately 131,100 people (NZ Census, 2006), making it the largest population of Pasifika peoples in New Zealand. Consequently, an increasing number of children who identify as ethnically and culturally Samoan are entering the New Zealand education system. In this context, research on sociolinguistic attitudes to Samoan English can contribute to an awareness of the rich linguistic diversity evident in New Zealand society, and perhaps counter potential discrimination against those who use minority group linguistic varieties.

Earlier sociolinguistic research among Samoan people has focussed on language maintenance and the attitudes of Samoan peoples towards their own language (Fairbairn-Dunlop 1984,

Wellington Working Papers in Linguistics 22 (2017) 81-94

Roberts 1999, Johri 1998, Starks 2005, Starks et al. 2005). And while there is a little research describing features of Samoan English as it has grown in salience (Gibson & Bell, 2010), there is very little work on attitudes towards the Samoan dialects of English, either among Samoan ethnic minority group members or among the NZ Pākehā ethnic majority group members. This research represents a small first step in this direction.

Literature review

A wide range of literature provides potentially relevant background for my study. I have focussed on two main areas: socialisation and its relation to language acquisition, and language attitude research.

Socialisation and language acquisition

Socialisation has been defined as a process by which people progressively learn to observe social and cultural norms regarding appropriate and expected behaviour (Allè-Jardel et al., 2003). These norms are not only expressed in language, but are also evident in evaluations of and attitudes towards languages (Kauhanen, 2006: 38).

Labov's (1972a) foundational research on language variability raised some questions about this conceptualisation of socialisation. He pointed out that variation was normal and that a speaker may say the same thing in many different ways, "identical in reference or truth value, but opposed in their social and/or stylistic significance" (Labov, 1972a: 271). This variability exists alongside the stability and regularities within languages (Chevrot et al. 2011). Labov (1964: 90-91) proposed that awareness of the social significance of such linguistic variation was not acquired until early adolescence, and preceded the acquisition of stylistic variation in one's own speech.

More recently, however, researchers have provided evidence of variability in language at a much younger age; variation has been noted in the speech of children ranging from 3 years of age through to early adolescence (Chevrot et al. 2011, Nardy 2008, Martin 2005, Díaz-Campos 2005, Patterson 1992). Acquisition of variation appears to proceed alongside acquisition of other aspects of language (Smith et al. 2007: 321). More recently, socialisation is conceptualised as a constructive process in which children take an active part, gathering material from everyday interactions to develop their communicative skills and their implicit knowledge about appropriate sociolinguistic use (Barbu et al., 2013: 406).

However, it is not clear whether the social significance of language variation is also learnt at a young age. Clark (1978) suggests that through self-correction, other correction, and language games, including games of "talking like", children provide evidence of metalinguistic

and metapragmatic awareness of language variation as early as 2 years of age. Nevertheless, it remains difficult to assess the extent of this awareness since a child's ability to verbalise is pivotal for evaluating the extent of their metalinguistic competence. By early adolescence (ages 10-12), however, it appears that children are generally able to provide evaluations based on language variation, in much the same manner as adults do (Martino 1982, Barbu et al. 2013: 383). Given all of this, I decided to focus my research on adolescents rather than young children.

Finally, there is also evidence that adolescents who identify with a minority cultural group, may nevertheless have a strong tendency to adopt the overt beliefs and evaluations of the wider society (King, 1976: 250), though covert attitudes appear to resist this trend. It is also relevant to note that the developmental stages and patterns relevant to developing overt attitudes appear to differ depending on the individual's social background (Barbu et al., 2013: 406).

Language attitude research

One aspect of language attitude research is variety recognition, including accent identification. Garrett et al. (2003: 208) proposed that dialect recognition involved mapping audible features of speech on to a person's individual record of the speech features used in particular communities. Correctly identifying the features which characterise different speech communities is thus a demanding task for listeners, since it requires substantial knowledge of the distinguishing speech features of different speech communities. Thus, evaluations of the features typically derive from evaluations of the available speech communities. An alternative position argued by McKenzie (2008: 140) is that listeners make evaluations of each individual feature of speech, and construct their attitudes towards speech from the sum of these individual evaluations. Overall, however, no matter how they are derived, there is clear evidence that identification affects the evaluation of and attitudes to speech varieties (Williams et al., 1999; Ryan, 1983: 149).

One influential approach that has been used both in eliciting identifications and evaluations of language varieties is the Matched Guise Technique (MGT). This was first used in a series of pioneering studies published in the 1960s (Anisfeld et al., 1962; Lambert et al., 1960), aimed at discovering the stereotypical characteristics that one sociocultural group attributes to another. The assumption underlying this technique was that a listener's attitudes towards a sociocultural group should generalise to the language they use. Thus, the evaluative reactions towards the spoken language should illustrate the evaluations and stereotypes that the listener holds of the group that speaks that language (Anisfeld & Lambert, 1964: 89).

The MGT generally requires a respondent to listen to a passage of speech in two or more languages, dialects, or accents. Ideally the recordings are made using one person who is fluent in all the varieties being evaluated, as this controls for evaluations of the personality of the speaker (Nesdale & Rooney, 1996: 133). The evaluations are usually then measured using bi-polar scales (Giles & Coupland, 1991). These scales traditionally use a set of personality traits that have been assumed to be appropriate when making judgements of people and of indicating language attitudes (Anisfeld & Lambert, 1964: 90).

Traditionally, analysis of these personality traits has suggested that they can be broken into two dimensions; solidarity (e.g. friendliness, goodness, and kindness) and status (e.g. perceived wealth, education, and success) (Ryan & Carranza, 1975). As the technique has developed, researchers have postulated various other categories that could be used, such as, Dynamism (Cargile & Giles, 1998: 5), and Charisma or Confidence (Bayard, 1995: 38).

The MGT technique is still considered the most appropriate technique for researching sociolinguistic attitudes (Garrett 2010), as it allows the researcher to test rather quickly and with relative ease, the attitudes of many respondents towards a multitude of stimuli. However, there are several important criticisms of the technique which need to be considered. Ball (1983: 165) notes, for instance, researchers very rarely discuss the difficulty of one person producing a range of authentic accents. While this could be done using professional actors, few researchers have that option available (Katz & Braly, 1933). Lee (1971) points to the tendency for this technique to use repetitive, content-controlled materials which tend to focus listener's attention on non-content based information in the recordings. Lee also notes the lack of reliability and validity of the dependant variables used, and questions the choice of certain rating scales. These criticisms have been responded to by researchers such as Giles & Bourhis (1973), who point out that the results are usually confirmed and validated using procedures that are not subject to the same criticisms, and that the technique is undergoing improvement every time it is employed so that these weaknesses have become less relevant over time. Connor (2008) also notes that computer simulations can add validity and reliability to MGT results. Bearing in mind these criticisms in the research literature, I turn now to the methodology developed for my own study.

Methodology

Participants

The study aimed to compare the development of language attitudes in Pākehā and Samoan youth; consequently, one of the participants in the pilot study ethnically self-identified as a Pākehā New Zealander, and the other participant as a Samoan New Zealander. Their parents similarly identified as Pākehā and Samoan respectively. Both were year 8 (aged 13) students

attending a Wellington intermediate school. As discussed above, the literature suggests that it is around this age that most young adults become aware of the social importance of language variation, and are able to comment on it in a conscious manner.

I first contacted the students' school where I was already known and where I had prior experience working with the students. I asked both the parents and the students if they would be willing to participate in my research and I obtained consent from both.

To elicit the students' attitudes, I used a version of the MGT, together with a semi-structured interview guided by a questionnaire.

Matched Guise Technique

The version of the MGT developed for this study was based on the modified form first used by Anisfeld et al. (1962). This differed from Lambert et al.'s (1960) original study; instead of using one speaker to produce multiple languages, dialects or accents, Anisfeld et al. used different speakers for each variety. This was regarded as a positive change since it provided the opportunity for the stimulus speech to sound natural, rather than artificial (Pishghadam & Sabouri, 2011: 90).

I recruited two male speakers, one Pākehā and one NZ Samoan, but otherwise from similar backgrounds, with similar jobs, and, as far as possible, similar voice pitch, speaking pace, and personality. They each recorded the stimulus passage several times and I selected the best match of the recordings for playing to the students. (See appendix for the content of the recorded passage). In addition to these recordings of the two different focus varieties, NZ English and Samoan English, three buffer recordings were also used to distract attention from the focus recordings.

Semi-structured interview

The interview consisted of a number of closed questions aimed at further measuring the participants' reactions to the recorded stimuli together with a series of open-ended attitude questions delivered in a conversational tone in order to encourage a relaxed, informal atmosphere. The interview also elicited additional ethnographic information which was useful for interpreting the participants' responses to the stimulus recordings.

Procedure

The students listened individually to the MGT recordings twice, and then they filled in the response form. This was followed by the recorded semi-structured interview. Refreshments were provided to make the interview as relaxed as possible. This procedure provided an opportunity to probe for further information when a participant gave a particularly interesting response. This process of administering a MGT with only one participant at a time is both relatively new and innovative. Previous studies have used very large groups with limited opportunity to collect detailed information on the participants, and no opportunity to explore the reasons for their responses. In the full study, I propose to conduct these interviews in small groups of two or three students in order to increase their comfort level (cf Labov 1972b).

Results

Methodological results

The most useful results of this small study were methodological. Firstly, despite my best attempts to give identical instruction and information concerning the research to both students, I noticed that the Pākehā participant was considerably more aware of the aim of my research probably due to the inquisitive nature and learning style of this particular participant. Moreover, he was much more extroverted than the NZ Samoan participant, and he answered questions more enthusiastically, more comprehensively, and with greater apparent ease. By contrast, the Samoan participant was introverted, answered with one word responses, and appeared reluctant to say very much.

Secondly, it seems possible that the responses of the participants during the MGT and the interview may have been strongly influenced by their cultural backgrounds. The background reading I had undertaken, together with the ethnographic information gathered during the research, suggested that Samoan cultural norms require children to stay silent in the presence of adults, and indicated that children hold little authority in a conversation. This may account for the reticent behaviour of the NZ Samoan participant. His teachers and peers told me that he was raised by a conservative Samoan mother with a very strong Samoan cultural identity and high cultural expectations of her children. Interestingly, when I asked the participant about his mother and her background, he appeared reluctant to discuss family details with me. This cultural difference may therefore account for his behaviour, although it is also possible that a shy and introverted personality may also be contributing factors. These results suggest that the main study will need a large number of participants to help distinguish

cultural influence from personality factors in responses to the stimulus materials and the interview questions.

MGT results

In analysing the responses to the MGT, the personality traits in the bi-polar scale were divided into either solidarity or status categories (cf Anisfeld et al.1962, Bayard 1995). The responses to each of the personality traits in the bi-polar scale were codified, and averaged within these two categories. This provided the relative solidarity rating and relative status rating for each participant in relation to the MGT stimuli.

Table 1

Solidarity Ratings of recordings

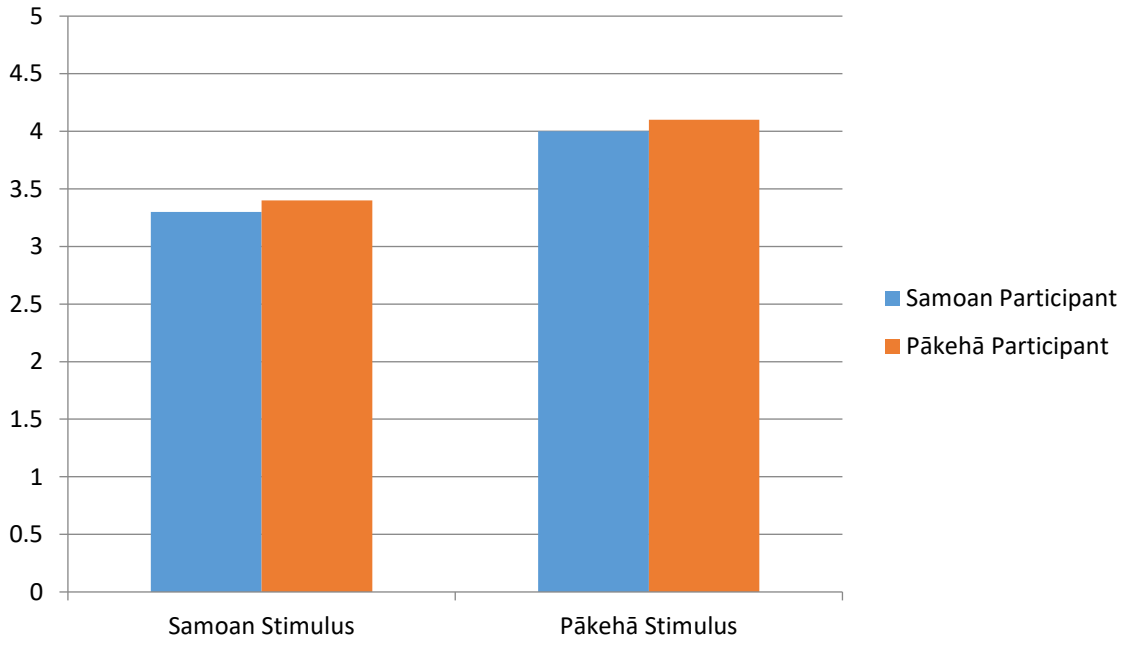


Table 1 features the Solidarity ratings that were given towards both the Samoan and the Pākehā Stimuli. The Samoan stimulus was rated somewhat lower than the Pākehā stimulus by both participants. This result is surprising because according to the data found by Labov (1972b), we might expect the Samoan participant to rate the Samoan stimulus higher on Solidarity than the Pākehā stimulus. Possible reasons for this result are discussed below in the section on interview results.

Table 2

Status Ratings of recordings

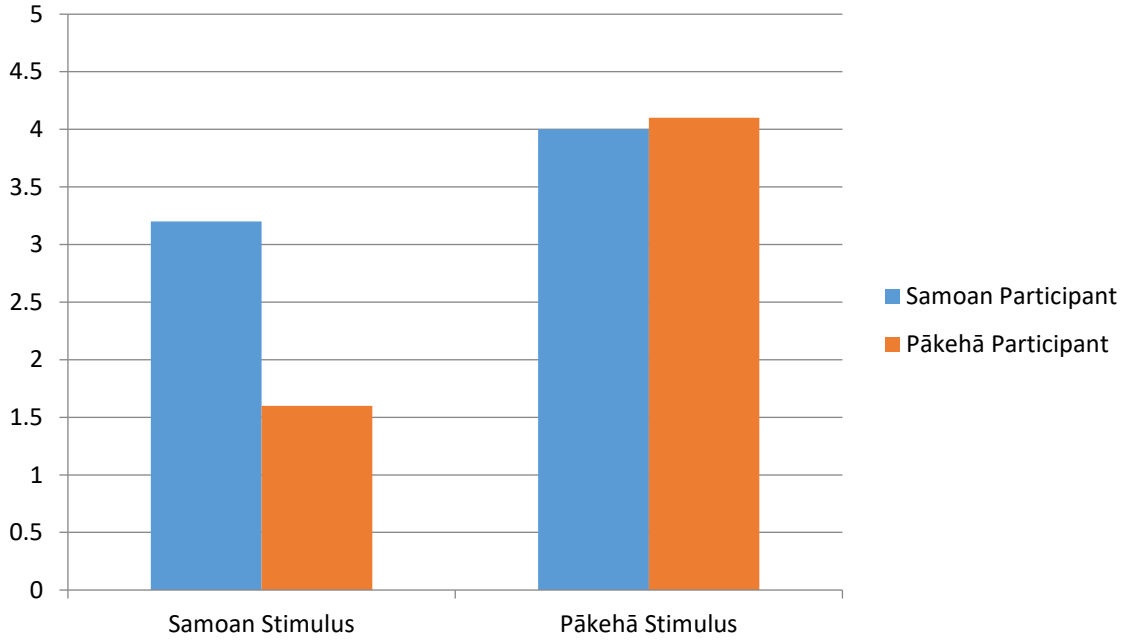


Table 2 shows the Status ratings given to both the Pākehā and Samoan stimuli. As with the Solidarity ratings in table 1, the Pākehā stimulus was given a higher Status rating than the Samoan stimulus by both participants but interestingly the Pākehā participant assigned the Samoan stimulus a much lower rating than the rating given by the Samoan participant. As noted in the discussion of the research literature above, the high rating of the Pākehā variety by both participants is to be expected, as the social status of a dialect tends to reflect the power relations in the wider society. Pākehā varieties are spoken by majority group members who have greater economic and political power in New Zealand, while the Samoan variety is spoken by a minority group with less economic and political power.

Both participants attribute high status to their own group. However, the Samoan participant still rated the Pakeha stimulus higher than the Samoan stimulus, again suggesting the influence of societies' wider values on attitudes

In sum, the Pākehā participant behaves as expected in that he evaluated the Pākehā stimulus, representing the variety of the group to which he belongs, more highly on both Solidarity and Status ratings than the Samoan stimulus, representing the group to which he does not belong. By contrast, the NZ Samoan participant assigned higher status to the Pākehā than the Samoan variety on both Solidarity and Status ratings. While the Status rating is easily accounted for, the Solidarity rating is not so easily explained and is discussed further below.

Interview results

The ethnographic information about each participant and the data retrieved from the interview questions provided some assistance in exploring the results reported in the previous section in more depth.

The results of MGT stimuli indicated that the NZ Samoan participant attributed greater Solidarity and Status value for the NZ English stimuli, and thus also for Pākehā. Despite this, information provided in the interview indicated a covertly greater solidarity status of his shared Samoan ethnicity, represented by the Samoan English stimuli. For example, he stated very firmly that he wanted to speak Samoan because his "family is from there". However, he found it hard to speak Samoan because he doesn't always understand what is being said to him, and he finds it "kind of boring". This last comment was interesting as my own intuitions and experience with children and people learning languages has led me to suspect that when something is said to be "boring", it is usually because the person finds it difficult or does not see the social salience of learning the particular language. This may be relevant to this participant as he did not begin learning Samoan from his parents until later in childhood and has no formal education in Samoan. The participant did however state that he is proud to be Samoan and mentioned that the majority of his friends are "Islanders" (those of Pasifika ethnicity).

During the MGT, despite answering the questionnaire in ways that reflected wider societal expectations and values, he commented that he "did not like" several of the non-Samoan voices, even going so far as to say they sounded "weird." By contrast, despite reporting that he could not recognise the Samoan accent, or any of the other accents for that matter, he was very quick to say that the Samoan stimulus "sounds like his friend".

Methodological implications of the pilot study

This pilot study was useful in identifying some methodological issues which need to be taken into consideration in the larger study planned.

Firstly one weakness that this pilot study identified was the influence of recording in different locations which affected the sound quality of the recording. For the main study, I will record the stimuli in one location with identical instructions, equipment, and minimum levels of background noise to ensure consistent sound quality for the recordings.

Secondly, the results of the pilot study support my view that administering the MGT followed by the interview is an effective way of eliciting more in-depth and reliable information about students' attitudes to language. Thirdly, in my planned study I will use a larger number of students to increase the reliability and validity of the results. Finally, I will interview students in small groups of two or three to reduce the stress of the interview, especially for shy and introverted participants.

Conclusion

To date there is very little New Zealand research focussed on attitudes towards the accents of ethnic minority groups, other than Māori. Attitudes to language may have a strong effect on the economic, educational, and health prospects of the relevant sectors of society. In particular, the educational consequences of societal attitudes to different accents and dialects have been well documented. Research in this area will provide useful information to support efforts ensuring that all New Zealanders, regardless of their individual cultural identities, are given an equal chance to succeed educationally.

Finally, I hope the innovative methodology described in this pilot study, namely using a semi-structured interview to complement and contribute to the interpretation of the MGT, will prove a valuable addition to sociolinguistic methodology more generally.

References

Allè-Jardel, M., Barbu, S., & Jouanjean, A. 2003. Les compétences sociales du jeune enfant: Vers une approche intégrative. *Cahiers Internationaux de Psychologie Sociale*, *60*, 10–24.

Anisfeld, E., & Lambert, W. E. 1964. Evaluational reactions of bilingual and monolingual children to spoken languages. *The Journal of Abnormal and Social Psychology*, *69*(1), 89.

Anisfeld, M., Bogo, N., & Lambert, W. E. 1962. Evaluational reactions to accented English speech. *Journal of Abnormal and Social Psychology*, *65*, 223.

Ball, P. 1983. Stereotypes of Anglo-Saxon and Non-Anglo-Saxon Accents: Some Exploratory Australian Studies with the Matched Guise Technique. *Language Sciences*, *5*(2), 163–83.

Barbu, S., Nardy, A., Chevrot, J.-P., & Juhel, J. 2013. Language evaluation and use during early childhood: Adhesion to social norms or integration of environmental regularities? *Linguistics*, *51*(2).

Bayard, D. T. 1995. *Kiwitalk : sociolinguistics and New Zealand society*. Palmerston North, N.Z.: Dunmore Press.

Cargile, A. C., & Giles, H. 1998. Language attitudes toward varieties of English: An American-Japanese context. *Journal of Applied Communication Research*, *26*(3), 338–356.

Chevrot, J.-P., Nardy, A., & Barbu, S. 2011. Developmental dynamics of SES-related differences in children's production of obligatory and variable phonological alternations. *Language Sciences*, *33*(1), 180–191.

Clark, E. V. 1978. Awareness of language: Some evidence from what children say and do. In A. Sinclair, W. Levelt, & R. Jarvella (Eds.), *The child's conception of language* (pp. 17–43). Springer.

Connor, R. T. 2008. Computer Simulation and New Ways of Creating Matched-Guise Techniques. *International Multilingual Research Journal*, *2*(1-2), 102–108.

Díaz-Campos, M. 2005. The emergence of adult-like command of sociolinguistic variables: A study of consonant weakening in Spanish-speaking children. In *Selected proceedings of the 6th conference on the acquisition of Spanish and Portuguese as first and second Languages* (pp. 56–65). Retrieved from http://www.lingref.com/cpp/casp/6/paper1125.pdf

Fairbairn-Dunlop, P. 1984. Factors associated with language maintenance: The Samoans in New Zealand. *New Zealand Journal of Educational Studies*.

Flunger, B., & Ziebertz, H.-G. 2010. Intercultural Identity Religion, Values, In-Group and Out-Group Attitudes. *Journal of Empirical Theology*, *23*(1), 1–28.

Garrett, P., Coupland, N., & Williams, A. 2003. *Investigating language attitudes: social meanings of dialect, ethnicity and performance*. University of Wales Press.

Garret, P. 2010. *Attitudes to Language.* Cambridge: Cambridge University Press.

Gibson, A., & Bell, A. 2010. Performing Pasifika English in New Zealand: The case of bro'Town. *English World-Wide*, *31*(3), 231–251.

Giles, H., & Bourhis, R. Y. 1973. Dialect perception revisited. *Quarterly Journal of Speech*, *59*(3), 337–342.

Giles, H., & Coupland, N. 1991. Language attitudes: Discursive, contextual, and gerontological considerations. *Bilingualism, multiculturalism, and second language learning*, 21–42.

Johri, R. 1998. Stuck in the middle or clued up on both. *Language and identity among Korean, Dutch and Samoan immigrants in Dunedin. Dunedin: University of Otago*.

Katz, D., & Braly, K. 1933. Racial stereotypes of one hundred college students. *The Journal of Abnormal and Social Psychology*, *28*(3), 280.

Kauhanen, I. 2006. Norms and sociolinguistic description. *Special issue Man of Measure Festschrift in Honour of Fred Karlsson SKY Journal of Linguistics*, *19*, 34–46.

King, V. 1976. Dialect Awareness in Preschoolers. *Language Arts*, *53*(3), 248–250.

Labov, W. 1964. Stages in the acquisition of standard english. In R. Shuy, A. Davis, & R. Hogan (Eds.), *Social Dialects and Language Learning* (pp. 77–104). Champaign, IL: National Council of Teachers of English.

Labov, W. 1972a. *Sociolinguistic patterns* (Vol. 4). Philadelphia: University of Pennsylvania Press.

Labov, W. 1972b. *Language in the inner city: Studies in the Black English vernacular* (Vol. 3). Philadelphia: University of Pennsylvania Press.

Lambert, W. E., Hodgson, R. C., Gardner, R. C., & Fillenbaum, S. 1960. Evaluational reactions to spoken languages. *Journal of abnormal and social psychology*, *60*, 44.

Lee, R. R. 1971. Dialect perception: A critical review and re-evaluation. *Quarterly Journal of Speech*, *57*(4), 410–417.

Martin, N. 2005. *Reseaux sociaux et variations phonetiques*. Université Stendhal-Grenoble, Grenoble.

Martino, J. 1982. The Phoneme /θ/ and its Alternative Realization as /f/: a Study of Variation in Australian English among Primary School Boys, According to Socio-Economic Background. *Working Papers in Linguistics*, *8*, 39–42.

McKenzie, R. M. 2008. The Role of Variety Recognition in Japanese University Students' Attitudes towards English Speech Varieties. *Journal of Multilingual and Multicultural Development*, *29*(2), 139–153.

Nardy, A. 2008. *Acquisition des variables sociolinguistiques entre 2 et 6 ans: facteurs sociologiques et influences des interactions au sein du réseau social*. Université Stendhal-Grenoble III.

Nesdale, D., & Rooney, R. 1996. Evaluations and Stereotyping of Accented Speakers by Pre-Adolescent Children. *Journal of Language and Social Psychology*, *15*(2), 133–154.

Patterson, J. L. 1992. *The development of sociolinguistic phonological variation patterns for (ing) in young children*. University of New Mexico, Albuquerque.

Pishghadam, R., & Sabouri, F. 2011. A Quantitative Survey on Iranian English Learners' Attitudes toward Varieties of English: World English or World Englishes? *English Language and Literature Studies*, *1*(1), 86–95.

Roberts, M. L. 1999. Immigrant language maintenance and shift in the Gujarati, Dutch and Samoan communities of Wellington. Retrieved from http://researcharchive.vuw.ac.nz/handle/10063/1311

Ryan, Ellen B., & Carranza, M. A. 1975. Evaluative reactions of adolescents toward speakers of standard English and Mexican American accented English. *Journal of Personality and Social Psychology*, *31*(5), 855.

Ryan, Ellen Bouchard. 1983. Social Psychological Mechanisms Underlying Native Speaker Evaluations of Non-Native Speech. *Studies in Second Language Acquisition*, *5*(02), 148–159.

Smith, J., Durham, M., & Fortune, L. 2007. " Mam, my trousers is fa'in doon!": Community, caregiver, and child in the acquisition of variation in a Scottish dialect. *Language Variation and Change*, *19*(1), 63.

Starks, D. 2005. The effects of self-confidence in bilingual abilities on language use: Perspectives on Pasifika language use in South Auckland. *Journal of Multilingual and Multicultural Development*, *26*(6), 533–550.

Starks, D., Harlow, R., & Bell, A. 2005. Who speaks what language in New Zealand. *Languages of New Zealand*, 13–29.

Williams, A., Garrett, P., & Coupland, N. 1999. Dialect recognition. In D. Preston (Ed.), *Handbook of Perceptual Dialectology* (Vol. 1, p. 345–358). Amsterdam: John Benjamins.

Appendix

Content of stimulus recording

The girls spent the day stopping everyone they met to tell them about the music evening. They decided to go to Kilbirnie and then to Miramar where they knew many students lived. Tavita told them which areas he had been the day before. So many streets were blocked off and the damage was bad. Dan walked by with a huge group of his mates in tow. Some of his family was there too. He gave Tavita a thumbs up. He was looking very pleased with himself.

How does contrastive accenting affect pronominal reference resolution?

Lou Kendall

Abstract

This study investigated the effects of contrastive accenting and the notion of parallel elements on reference resolution of ambiguous pronouns in sentence-final object position. The aim for this study was two-fold. Firstly, to investigate whether contrastively accenting either of two possible antecedents could influence pronoun resolution. Secondly, to see what effect contrastively accenting the pronominal anaphor had on pronoun resolution. The results indicated that when the pronoun was unaccented in the object position, the parallel antecedent also in the object position was the preferred referent. In contrast, when the pronoun was accented the antecedent in subject position was the preferred referent. The results also showed that accenting either the subject or object in the sentence preceding the pronominal target sentence had no effect on antecedent selection. Overall, this study showed how the notion of parallel elements and contrastive accenting compete with each other to influence pronominal antecedent selection. When contrastive accenting was not present on the pronoun then the parallel element influenced the referent, and when there was contrastive accenting this overrode the parallel element to influence the referent.

1. Introduction

During speech it is important to ensure that the information being shared with the listener is easy to understand and remember. By doing this, content mentioned during the conversation can easily be referred back to by both interlocutors. It is these informational links between the current utterance and the anaphoric context that help to contribute to the overall coherence of a discourse (Ward & Birner 2004: 153). Pronouns in particular need to have obvious links to their referents so that meaning is not lost or misconstrued by the interlocutors (Greene, McKoon & Ratcliff 1992; Badecker & Straub 2002; Cowles, Walenski & Kluender 2007; Kehler 2008). In English, pronouns typically associate with the most salient referent in the preceding utterance which is often in the subject position (Umbach 2004; Vallduví to appear: 17), or to their parallel element in the preceding utterance (Kameyama 1997; Kehler 2008; Kehler & Rohde 2013). Referents of the pronoun can also be made salient by assigning them as the focus of the discourse (Carlson, Dickey, Frazier & Clifton Jr 2009), which is an aspect of information structure (Vallduví & Zacharski 1994; Cowles 2007; Vallduví to appear: 19). Methods used by speakers to achieve focus in English can involve, but are not restricted to, contrastive accenting on the constituent that needs to be the focus, or through altering the syntax through the use of structures such as *it*-clefts (Bolinger 1961; Birch & Garnsey 1995; Cahn 1995; Wichmann, Blakemore & Collins 2006). For the purpose of this study only the method of focusing through contrastive accenting will be examined.

Wellington Working Papers in Linguistics 22 (2017) 95-120

Previous studies (Lakoff 1971; Carlson et al. 2009; Kaiser 2011) have already investigated how contrastively accenting different constituents can influence which referent a pronoun refers to. One of these studies in particular, Kaiser (2011), reports a strong subject antecedent preference for the pronoun referent even when the object in the preceding clause had been accented. This study therefore aims to establish whether placing the pronoun in the object position and contrastively accenting it, as well as each antecedent, will alter this subject preference as a result of the interaction between contrastive accenting and the notion of parallel elements.

1.1 Anaphors, Antecedents, and Pronouns

Before discussing pronoun resolution, it is necessary to understand the goal of referent resolution as a whole, including the terms anaphor and antecedent.

Umbach (2004) explains that an anaphor is either a noun or a noun phrase which refers to a previously mentioned noun or noun phrase, known as the antecedent. This is illustrated in the following example where the anaphor *leader* relies on information in the preceding sentence for complete understanding.

(1.1.1) The research team arrived at the base camp late at night.
Ben only talked to the LEADER (Umbach 2004: 163).

Without links being made back to the antecedent *the research team* the listener would not understand who or what this person is the leader of, resulting in confusion. These links between anaphor and antecedent become extremely important when encountering pronouns.

This relationship between anaphor and antecedent is examined in Gundel, Hedberg & Zacharski (1993) who introduce the Givenness Hierarchy. This Hierarchy proposes a set of related cognitive statuses used for explaining the relationship between referring forms, or an antecedent and its anaphor. They explain that in the Hierarchy, as outlined in Table 1, there are six cognitive statuses used to indicate referring expressions. N stands for a noun.

In focus >	Activated >	Familiar >	Uniquely Identifiable >	Referential >	Type Identifiable >
{it}	{that this this N}	{that N}	{the N}	{indefinite this N}	{a N}

Table 1: The Givenness Hierarchy as outlined in Gundel et al. (1993: 275).

The most relevant status for pronominal resolution is also the most restrictive. Pronouns come under *in focus* as the referent of the pronoun has to be both in the short-term memory of the interlocutors and the focus of the discourse. Gundel et al. (1993) explain that for a referent to be the

centre of attention, it is usually focused through syntactic structure or prosodic form. Focus is a key part of information structure, which will be discussed in the next section.

The importance of the relationship between anaphor and antecedent is highlighted when looking at pronoun resolution. Pronouns are one of the most common types of anaphors because, as Umbach (2004) explains, without an antecedent to refer to a pronoun is almost meaningless. When looking at an example of pronoun resolution from Warren (2012) it is possible to see how these informational links are used to add information to the discourse.

(1.1.2) A man stopped Jane in the street the other day. She gave him directions to the town hall (Warren 2012: 204).

In these two sentences *a man* and *Jane* are both acting as the antecedents, which are also known as the referents of the pronoun. This means that the pronouns *she* and *him* are the anaphors. Even though the anaphors do not refer to the antecedents respectively, the listener is still able to interpret the informational links and assign the pronouns to their referents by aligning them with their gendered counterparts. This is because for anaphors to refer to their antecedents efficiently there must be coherence and cohesion within an utterance. Warren (2012: 203) defines coherence as there being a consistency between the events or states in a series of sentences, and cohesions as making the appropriate links between the words and phrases within a discourse.

In a study by Itzhak & Baum (2014) on pronominal resolution they look at sentences when gender cannot be used to identify the antecedent. In the following sentence either *Ben* or *Matt* can technically be the referent of the pronoun.

(1.1.3) Ben lied to Matt about it because he didn't want to ruin the surprise (Itzhak & Baum 2014: 643).

While the antecedent is inferred as *Ben* from the context of the sentence, there is more ambiguity than in the preceding example from Warren (2013). This highlights the need for more complex strategies to resolve pronoun resolution, and the way in which these strategies interact are not fully answered for pronominal resolution. This leads onto the topic of information structure and some of the methods speakers can use to help the addressee create appropriate links in the discourse.

1.2 Information Structure – Topic, Focus, and Contrast

Information structure is a well-studied area of linguistics (Steedman 2000; Krifka & Renate 2012; Arnold, Kaiser, Kahn & Kim 2013; Vallduví to appear). The purpose of information structure is to signal the relationship between the information of the current utterance to the 'common ground of shared beliefs' (Vallduví to appear: 3) between interlocutors. This common ground can be viewed as

the information known and shared by interlocutors that is available to be modified during the conversation (Krifka 2008). From this explanation it is easy to see how the task of referring an anaphor back to its antecedent can be influenced by the information structure of the discourse.

Topic and focus are keys aspects of information structure (de Swart & de Hoop 2000; Lambrecht 1994; Gundel & Thorstein 2004) and play an important role in pronoun resolution. The topic is typically what the utterance is about and presents given information. According to Birner (2013: 212), given information is classified as previously mentioned in the discourse, or as previously known by both interlocutors even if it has not been mentioned before in the conversation. Focus on the other hand indicates new information in relation to the topic, or is the new information in the proposition introduced by the topic. New information is either completely new information to the addressee or new to the current proposition, but it is not always required to be completely new to the discourse. It is these links made between the given and new information being presented as the topic and focus that aid in the understanding and overall coherence of the discourse (Ward & Birner 2004: 153).

In his discussion on information structure Vallduví (to appear) elaborates on the role of a topic within an utterance, claiming that it is used to indicate what the utterance is about while allowing interlocutors to follow the new information being introduced later in the clause (Vallduví to appear: 20). Vallduví (to appear) further states that the topic introduces either a referent, or a set of referents that can then be used to discuss other non-topic elements in the discourse, illustrated by the following example (Vallduví to appear: 20):

(1.2.1) A: Tell me about John

B: John invited Mary to the dance.

In B the topic constituent is *John* because it is previously mentioned information and is used to introduce a new non-topic element, in this case the focus which is *Mary*. If the names were reversed and the conversation became:

(1.2.2) A: Tell me about Mary.

B: Mary invited John to the dance.

Then *Mary* is the new topic because *John* is now the new entity being introduced into this utterance. This does not however have to mean that *John* is entirely new information to the either the addressee or the discourse, he is just new to the event of who *Mary* invited.

In an example discussed in Cutler, Dahan & Donselaar (1997: 171) it is possible to see how contrastive accenting a word can be used to bring it into focus for the discourse. By focusing a

constituent through contrastive accenting it becomes prominent within the sentence, but the context must support the focusing so that the result is not infelicitous.

(1.2.3) Jack has a ring for Jill (Cutler et al. 1997: 171).

This sentence is a good response for the following questions depending on which noun the accent has been placed.

(1.2.4) a. Who has a ring for Jill?
b. What does Jack have for Jill?
c. Who does Jack have a ring for?

Jack, Jill, and *ring* can all be accented appropriately in (1.2.3) to place the focus upon the most important constituent. For example, in question (1.2.4.a) the topic is *who,* therefore to answer this question appropriately *Jack* must be focused through contrastive accenting. *Jack* is also the anaphor which directly refers back to the antecedent *who.* This type of accenting is also known as *focal stress* (Birner 2013: 213). For an accent to be contrastive it requires something to contrast against. In (1.2.3) *Jack* obviously contrasts against *Jill,* however the contrasting elements are not always as obvious.

1.3 Focus and contrastive accenting

There have been a number of studies on the use of contrastive accenting to indicate focus in a sentence (e.g. Dahan, Tanenhaus & Chambers 2002; Repp 2010; Repp & Drenhaus 2015). In a review of the use of contrast in information structure, Umbach (2004) discusses different ways contrastive accenting can be used to portray focus. Through contrastive accenting, a set of possible alternatives is created in the common ground (Cutler et al. 1997; Braun & Tagliapietra 2010; Fraundorf 2012). It is agreed that a contrastive accent has the ability to evoke 'the mere existence of alternatives' (Umbach 2004: 161) without the need for an explicit set of alternatives mentioned in the discourse. For example:

(1.3.1) Let's have a PICNIC (Umbach 2004: 158).

PICNIC is not directly contrasted with anything explicitly, but it is suggesting to have a *picnic* over some other group activity. On the other hand, a sentence like the following already has predetermined alternatives as established by the discourse, yet contrastive accenting is still used to identify one constituent out of the set of alternatives.

(1.3.2) John and Mary went shopping, but only JOHN bought something.

While the clause 'only JOHN bought something' does make sense on its own without the preceding clause, it is within the context of the entire discourse that the interlocutors know that the set of possible alternatives is restricted to *John* and *Mary.*

When dealing with pronouns and contrastive accenting in particular, alternatives can occur when there is an accented pronoun out of context, for example 'I didn't see HER there.' However, there still must be an agreed referent that has been mentioned previously in the discourse and is shared on the common ground between interlocutors. Umbach (2004) views contrastive accenting as a type of anaphor resolution, thus for the previous example there must be an antecedent referent of *her* for the anaphor to refer to in the discourse, and an antecedent set *her and other people*. For this study the view will be taken that contrastive accenting is usually used to signal alternatives from immediately preceding referents.

An eye-movement study by Dahan et al. (2002) looked at the effect that contrastive accenting had on anaphor resolution when the focused information was not new to the discourse, but was new to the proposition. Participants were shown pairs of objects that had similar phonetic onsets, e.g. *candle* and *candy* and were asked to listen to sentences such as *Put the candle above the triangle. Now, put the CANDLE/candle above the square.* The second object in these sentences would either feature a contrastive accent or not. They discovered that when a previously mentioned object, e.g. *candle* was repeated in the following sentence with an L + H* accent, participants fixed on the *candy* for longer. Results were opposite when the new object, e.g. *candle-candy* was unaccented, participants tended to focus on the *candle* for longer. This clearly showed that a contrastive pitch accent is used by speakers to not only introduce new information to the proposition, but also create a contrast between a constituent and other possible choices.

Discourse context	**Accent Pattern**	**First Instruction**	**Second Instruction**
Anaphoric (new competitor)	Accented target word	Put the candle below the triangle	Now put the CANDLE above the square
Anaphoric (new competitor)	Deaccented target word	Put the candle below the triangle	Now the candle ABOVE THE SQUARE
Nonanaphoric (given competitor)	Accented target word	Put the candy below the triangle	Now put the CANDLE above the square
Nonanaphoric (given competitor)	Deaccented target word	Put the candy below the triangle	Now put the candle ABOVE THE SQUARE

Table 2: Examples of the four conditions in Dahan et al.'s study (Dahan et al. 2002: 269)

In a similar study to Dahan et al. (2002), Weber et al. (2006) investigated whether accented words are processed faster when compared to non-accented words, thus leading to faster referent resolution. Participants were shown pictures that either contrasted in colour or object. For example, pictures included: *purple scissors, red scissors,* and a *red vase.* This left participants with an exhaustive list of possible alternatives to compare the focused constituent to. They listened to a

series of sentences that either featured a contrastive referent with a non-contrastive accent or a non-contrastive referent with a contrastive accent, such as: *Click on the purple SCISSORS/Click now on the red SCISSORS* and *Click on the purple SCISSORS/Click now on the RED vase.* Through collecting eye-tracking data and response times they were able to determine that 'listeners rapidly exploit prosodic information for the interpretation of referential expressions' (Weber et al. 2006: 386). This meant that participants were using the contrastive accent to establish whether the object being focused was in fact contrasted against the set of predetermined alternatives. However, this exploitation of prosodic information inhibited referent resolution when the accenting on the focused constituent was infelicitous.

This is further explored in another eye-tracking experiment by Ito & Speer (2011). Participants were required to decorate a Christmas tree with ornaments while listening to instructions featuring contrastive accents. Much like the objects in Weber et al. (2006), the Christmas ornaments contrasted either in colour or actual object, for example: *yellow star* or *red heart.* Overall their results aligned with those of Weber et al. (2006) as they found that a contrastive accent on the prenominal adjective put the following referent into focus, thus contrasting it against the previously established alternatives. They also agreed that contrastive accenting increased the speed of referent resolution, but only when the contrast was felicitous. If the contrast was infelicitous then resolution would be hindered because the prosodic information would be indicating a focus and therefore new information for the current utterance, rather than the repetition of given information that had been mentioned in the previous clause.

1.4 Mechanisms of Pronoun Resolution

An early paper by Akmajian & Jackendoff (1970) looked at cases of pronoun interpretation when coreferentiality between anaphor and antecedent depended entirely on the stress patterns. They illustrated how contrastive accenting on either a pronoun or noun has the ability to hinder coreference in a sentence. For example:

(1.4.1) After he woke up, John went to town.

In this sentence, *he* quite clearly refers to John. In the following two sentences, *he* and *John* are not coreferential meaning that *he* does not refer to *John* but someone else.

(1.4.2) After *HE* woke up, John went to town.
(1.4.3) After he woke up, *JOHN* went to town.

These examples clearly illustrate that the contrastive accenting causes the accented constituents to refer to alternatives not mentioned in this utterance, but most likely mentioned previously in the discourse. In other sentences contrastive accenting is necessary for there to be any coherence.

(1.4.4) John$_i$ hit Bill and then *HE*$_i$ was hit by Ira (*he* is John).
(1.4.5) *John hit Bill and then he was hit by Ira.

The reasons why the pronoun must be accented in this sentence will be explained below.

When there are two possible antecedents for one anaphor, and gender or number cannot be used for distinction it is typically agreed that in English, pronouns refer to the most salient constituent from the preceding discourse (Vallduví to appear; Kehler 2008: 100). According to Kelher (2008) the most salient referent is often in the subject position. For example, in the following sentence there are two possible referents:

(1.4.6) Bush gave a circumspect answer to a question on Iraq from Wolf Blitzer. He then brought up the hunt for Bin Laden (Kehler 2008: 100).

At no point in this discourse is *Wolf Blitzer* considered the antecedent for the pronoun *he* because, as Kehler (2008) argues, this noun is in a prepositional phrase and it therefore less salient.

Vallduví (to appear) expands on this by identifying the notion of the locality of pronoun resolution. While a referent is required to be salient, its position in relation to the pronoun also affects the antecedent selection. Kameyama (1997: 2) states that an unstressed pronoun creates grammatical parallelism between the pronominal utterance and the antecedent utterance. This is further elaborated on by Kehler (2008), who discusses the notion of parallel elements and shows how shifting the pronoun to the object position can influence which referent is selected.

(1.4.7) Margaret Thatcher admires Hillary Clinton, and George W. Bush absolutely worships her (Kehler 2008: 115).

Because *Hilary Clinton* and *her* are both objects in the separate clauses, they are also parallel elements resulting in an object preference. This appears to override the expected subject position saliency. However, if the pronoun was moved back to the subject position, the subject preference re-emerges.

(1.4.8) Margaret Thatcher admires Hillary Clinton, and she absolutely worships George W. Bush.

When the pronoun is required to be coreferential with a non-parallel element, contrastive accenting can be used to alter which antecedent is selected. This is because ‘any element in the second clause

that is not coreferential with its parallel element in the first becomes part of the focus of the sentence…' (Kehler 2008: 115). In English, constituents that are in focus are required to be accented. Therefore, if the referent of *her* is to be *Thatcher,* then the pronoun must be accented.

(1.4.9) Margaret Thatcher admires Hillary Clinton, and George W. Bush absolutely worships HER (Kehler 2008: 115).

On reading this sentence with the pronoun contrastively accented, *Margaret Thatcher* becomes the referent of *HER*. This accenting requirement for focusing is not restricted to pronouns, as shown when *HER* is replaced with the proper noun *THATCHER. THATCHER* is still required to have an accent so that it felicitously refers to *Margaret Thatcher* from the first clause even though the link is fairly obvious.

(1.4.10) Margaret Thatcher admires Hilary Clinton, and George W. Bush absolutely worships THATCHER (Kehler 2008: 115).

If there were no accent, *Thatcher* would be infelicitous because in its unaccented form it is not coreferential with the initial object Clinton. This shows that the position and accenting on the pronoun can influence the referent when there are two possibilities.

Ariel (1990) offers a more detailed explanation for why accenting is required on the pronoun when it does not refer to its parallel element by relating it to the semantic and syntactic roles of the constituents within the discourse. She explains that when the semantic role of a pronoun differs to that of its referent but both have the same syntactic role then the pronoun must become stressed.

(1.4.11) John hit Bill, and then HE was hit by Ira (Ariel 1990: 65).

While *John* and *HE* are both syntactically subjects, they vary in their semantic roles. *John* is the agent of the first clause and *HE* is acting as the patient in the second clause. While accented constituents typically refer to new information in information structure, pronouns, whether stressed or unstressed, must refer back to a contextually given entity. Therefore, the new information that Ariel (1990) suggests is causing the stress requirement on the pronoun refers to the agency of the pronoun and its referent.

A study by Carlson et al. (2009) looked at the effect of accenting and co-referencing on sluiced sentences such as:

(1.4.12) The lawyer insulted the witness, but I don't know who else (Carlson et al. 2007: 118).

In sluiced sentences, *who* can refer to either the subject or the object in the preceding clause leading to referent ambiguity. It was already known that there is an object preference for these types of sentences, therefore Carlson et al. (2007) wanted to test whether contrastive accenting could be used to alter the referent. In the experiment participants listened to sentences where either the subject or object was contrastively accented in the preceding clause.

> The captain talked with the co-pilot, but we couldn't find out who else.
> The CAPTAIN talked with the co-pilot, but we couldn't find out who else.
> The captain talked with the CO-PILOT, but we couldn't find out who else.

Overall they found that when the object was accented, this was selected as the referent around 90% of the time. On the other hand, when the subject was accented the object was selected as the referent only around 50% of the time. This illustrates that it is possible to alter the antecedent of an anaphor just through changing the contrastive accenting within the sentence.

An eye-tracking and picture verification study by Kaiser (2011) looked at how contrastive accenting could be used to influence pronoun resolution directly. Her aim was to look at the information structure concepts of topic and focus, and understand 'how manipulating *subjecthood* impacts the effects of *pronominalisation/givenness* and *contrastive focus'* (Kaiser 2011: 1632). The first experiment investigated how subjecthood and pronominalisation/givenness aided pronoun resolution when there was no contrastive focus. The second looked at contrastive focus effects on pronoun resolution when there was a contrastively focused referent as well as a pronominalised referent in the subject or object position. For the initial experiment Kaiser (2011) featured three conditions: S = pronoun/O = name, S = name/O = pronoun, and S = name/O = name. The third condition was used as a control for the experiment. Participants were required to listen to sentences while looking at pictures which represented the audio they were hearing.

Condition 1	S = pronoun/O = name
a.	*Greg* is always very supportive of others
b.	*He* congratulated *John* enthusiastically yesterday (critical sentence)
c.	The prizes for the best-ranked tennis players were about to be announced, and
d.	*he* was holding a new yellow tennis racket (test sentence)
Condition 2	S = name/O = pronoun
a.	*Mike* did very well in last month's tennis tournament
b.	*John* congratulated *him* enthusiastically yesterday (critical sentence)
c.	The prizes for the best-ranked tennis players were about to be announced, and
d.	*he* was holding a new yellow tennis racket (test sentence)
Condition 3	S = name/O = name
a.	*Greg* is always very supportive of others
b.	*Greg* congratulated *John* enthusiastically yesterday (critical sentence)
c.	The prizes for the best-ranked tennis players were about to be announced, and
d.	*he* was holding a new yellow tennis racket (test sentence)

Table 3: Conditions for Kaiser (2011: 1635) experiment 1.

It is worthy to note here that in the pictures observed by the participants, neither character was holding a yellow tennis racket so that there was no bias created. The overall results of the first experiment found that there was a subject preference in all conditions during pronoun resolution. This was confirmed in her second experiment when she examined whether contrastive focus influences pronoun interpretation even when there were discourse-old, pronominalised referents in the sentences. In this experiment *it-clefts* were also used so they were able to test if the effects of focus are stronger when the focus of a constituent is formed through discourse context as well as syntax. In experiment two there were four subject conditions: SVO.Object = focus, SVO.Subject = focus, Cleft.Object = focus, and Cleft.Subject = focus.

Speaker A: I heard that Greg congratulated Mike enthusiastically yesterday.

a. No, that's not quite right.
b. (i) He congratulated John (Critical sentence: [SVO.Object = focus])
   (ii) John congratulated him. [SVO.Subject = focus]
   (iii) It was John that he congratulated. [Cleft.Object = focus]
   (iv) It was John who congratulated him [Cleft.Subject = focus]
c. The prizes for the best-ranked players were about to be announced, and
d. *He* was holding a new yellow tennis racket (Test sentence)

Again, in all four of these conditions there was a subject preference regardless of whether the subject or the object was contrastively focused. Therefore the 'effects of subjecthood can be observed regardless of the subject's information structure' (Kaiser 2011: 1658). It is possible that this could be a result of the alignment effect mentioned previously in Kehler (2008), where pronouns typically refer back to their parallel element. This raises further possible research questions regarding whether subject preference still occurs when the pronoun is located in the object position.

Overall, there are many concepts and theories that are said to affect pronoun resolution. Of these, contrastive accenting has been shown to strongly influence pronoun resolution. There is also a lack of studies focusing on the pronoun resolution when the pronoun is in object position. In order to test the effect of contrastive accenting and parallel elements on pronoun resolution a cross-modal experiment has been created following previous anaphor resolution studies (Dahan et al. 2002; Ito & Speer 2011; Kaiser 2011). The experiment will feature the target pronoun in object position to test whether the strong subject referential bias seen by Kaiser (2011) is a result of the position of the pronoun within the sentence or if it is because the subject is a salient position in the sentence (Vallduví to appear). It will also be interesting to know how contrastive accenting on the antecedents and anaphor and the notion of parallel elements interact with each other. As shown in Weber et al. (2006) it is possible for the incorrect use of contrastive accenting to be infelicitous, ultimately hindering anaphor resolution instead of aiding it. It is possible that the position of the pronoun and the expected meaning of the contrastive accent may interfere with one another to slow down pronoun resolution.

2. Materials

For this study E-Prime 2.0 software (Psychology Software Tools 2012) was used to create the experiment materials as well as run the procedure. A total of 16 test discourses were constructed that featured an ambiguous pronoun in the object position. This meant that the referent, or antecedent of the pronoun was ambiguous between the subject and object of the preceding clause. Eight sentences featured female characters and eight featured males so that there was a balance between the gendered pronouns. For each test utterance there were four versions, one for each of the test conditions as outlined below.

The four conditions used in this experiment were:

a. Subject and pronoun contrastively accented.
b. Object and pronoun contrastively accented.
c. Subject contrastively accented, no accent on pronoun.
d. Object contrastively accented, no accent on pronoun.

The test discourses comprised 3 sentences (see examples 2.1 and 2.2). The first sentence of each discourse, known as the *common context*, was the same across each condition and was used to establish the setting so that participants had time to become accustomed to the audio before hearing the sentences that contained important antecedent information. The *context sentence* then introduced the two possible antecedents in the subject and object position. It was necessary that the verb used in this sentence did not bias one constituent over the other as this would remove the ambiguity from the discourse (McKoon, Greene & Ratcliff 1993; Itzhak & Baum 2014). Immediately following was the *pronoun sentence* that again had to feature a verb that did not bias the listener to one antecedent over the other. During the initial creation of the test sentences it was discovered that the pronoun sentence had to follow the context sentence with no intermediate sentence otherwise the referent ambiguity would be lost.

(2.1) Common context: The girls were waiting for the bus.
Context sentence:
(a) KATE stood next to Erin.
(b) Kate stood next to ERIN.
Pronoun sentence:

(c) And Zoe sat next to her.
(d) And Zoe sat next to HER.

(2.2) Common context: The three men had to agree on the idea.
Context sentence:
(a) JOHN favoured Nick.
(b) John favoured NICK.
Pronoun Sentence:

(c) And Adam supported him.
(d) And Adam supported HIM.

Before each test and filler discourse participants were presented with a question, for example: *Who was waiting for the bus?* that they were required to answer following the audio. The answer for each question was either the subject or the object depending on who the participant believed the pronoun referred to.

A total of 24 filler utterances were also recorded which featured pronouns and contrastive accenting in varying positions. Most of these fillers were adapted from previous studies (Itzhak & Baum 2014; Vallduví to appear) on pronoun resolution, e.g.:

(2.3) Jane bought whitebait for dinner.
Sophie SMILED at Becky,
She loved whitebait

(2.4) Josh and Nick met at a cocktail party.
Josh liked NICK right away,
Because he kept telling funny jokes.

3. Predictions

With four test conditions as outlined in the methodology, four predictions were made about each condition.

a. Subject and pronoun contrastively accented.

This condition is expected to create an overall subject preference for the referent. As explained by Kehler (2008) when the pronoun is in the object position with no accenting, the object is its default referent. However, by focusing the pronoun through contrastive accenting this is expected to cause the referent to switch to the subject position. The subject is also the most salient referent because not only is it in the subject position (Vallduví to appear), it has been focused through contrastive accenting. With all of these added informational links created in the information structure of the discourse, response times for pronoun resolution should also be faster than if there was only accenting on the pronoun.

b. Object and pronoun contrastively accented.

This condition features the informational links competing against each other through contrastive accenting. With the pronoun being both accented and in the object position it is expected that the referent will be the subject (Kehler 2008). However, the contrastive accenting on the object however may counteract this because it has been made salient as the focus of the clause. Overall it is

expected that a subject preference will be seen because the accenting on the pronoun will be more salient for the participant due to its position at the end of the discourse. In contrast to the response time prediction for condition a, it is believed that response times for condition b will be longer because the focusing on both the object and pronoun will be infelicitous, as they are indicating two opposing focuses in the discourse and therefore participants will require longer processing times.

c. Subject contrastively accented, no accent on pronoun.

In this condition it is predicted that the subject will be the preferred referent of the pronoun. While the parallel element notion asserts that the pronoun in the object position should align with the object in the previous clause when the pronoun is not accented, it is believed that the increased saliency of the focused subject will counter this. The response times for this condition are predicted to be longer as in condition b, due to the parallel element notion and the information structure notion of focus competing.

d. Object contrastively focused, no accent on pronoun.

A clear overall object preference should be seen in this condition. This is because the focusing of the object through the information structure, coupled with the lack of accenting on the pronoun all indicate that the object is the referent of the pronoun. Therefore, the response times for this condition should be relatively fast in comparison to conditions b and c due to all the information provided indicating that the object is the referent.

4. Experiment Design

The speaker used for the recordings was a female native speaker of New Zealand English. The speaker was given the discourse stimuli beforehand and asked to speak as naturally as possible. They were also asked to produce a contrastive accent on the required constituents by using contrastive stress. There was no post-hoc manipulation of the pitch or volume of the speech.

To maintain the uniformity across the conditions, sentences were spliced together in E-Prime. That is, the common context sentence in each utterance was the same across all conditions and remaining sentences were spliced together depending on whether the pronoun was accented or not, and if the subject or object antecedent was accented.

Using a Latin square design 16 lists were created which featured the same 24 fillers and the 16 test utterances in the same order, but in different conditions. In this way, all utterances appeared in all conditions across participants. See example below.

List1	List2	List3	List4
A	B	C	D
B	C	D	A
C	D	A	B
D	A	B	C

In total 24 cartoon pictures were also chosen to accompany the sentences following Kaiser (2011). These pictures were found using an internet search and were labelled for free reuse. Of these pictures, 12 were female and 12 were male. Each picture was assigned a name that aligned with the ones used in the utterances. During the experiment the cartoons which represented the subject and object mentioned in the discourse were displayed on the left and right sides of the screen. The position of the subject and object on screen was pseudorandomised so that the participants did not associate the subject with the left, and the object with the right, or vice versa.

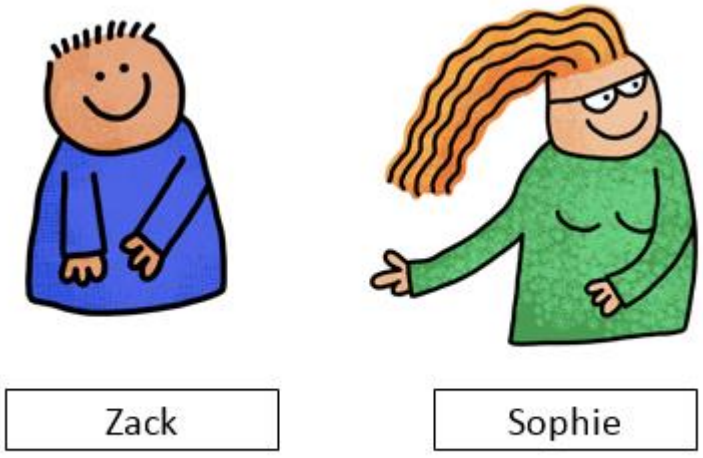


Figure 1: Examples of cartoons used in experiment.

4.1 Participants

There were 16 participants, each of whom completed one of the 16 list conditions. All participants were aged between 18 and 25 and had either completed, or were studying towards, a university degree. While gender was not a variable in the study there was an attempt made to have an equal number of males and females. As a result, 9 of the participants were female and 7 were male. All were native speakers of New Zealand English and reported no hearing problems. There was no remuneration for participants. Before beginning the experiment, participants were given an information sheet and signed an ethics form. Following this they were also asked to fill in a brief

language history questionnaire which asked them to provide information such as ethnicity, place of birth, and first language. This was to ensure their suitability for the experiment criteria and provide possible explanations if there were patterns in the data that could not be explained from initial statistical analysis.

4.2 Procedure

Participants were seated comfortably in front of the computer and listened to the discourses through noise-cancelling headphones in a quiet room. They were first presented with the instructions for the task which included two example discourses that were not ambiguous. Following this they completed a short practice session of 5 practice questions. In the example discourses, as in the practice discourses, the referents of the pronouns were not ambiguous. After this, participants asked any questions they were unsure about then they began the trial task. The main trial comprised of 40 questions in total; 16 target discourses and 24 fillers.

During the experiment the questions about the utterances were presented before the audio played. This was to ensure the participant was focusing on the dialogue and was able to think about the best answer for the question throughout. Once the participant had read and understood the question they pressed the 'TAB' button which caused the audio to play and for the pictures to appear on the screen simultaneously. Participants were instructed not to answer until the audio had finished playing as in the target utterances, the information to answer the question was not revealed until the final sentence. If participants believed the character on the left of the screen best answered the question, then they would select it using the 'Z' key and 'M' for the right-hand side character. No feedback was given during the experiment because there was no clear correct or incorrect answer to the questions. E-Prime recorded both response times and answers.

5. Results

Of the 16 lists created for this experiment 2 were excluded due to coding issues with E-Prime. Another 9 responses out of a total of 224 were excluded due to null responses from the participants. This left 215 responses available for further analysis.

5.1 Response Selection

Overall responses indicated the pattern of a subject preference when the pronoun was accented, and an object preference when the pronoun was not accented. This can clearly be seen in Figure 2.

In the two conditions where the pronoun is accented there is a very obvious subject preference with over 60% of responses being subject. In the other two conditions that had no pronoun accenting an even clearer object preference is seen with around 70% of responses being object. These results also show that accenting on the subject and object appears to have little to no influence on this type of pronoun resolution.

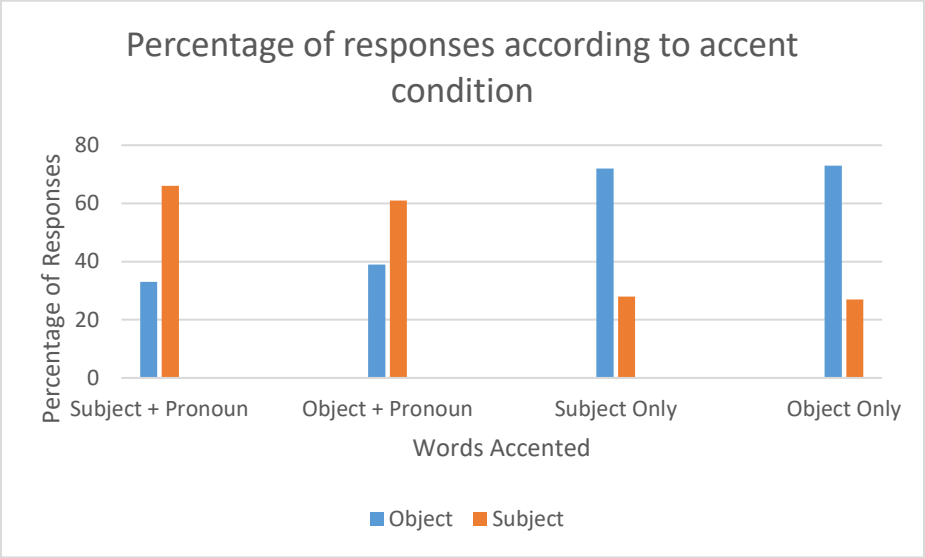


Figure 2. *Proportion of subject and object choices*.

To support the results illustrated in Figure 2 a binomial mixed effects logistics regression model was built to analyse the likelihood of the subject versus the object being chosen as the referent, using the *glmer* function in the *lme4* package (Bates, Mächler, Bolker & Walker 2015) in R (R Core Team 2013). P-values were calculated using the *lmerTest* package (Kuznetsova 2016). The fixed effects were Pronoun Accent (accented or not) and Potential Antecedent Accent (Subject or Object). The random effects fitted to the model were the Participants and Items (the test discourses). A model was built including the interaction of Pronoun Accent and Potential Antecedent Accent, but an ANOVA showed that this model was not a significantly better fit than the model without the interaction, so this was excluded.

	Estimate Std.	Error	z value	Pr(>|z|)
(Intercept)	-1.1689	0.3591	-3.256	0.00113
Potential Antecedent (Object Accented)	0.2507	0.4632	0.541	0.58837
Pronoun Accented	1.8568	0.4535	4.095	0.00004

Table 4. *Mixed effects model with participant and test item as random effect, modelling likelihood of subject vs. object preference (object is the default level).*

As is seen in Table 4, there is a highly significant effect of pronoun accenting, with accenting on the pronoun more likely to produce a subject preference (the reference level is response=object). There is no significant effect on the subject and object preference of the Potential Antecedent Accent (Subject vs. Object).

5.2 Response Times

The participant's reaction times for selecting between the subject and object were also recorded. As shown in Figure 3 the differences in response times between the conditions were very small. There was no evident difference in response times if the subject or object was accented, or whether the pronoun was accented or not.

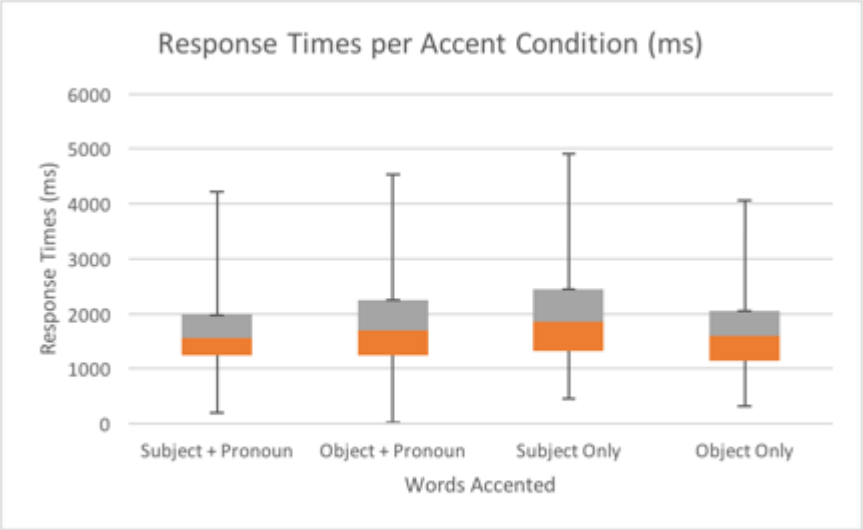


Figure 3. *Box plot illustrating the response times per condition.*

A statistical analysis of response times was completed. Before beginning the analysis all response times >4000ms were excluded from the data set as these were considered outliers.

Once they were removed from the data set the distribution of the response times was approximately normal. Following this a linear mixed effects regression model was built to predict response times using the *lmer* function in the *lme4* library in R, with p-values calculated using the *lmerTest* package. The fixed effects for this model are shown in Table 5. Models were built including all the possible two-way interactions between the three fixed factors, however, ANOVAs showed these models did not have significantly better fit, so these interactions were excluded. As with the previous model, the random effects were participants and items.

	Estimate Std.	Error	df	t value	Pr(>|z|)
(Intercept)	1746.80	139.19	22.13	12.549	0.0001
Response=Subject	119.68	99.58	204.85	1.202	0.231
Potential Antecedent (Object Accented)	13.55	88.77	199.75	0.153	0.879
Pronoun Accented	-103.19	96.32	200.58	-1.071	0.285

Table 5. *Mixed effects model with participant and test item as random effect, modelling response time.*

Table 5 shows that none of the fixed effects had a significant effect on reaction times. It should be noted, however, that the intercept estimate is 1747ms which is very slow when compared to other psycholinguistic experiments such as lexical decision tasks (see further in Discussion section). Overall response times did not vary significantly according to the experimental manipulation.

5.3 Preferred Response

Following these results of response selection and response time, a new variable was created which was labelled as *preferred response,* to show whether the participant selected the preferred response or not. A preferred response was classified as subject if there was accenting on the pronoun, and object if there was no accenting on the pronoun (as was established from the previous results). A linear mixed effect regression model was built with the same factors as above, but with the fixed effect of *preferred response* instead of the grammatical category of response (subject or object) as used before. This is because a faster response might be expected if the participant is choosing the generally preferred response. Therefore, this variable aimed to see if the experimental manipulations had an effect on response times apart from this.

As Table 6 illustrates, none of the fixed factors had a significant effect on response times. All possible two-way interactions were also tested through ANOVAs but these were not significant.

	Estimate Std.	Error	df	t value	Pr(>|z|)
(Intercept)	1741.60	139.16	22.02	12.515	0.001
Chose dispreferred response	138.43	98.19	188.89	1.410	0.160
Potential Antecedent Object Accented	11.26	88.66	185.25	0.127	0.899
Pronoun Accented	-71.09	89.40	185.43	-0.795	0.428

Table 6. *Mixed effects model with participant and test item as random effect, modelling reaction time.*

Two other possible factors were also analysed; the handedness of participants, and the side of the screen subject and object pictures appeared on in relation to which key was pressed. No effect was found.

Overall these results showed that the significant factor in pronoun resolution is the accenting of the pronoun itself. These results also showed that response time was not affected by antecedent selection and that the variable of preferred response had no influence reaction time either.

6. Discussion

This research aimed to investigate how contrastively accenting either of the possible antecedents, with or without additional contrastive accenting on the pronoun influenced pronoun resolution. This study extended existing research (Kaiser 2011) that primarily focused on pronoun resolution when the pronoun was in the subject position, as well as studies that only contrastively accented the antecedents (Carlson et al. 2009). This research looked at two possible factors that influence pronominal resolution. The first involved shifting the pronoun to the object position, and the second explored contrastively accenting both the pronoun and antecedent. Ultimately the findings from this research, coupled with the findings from Kaiser (2011), showed that pronoun resolution is strongly influenced by both the positioning of the pronoun within the clause and the accenting of the pronoun. The results from the experiment also indicated that accenting either one of the possible antecedents played little to no role in the selection of a referent itself, which was in contrast to Carlson et al.'s (2009) findings.

The two theories discussed above that are said to influence pronoun resolution are contrastive accenting and parallel elements. As seen in Figure 2 from the results section, the main factor that influenced antecedent selection was whether contrastive accenting was present or not. When there was no accenting the pronoun referred to its parallel element, in this case the object. When contrastive accenting was present this indicated that the pronoun was now being focused and as a result referred to its non-parallel element, which was the subject. This finding, combined with known studies on how pronominal reference resolution interacts with parallel elements (Kameyama 1997; Kehler 2008) and contrastive accenting (Umbach 2004; Vallduví to appear) leads to an interesting discussion.

A notable aspect of this study is that accenting on either the subject or the object appears to have no effect on pronoun resolution. This study's hypotheses were influenced by the fact that accenting of either the subject or the object would bring them into focus in the discourse, thus making them highly salient and resulting in the focused constituent influencing pronoun resolution. Other research on pronominal reference resolution such as Carlson et al. (2009) suggested that it was possible for contrastive accenting on the possible antecedents to influence referent selection. While their study looked at sluiced sentences and the pronoun *who, who* always appeared in the object position leading to an object bias when there was no accenting, much like the findings from this study. They found that this bias decreased by 40% when the subject in the preceding clause was accented. There was no such effect found in this experiment as the results indicated that participants only used the pronoun to select the antecedent. However, there are two significant differences between the test discourses in the present study and those used in Carlson et al. (2009). Firstly, the pronoun was introduced in the same sentence for Carlson et al. (2009) whereas for this study the pronoun and possible antecedents were placed in separate sentences. Secondly, if the *who* pronouns from Carlson et al. (2009) were replaced with *him* or *her* (as in this study) it is possible the effect of the accenting would disappear, or vice versa. Nevertheless, this does create possible future directions for study on how contrastive accenting on antecedents influences different types of pronouns, as well as how close the anaphor must be within the sentence structure for accenting on the antecedents to influence resolution.

A further finding worthy of discussion is the lack of subject preference. While previous studies such as Kaiser (2011) have found strong subject preferences in their pronoun resolution experiments, this research helps to strengthen the understanding that the position of the pronoun within the clause has a significant effect on which antecedent is selected. This is identified by Kehler (2008) as the notion of parallel elements. As he explains, pronouns typically refer back to their parallel elements in the preceding clause. This means that a pronoun in the subject position will refer to the subject in the previous clause, and a pronoun in the object position will align with the preceding object. In Carlson et al.'s (2009) study on sluiced sentences they discuss how the unaccented version of their sentences resulted in object preferences, most likely as a result of the pronoun appearing in the object position. It will be this effect of parallel elements that influenced the subject preference found in Kaiser's (2011) research, and the object preference for the two conditions with unaccented pronouns in this study.

It is also necessary to address the long average response times for participants as highlighted in the results section. Considering that the response times for typical psycholinguistic studies, such as word recognition tasks, are <1000ms, the average response time of 1747ms for this experiment is considered very slow. For Kaiser (2011) the eye-movement data collected began to show subject preference at around 500ms. This comparison of response times indicates that the type of pronoun resolution required for this experiment was challenging for the participants. Ito & Speer (2011) discuss how contrastive accenting could be used to increase the speed of reference resolution when it was felicitous. Accenting was considered felicitous when it referred to new information because, as discussed previously, in information structure focusing a constituent indicates that the information is new to the common ground (Vallduví to appear). Ito & Speer (2011) found that when contrastive accenting was infelicitous, meaning that the contrasted constituent referred to given information, participants' response times were slower. It is possible that in this study the contrastive accenting on either of the antecedents in the context sentences was infelicitous because there was no clear discourse reason for the accenting to be there. The purpose of contrastive accenting is to create a set of alternatives, and for the antecedents there was no reason for one to be contrasted against the other. This suggests that instead of helping communication by signalling the links between information in the discourse, accenting may have hindered it, thus confusing participants and resulting in the long response times.

Following on from this, as previously discussed, the purpose of information structure is to create a common ground between interlocutors so that the discourse has coherence and cohesion (Warren 2012: 203). During the experiment many participants commented on the difficulty of the task and the relative ambiguity of the referents. While the materials were purposely designed to be as ambiguous as possible, the results from the response times indicate that the contrastive accenting did not aid resolution as well as hoped. In fact, the participants' comments during the task, coupled with the lengthy response times indicate that this is a challenging form of pronoun resolution. This links back to the idea that accenting either the subject or the object is infelicitous and therefore increasing response time. Given that participants could identify a referent in a relatively uniform matter based on the positioning and accenting of the pronoun alone, this suggests that it is the accenting of the antecedents that made the task difficult. Focusing either of the antecedents takes away the attention from the pronoun, possibly making it more difficult to focus on the constituent that is going to aid pronoun resolution. As a result, it is likely that participants would have had

limited experience with discourses of this nature outside of the experiment task which could have also led to the increased response times observed.

While studies focusing on contrastive accenting such as Dahan et al. (2002) and Ito & Speer (2011) used eye-movement data, as well as Kaiser's (2011) study on pronoun reference, other studies such as Cowles et al. (2007) and Carlson et al. (2009) relied on off-line data. Due to time constraints surrounding data collection and analysis it was decided to focus on off-line data, and the results indicate not much would have been gained from either eye-tracking or mouse-tracking. When considering how the discourses were structured with the target word in the final position, coupled with the length of a pronoun being around 400ms and the actual response times of around 1700ms, it is unlikely much meaningful data would have been collected. If response times had been faster, then it is possible understanding participants' thought processes would have been beneficial. In fact, the response times indicate that participants were not making decisions until long after the offset of the target word, meaning that they spent a lot of time making sense of what they just heard. This does, however, reveal an area of study for future research, i.e. to run the experiment with some form of on-line data collection. By doing this it will be possible to see if there is anything interesting happening in the period of time between the offset of the word and referent selection. This information may reveal whether participants were still biased to one referent on the offset but were unsure of their answer, or if the long reaction times are a result of them deciding between the two possible referents. While on-line processing data is useful for understanding how participants come to their final decision, this study was not limited by the fact that it only collected off-line processing results.

This study also highlights the important relationship between pronominal anaphor resolution and contrast interpretation. As established previously, pronouns are one of the most common types of anaphors because without an antecedent to refer to, a pronoun is almost meaningless. For a pronoun to be useful in a discourse the information links from the anaphor must clearly indicate who or what the antecedent is. The results from this experiment demonstrate how important the interpretation of contrastive accenting in relation to parallel elements is to pronoun resolution. As Umbach (2004) explained, contrastive accenting is a type of anaphor resolution that has a dual role; to indicate new information, and to indicate the existence of a possible set of alternatives to the focused constituent. These results show how contrastive accenting can be used during pronominal anaphor resolution, in conjunction with the notion of parallel elements, to identify one antecedent over the possible alternatives. In this study the presence, or not, of contrastive accenting on the pronoun/anaphor helped participants to interpret the antecedent. It is likely that if none of the conditions featured contrastive accenting on the pronoun, an overall object bias would have been seen due to the position of the pronoun in the clause. There would have been no contrast being evoked indicating a set of alternatives. The role of the contrastive accent was to indicate that there was a set of alternatives to the presumed antecedent in the parallel position to the pronoun, leading participants to select the other antecedent, in this case the subject.

7. Conclusion

The results from this study indicate how contrastive accenting and the notion of parallel elements interact and compete with each other to influence pronoun interpretation. Pronominal anaphor resolution is a complex process and many factors are taken into account by listeners when selecting the antecedent. The fact that contrastive accenting interacted so clearly with the parallel elements in this study showed that participants were using all information available to them. When studying pronominal reference resolution all possible influencing factors such as accenting and parallel elements must be taken into account to explain outcomes. However, this does leave plenty of room for future research on the interactions between contrastive accenting and parallel elements.

References:

Akmajian, Adrian & Ray Jackendoff 1970. Coreferentiality and Stress. *Linguistic Inquiry* 1 (1): 124–26.

Ariel, Mira 1990. *Accessing Noun-Phrase Antecedents*. Routledge.

Arnold, Jennifer E., Kaiser, Elsi, Kahn, Jason M. & Kim, Lucy K 2013. Information structure: linguistic, cognitive, and processing approaches. *Wiley Interdisciplinary Reviews: Cognitive Science*, 4(4), 403–413.

Badecker, William & Kathleen Straub 2002. The Processing Role of Structural Constraints on Interpretation of Pronouns and Anaphors. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 28 (4): 748–69.

Bates, Douglas, Martin Mächler, Ben Bolker & Steve Walker 2015. Fitting Linear Mixed-Effects Models Using lme4. *Journal of Statistical Software* 67 (1).

Birch, S. L. & S. M. Garnsey 1995 The Effect of Focus on Memory for Words in Sentences. *Journal of Memory and Language* 34 (2): 232–67.

Birner, Betty J. 2013. *Introduction to Pragmatics*. West Sussex: John Wiley & Sons.

Bolinger, Dwight L. 1961. Contrastive Accent and Contrastive Stress. *Language* 37 (1): 83–96.

Braun, Bettina & Lara Tagliapietra 2010. The Role of Contrastive Intonation Contours in the Retrieval of Contextual Alternatives. *Language and Cognitive Processes* 25 (7-9): 1024–43.

Cahn, Janet 1995. The Effect of Pitch Accenting on Pronoun Referent Resolution. *CoRR, abs/cmp-lg/9506017*.

Carlson, Katy, Michael Walsh Dickey, Lyn Frazier & Charles Clifton Jr 2009. Information Structure Expectations in Sentence Comprehension. *The Quarterly Journal of Experimental Psychology* 62 (1): 114–39.

Cowles, H. Wind, Matthew Walenski & Robert Kluender 2007. Linguistic and Cognitive Prominence in Anaphor Resolution: Topic, Contrastive Focus and Pronouns. *Topoi* 26 (1): 3–18.

Cutler, Anne, Delphine Dahan & Wilma van Donselaar 1997. Prosody in the Comprehension of Spoken Language: A Literature Review. *Language & Speech* 40 (2): 141–201.

Dahan, Delphine, Michael K. Tanenhaus & Craig G. Chambers 2002. Accent and Reference Resolution in Spoken-Language Comprehension. *Journal of Memory and Language* 47 (2): 292–314.

de Swart, Henriëtte & de Hoop, Helen 2000. Topic and focus. Pages 105– 130 of: Cheng, Lisa, and Sybesma, Rint (eds), *The first Glot international state-of-the-article book*. Berlin: De Gruyter.

Fraundorf, Scott 2012. What Happened (and What Didn't): Prominence Promotes Representation of Salient Alternatives in Discourse. Published PhD thesis, University of Illinois, Ann Arbor, United States.

Greene, Steven B., Gail McKoon & Roger Ratcliff 1992. Pronoun Resolution and Discourse Models. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 18 (2): 266–83.

Gundel, Jeanette & Fretheim Thorstein 2004. Topic and focus. In *Handbook of Pragmatics*, by Laurence Horn and Gergory Ward, 175–96. Oxford: Blackwell Wiley.

Gundel, Jeanette K., Nancy Hedberg & Ron Zacharski 1993. Cognitive Status and the Form of Referring Expressions in Discourse. *Language* 69 (2): 274–307.

Ito, Kiwako & Shari R. Speer 2011. Semantically-Independent but Contextually-Dependent Interpretation of Contrastive Accent. In *Prosodic Categories: Production, Perception and Comprehension*, edited by Sónia Frota, Gorka Elordieta, and Pilar Prieto, 69–92. Studies in Natural Language and Linguistic Theory. Springer Netherlands.

Itzhak, Inbal & Shari R. Baum 2014. Misleading Bias-Driven Expectations in Referential Processing and the Facilitative Role of Contrastive Accent. *Journal of Psycholinguistic Research* 44 (5): 623–50.

Kaiser, Elsi 2011. Focusing on Pronouns: Consequences of Subjecthood, Pronominalisation, and Contrastive Focus. *Language and Cognitive Processes* 26 (10): 1625–66.

Kameyama, Megumi 1997. Stressed and Unstressed Pronouns: Complementary Preferences. In *Focus Linguistic, Cognitive and Computational Perspectives,* edited by P. Bosch and R. van der Sandt. Cambridge: Cambridge University Press.

Kehler, Andrew 2008. Rethinking the SMASH Approach to Pronoun Interpretation. In *Reference*, by Jeanette Gundel and Nancy Hedberg, 95–122. Oxford: Oxford University Press.

Kehler, Andrew & Hannah Rohde 2013. Aspects of a Theory of Pronoun Interpretation. *Theoretical Linguistics* 39 (3/4): 295–309.

Krifka, Manfred 2008. Basic Notions of Information Structure. *Acta Linguistica Hungarica* 55 (3-4): 243–76.

Krifka, Manfred & Musan, Renate 2012. Information structure: Overview and linguistic issues. Pages 1–44 of: Krifka, Mandred, and Musan, Renate (eds), *The expression of information structure*. Berlin: De Gruyter.

Kuznetsova, Alexandra, Per Bruun Brockhoff &Rune Haubo Bojesen Christensen 2016. lmerTest: Tests in Linear Mixed Effects Models. R package version 2.0-32. https://CRAN.R-project.org/package=lmerTest.

Lakoff, George 1971. Presupposition and Relative Well-Formedness. In *Semantics: An Interdisciplinary Reader in Philosophy, Linguistics, and Psychology*, by D. D. Steinberg and L. A. Jakobovitz, 329–49. Cambridge: Cambridge University Press.

Lambrecht, Knud 1994. *Information Structure and Sentence Form: Topic, Focus, and the Mental Representations of Discourse Referents.* New York: Cambridge University Press.

McKoon, Gail, Steven B. Greene & Roger Ratcliff 1993. Discourse Models, Pronoun Resolution, and the Implicit Causality of Verbs. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 19 (5): 1040–52.

Psychology Software Tools, Inc 2012. E-Prime 2.0. http://www.pstnet.com.

R Core Team 2016. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. https://www.R-project.org/.

Repp, Sophie 2010. Defining "contrast" as an Information-Structural Notion in Grammar. *Lingua*, Contrast as an information-structural notion in grammar, 120 (6): 1333–45.

Repp, Sophie & Heiner Drenhaus 2015. Intonation Influences Processing and Recall of Left-Dislocation Sentences by Indicating Topic vs. Focus Status of Dislocated Referent. *Language, Cognition and Neuroscience* 30 (3): 324–46.

Smyth, Ron 1994. Grammatical Determinants of Ambiguous Pronoun Resolution. *Journal of Psycholinguistic Research* 23 (3): 197–229.

Steedman, Mark 2000. Information Structure and the Syntax-Phonology Interface. *Linguistic Inquiry* 31 (4): 649–85.

Umbach, Carla 2004. On the Notion of Contrast in Information Structure and Discourse Structure. *Journal of Semantics* 21 (2): 155–75.

Vallduví, Enric. To appear. Information Structure. In *The Cambridge Handbook of Semantics*, edited by M Aloni and P Dekker. Cambridge: Cambridge University Press.

Vallduví, Enric & Ron Zacharski 1994. Accenting phenomena, association with focus, and the recursiveness of focus-ground. Pages 683–702 of: Dekker, Paul, and Stokhof, Martin (eds), Proceedings of the Ninth Amsterdam Colloquium. Amsterdam: University van Amsterdam.

Ward, Gregory & Betty Birner 2004. Information Structure and Non-Canonical Syntax. In *Handbook of Pragmatics*, by Laurence Horn and Gergory Ward, 153–74. Oxford: Blackwell Wiley.

Warren, Paul 2012. *Introducing Psycholinguistics*. Cambridge: Cambridge University Press.

Weber, Andrea, Bettina Braun & Matthew W Crocker 2006. Finding Referents in Time: Eye-Tracking Evidence for the Role of Contrastive Accents. *Language and Speech* 49 (3): 367–92.

Wichmann, Anne, Diane Blakemore & Peter Collins 2006. Special Issue: Prosody and Pragmatics It-Clefts and Wh-Clefts: Prosody and Pragmatics. *Journal of Pragmatics* 38 (10): 1706-20

Swearing Is Caring? Investigating Links Between Expletive Vocabulary Size, Emotional Vocabulary Size, and Expletive Use

Emma Wollum

Abstract

The use of expletives has long been associated with the 'poverty of vocabulary' argument (Jay & Jay, 2015, p.1), that is, the idea that using expletives indicates insufficient access to non-expletive vocabulary. However, many scholars (including Adams, 2016; Allan & Burridge, 2006; Jay & Janschewitz, 2007; Moore, 2012; Pinker, 2007) have qualitatively evaluated expletives as essential linguistic tools for the expression of strong emotion. The current research seeks to test the poverty of vocabulary argument as it relates to non-expletive emotional vocabulary, and also to provide insight into the expletive language choices and behaviours of a sample of young New Zealanders. A group of twenty-four 18 to 28-year-old native New Zealand English speakers completed two timed production tasks involving the production first of expletive vocabulary and second of non-expletive emotional vocabulary. For the expletive production task, they were also asked to indicate the expletive tokens they used regularly, which allowed for the results to incorporate both the range of expletives participants knew or were aware of, and the subset of expletives in regular use. Participants subsequently completed a survey on their own perceived frequency of expletive use, overall and in specific situations. The current research found that the number of expletive word families in regular use by participants was not a reliable predictor of the number of emotional word families produced by participants. However, a positive, strong and significant correlation was found between the number of expletive word families known by participants and the number of emotional word families they produced, indicating that there is a quantifiable connection between expletive and emotional word production. The production data on expletives also indicated a paucity of religious profanity within the most frequent word forms and word families produced, indicating that for this population of young New Zealanders, religious profanity is perhaps losing its taboo properties.

I. Introduction and Literature Review

In *Elbert's Bad Word*, a children's book by Audrey and Don Wood, the titular character goes to a garden party and hears a new word, which is illustrated and described by the authors as 'ugly and covered with dark, bristly hairs' (Wood & Wood, 1996, p.2). When Elbert uses the ugly word after a croquet mallet lands on his toe, he is punished by his parents and sent to see a wizard gardener, who bakes Elbert a magical cake made of alternative words to use instead. When another croquet mallet lands on the accident-prone Elbert's toe, he shouts 'My stars! Thunder and lightning! Rats and blue blazes! Suffering cats!' and is praised by the other party attendees. The children's story is an illustration of the 'word magic' (Pinker, 2007, p.331) that taboo language possesses, the obligatory and immediate affective charge that is unique to this category of language (after Moore, 2012). Although intended for a rather different audience than the current research, *Elbert's Bad Word* represents prevalent attitudes toward the significance and use of taboo language, taught to children yet persistent

Wellington Working Papers in Linguistics 22 (2017) 121-152

into adulthood. This is the 'poverty of vocabulary' (Jay & Jay, 2015, p.1) argument, the contention that 'obscenity is a crutch for crippled minds' (Allan & Burridge, 2006, p.77) and that speakers who use expletives do so because they do not have a large enough vocabulary to express their emotional state with a non-expletive word form. Allan & Burridge (2006, p.77), in a meta-review of previous studies, found no evidence whatsoever to support the poverty of vocabulary claim, and Jay (1999) dismisses this folk perception as one of the most common myths about taboo language. Jay & Jay's (2015) research, upon which the current study is based, demonstrates that 'fluency is fluency' (Jay & Jay, 2015, p.1) argument is more accurate. Their research demonstrated that knowledge of expletive terms is positively correlated with overall vocabulary size, indicating that greater fluency in expletives is a sign of increased fluency in general vocabulary. The persistent poverty of vocabulary argument is a view of language that discounts expletives as unnecessary because 'you can always find a polite way to say it' (Adams, 2016, p.171).

However, many scholars believe that there is no 'polite' or non-expletive way to express the affective and emotional content that is communicated by expletives (including Adams, 2016; Allan & Burridge, 2006; Jay & Janschewitz, 2007; Moore, 2012; Pinker, 2007). Jay & Janschewitz (2007) comment that expletives are a necessary part of language because 'they can intensify emotional communication' (p. 155) to a degree that non-expletives cannot. Similarly, Pinker (2007, p.352) remarks that 'the emotional force of the speaker's reaction is no longer being conveyed' if the speaker chooses to use euphemistic rather than expletive terms. Jay (2009, p. 155) compares taboo words to 'using the horn on your car' to mark strong emotions, ranging from anger, pain, and frustration to joy, pleasure and encouragement. The aforementioned scholars argue that expletives are an essential tool for expressing strong emotion, and that they should not be dismissed or discounted simply due to folk perceptions of expletives as inferior or less legitimate than other linguistic forms (e.g. Pinker, 1994). Although these authors see expletives as being an essential emotional linguistic tool, they present very little evidence beyond the descriptive that definitively links expletives with other non-expletive vocabulary to describe emotions. Drawing on previous research indicating that a greater degree of fluency in expletives is linked with a greater degree of fluency in general vocabulary (Jay & Jay, 2015), and research linking expletives to the expression of strong emotion (Adams, 2016; Allan & Burridge, 2006; Jay, 1999; Jay & Janschewitz, 2007; Moore, 2012; Pinker, 2007), this study aims to investigate whether the number of expletive word families known and in regular use by a speaker are effective predictors of the number of non-expletive emotional word families the speaker is able to produce. It will also present data on the expletives that are most-commonly known and reported to be in regular use by this sample of 18 to 28-year-old, university-educated New Zealand English speakers, providing new insights into the expletive vocabulary choices and expletive use of young New Zealanders.

A variety of terms are often used interchangeably to describe expletives, including *cursing, dysphemisms, obscenities, profanity, swearwords*, and *taboo language*. The current research will use the term *expletives* to refer to the category in general, as it best reflects the wide range of functions (that is, both positive and negative functions) as well as the affective

motivations behind the use of this language category. The current research will also refer to the following subcategories:

1. Profanity - language with religious connotations such as *goddamn, hell,* and *Jesus Christ* (Adams, 2016)
2. Swearing - expletives that have been bleached of their semantic meaning in many contexts, such as *fuck* and *shit* (Moore, 2012)
3. Slurs - words identifying a particular person or group, usually with derogatory force, such as *nigger* or *faggot* (Croom 2010, 2013)

Adams (2016), Allan & Burridge (1991, 2006) and Moore (2012) all observe that the boundaries of the expletive category are dependent on context. However, they also observe that the collection of lexical items generally considered to be expletives has remained relatively stable for decades, and that the range of topics expletives refer to in Western English-speaking cultures has remained relatively stable since Shakespeare's time - namely, 'private parts, bodily functions, sex, lust, anger, notions of social status, hate, dishonesty, drunkenness, madness, disease, death, dangerous animals, fear and God' (Allan & Burridge, 2006, p.239). Studies conducted by Jay (1986, 1992, 2009), Jay, King & Duncan (2006), and Jay & Janschewitz (2007) indicate that expletive utterances rely on 'a small set of words that are repeated often' (Jay, 2009, p.156). Jay (2009) and Jay & Janschewitz (2007) contend that ten expressions that have remained stable for the past 20 years account for 80% of the expletives represented in public recordings from college campuses, specifically *fuck, shit, hell, damn, goddamn, Jesus Christ, ass, oh my god, bitch,* and *sucks*. According to Jay (2009, p.156), *fuck* and *shit* alone amount to between 33% and 50% of all recorded expletive episodes between 1986 and 2006. This relatively limited number of word families makes the expletive category highly productive and morphologically inventive, described by Adams as 'a very intense site of creativity' (2016, p.32) where profoundly emotional speech and language play occur simultaneously. Although expletive language is extremely productive with a limited number of word families, this is not to say that the pool of words available has remained completely unchanged, as different words gain or lose their expletive status. Notably, five out of the ten words in Jay's (2009) list constitute religious profanity, a category which Adams (2016) argues has lost its taboo status. Similarly, Allan & Burridge (2006, 239) comment that the '-IST taboos'– such as sexist, racist, ableist, and ageist language – have now surpassed profanity and sexual expletives in significance. This point does not undermine Jay's (2009) research, which focused on publicly recorded instances of expletives - due to the nature of expletives, the words or expressions with the most significant or most extreme taboo properties will also be the most unspeakable, and therefore are likely to account for a smaller proportion of publicly recorded expletive use. Ultimately, the formal scope of what constitutes the expletive category is different for everyone, as what is considered taboo is learned through the 'socialisation of speech practices' (Jay, 2009, p. 153) and the transmission of folk knowledge of expletive etiquette. Most expletives do have a "polite synonym" representing the same semantic concept but without the affective taboo property, e.g. *arse* vs. *bottom* or *shit* vs. *fecal matter*. The etiquette component of this learning process represents one way in which expletives are learned and processed differently than other areas of language.

Expletives have previously been dismissed as inferior to or less legitimate than other language categories because they are processed primarily by the subcortical limbic system, rather than by the cerebral cortex (Jay, 1992; Pinker, 2007). Pinker (1994) writes that expletives are processed the same way as non-verbal vocalisations of emotion, such as sobbing, laughing, and shouting in pain, arguing that the connections between expletives and non-verbal expressions do not qualify expletives as 'genuine language' (Pinker, 1994[1], p.334). Although Jay (1992) similarly writes that expletives can be characterised as 'response cries' (p.50), he argues that expletives are genuine, essential, and ubiquitous within all languages, representing how the limbic system becomes linked to the linguistic system during childhood, and how children become conditioned to express emotional states through words rather than through shrieks and cries. Jay (1999, p.11) states that a language without emotions is 'no more normal than a person without emotions' , and that expletives represent an important link between linguistic and emotional processing centres of the brain. Pinker (2007, p.331) suggests that expletives connect the 'mammalian brain', which houses the limbic system that regulates motivation and emotion, with the neocortex, which 'ballooned in human evolution' (p.331) and controls perception, knowledge, reason and planning. Within the limbic system, previous research has shown that the amygdala, an organ which helps to invest memories with emotion, shows greater metabolic activity in brain scans when confronted with an expletive (Isenberg et al, 1999; LaBar & Phelps, 1998). In addition, previous studies of skin conductance have even shown that the processing of expletives affects people physically in a different way than the processing of non-expletives (Harris et al., 2003; LaBar & Phelps, 1998), with taboo words causing far stronger skin conductance responses. These neurological and physical responses indicate that expletives are perceived as a 'linguistic threat' (Isenberg et al, 1999, p. 10456) with connotative meanings that are accessed more immediately than non-expletive speech, reflecting the idea that expletives are '[tapping] the deeper and older parts of the brain' (Pinker, 2007, p.334). Similarly, Jay (1999, p.13) states that expletives enter awareness at a 'low level of consciousness', and are accessed and recognised much more quickly than non-expletive forms. Due in part to these processing effects, expletives are recognised as being a method of immediately capturing a listener or observer's attention (Adams, 2016; Allan & Burridge, 2006; Pinker, 2007). This method is often used by advertisers who want to draw attention to their brands, for example, the 1999 *bugger* ad released by Toyota in New Zealand or the recent "CU in the NT" hoax tourism campaign for Australia's Northern Territory.

This neurological processing of expletives is one component of Jay's (1999) Neuro-Psycho-Social (NPS) theory of expletives, which postulates that an act of using an expletive cannot be understood without considering the three behavioural aspects of neurological control, psychological restraints, and socio-cultural restrictions. The neurological control aspect relates to the previously discussed connections with the limbic system and amygdala, and whether or not these systems and organs are working correctly to regulate emotional responses. Psychological restraints represent the speaker's psychological development within a particular linguistic, familial and cultural context, including variables such as level of exposure to religion, rewards or punishments for using expletives, and the speaker's personal

[1] Pinker's opinions on the validity and necessity of expletives have changed diametrically over time, as evidenced in his 2007 book *The Stuff of Thought* where he refers to expletives as a language category that 'recruits our expressive faculties to the fullest' (p.372)

temperament. Finally, the socio-cultural restrictions dimension of the NPS theory refers to variables that a speaker uses to determine whether an expletive is appropriate for a given context, based on the criteria their culture has developed regarding appropriate situations for and limits of expletive use. The NPS theory emphasises the idea that the choice to use an expletive bridges and negotiates multiple dimensions, and that expletives are learned as a combination of denotative semantic meanings, connotative 'emotional colouring' (Pinker, 2007, p.331), and contextual frameworks for their appropriate use. This is particularly relevant for Task IV of the current research, in which participants were asked to rank the frequency with which they used expletives in different situations.

The connotative and denotative meanings of expletives represent the expressive and descriptive dimensions of language, as described by Potts (2007), Croom (2011, 2013), and McCready (2010). Potts (2007, p.165) views the 'performative, often destructively so' category of expletives as belonging solely to the expressive dimension, presenting six key properties that expressive language possesses. These are:

1. *Independence* - a separation from the domain of descriptive content
2. *Nondisplaceability* - uniqueness of meaning to the utterance situation
3. *Perspective dependence* - the evaluation of expressive content from a particular perspective,
4. *Descriptive ineffability* - the inability to capture expressive meaning with descriptive content
5. *Immediacy* - the ability of an expressive term to achieve an intended act simply by being uttered
6. *Repeatability*, the property of emotional intensification that occurs when a speaker repeatedly uses an expressive item

The specificity and categorical quality of Potts' definition is highly valuable when considering potential taboo universals. However, as indicated by the first property, Potts views expressive terms to be completely separate from the realm of descriptive content. This is a view that Jay & Janschewitz (2007) caution against, in their response to Potts' (2007) article. Croom (2011, 2013) also disagrees with the independence property, focusing specifically on the subcategory of slurs to argue that expletives are of a mixed category type spanning both the expressive and descriptive dimensions. According to Croom, slurs are of a mixed category type because, like pure descriptive category words, they identify a particular item or person in the world. However, he observes that most descriptive category words do not carry derogatory force, which is why slurs also concurrently belong to the category of expressives, possessing the properties of speaker nondisplaceability and emotional immediacy. It is this property of emotional immediacy that is further explored in the current research, which aims to determine whether the number of expletive word families produced by participants is an effective predictor of the number of non-expletive emotional word families participants are able to produce.

The author who comes closest to linking expletive vocabulary with non-expletive emotional vocabulary is Janschewitz (2008), who asked participants to rate taboo, emotionally-valenced, and emotionally-neutral words based on the seven categories of personal use, familiarity, offensiveness, tabooness, valence, arousal, and imageability. Although this was a perception study rather than a production study, the comparison of these three word types on the same scale is a very useful reference point for the production study conducted for this research project. Significantly, the 'personal use / familiarity' and 'offensiveness / tabooness' categories in her study allowed for a distinction to be made between participants' personal judgements and their judgements of the way the word was perceived or used by society at large. The 'familiarity' and 'tabooness' categories in particular help to illustrate the important societal distinction that the emotional or taboo property of the word to a larger group could differ from its emotionality or offensiveness to the individual. Her results indicated that the expletives were rated much higher for general tabooness than they were for personal offensiveness. As well as functioning to signify a wide range of emotions, expletives can achieve many positive social outcomes. They are represented in jokes and humour, social commentary, and in-group slang in order to promote social cohesion, acting as in-group markers that can be 'flaunted as a sign of defiance and solidarity, precisely because they *are* still offensive in the language community at large' (Pinker, 2007, p. 329). Janschewitz (2008, p.1071) acknowledges that there is 'substantial variability in the semantic domains' that make up her list of expletives, and notes that her raters were not asked to base their judgements on a specific meaning of the expletive. Notably, she found that the expletives were rated much higher in the 'arousal' category compared with non-expletives, indicating that the strong emotionality attributed to expletives is connected with arousal, or 'the quality to be exciting or attention-grabbing' (Janschewitz, 2008, p.1065), rather than with a definitive negative or positive valence. This attention-grabbing effect is related to the processing effects previously discussed in this literature review.

Janschewitz' (2008) study is a useful starting point for the current research, which examines the links between expletive vocabulary and non-expletive emotional vocabulary through a production study of both vocabulary types, as well as a survey regarding expletive language behaviour. This research is most closely based on Jay & Jay (2015), which demonstrated 'fluency is fluency regardless of subject matter' (p.1) by demonstrating positive correlations between general verbal fluency and expletive fluency. The task used to measure general verbal fluency in Jay & Jay's (2015) experiment was the Controlled Oral Word Association Test (COWAT), which required participants to produce as many words as possible beginning with F, A, or S for the orthographic component, and to name as many animals as possible for the semantic component. Although recognised as an effective measure of normal language processing as well as semantic fluency, the COWAT tasks from this study did not explore any of the semantic and pragmatic connections to emotion that many other researchers (e.g. Adams, 2016; Allan & Burridge, 2006; Janschewitz, 2008; Jay, 1999; Jay, 2009; Jay & Janschewitz, 2007; Moore, 2012; Pinker, 2007) have discussed in the past. Although Jay & Jay (2015) provide evidence that disputes the poverty of vocabulary argument, they do not go any further in their study to indicate whether expletives demonstrate any real relationship with the non-expletive emotional category.

The study presented here aims to draw on research indicating a strong relationship between fluency in expletives and fluency in other language areas, as well as a strong relationship between expletives and non-expletive emotional language. It seeks to further test Jay & Jay's (2015) fluency-is-fluency conclusion by investigating whether expletive fluency is an effective predictor of non-expletive emotional word fluency, and present data on how and when this sample of young (aged 18-28) New Zealanders uses expletives. The results illustrate the relationships between expletives and emotional vocabulary, two categories long believed to be linked. The results also present a detailed picture of which words are currently considered expletives, which of these words are being used, and in which situations they are being used by this group of participants.

II. Research Aims

- To investigate the relationship between the production of expletives and the production of non-expletive emotional language
- To collect data on word families and word forms that are currently considered expletives, and to investigate the situations in which these are most commonly used

III. Methodology

A. Participants

A total of 24 university students (13 women and 11 men) aged 18-28, all of whom were native speakers of New Zealand English, were recruited for this study. Recruitment materials clearly indicated that the study would involve the production of both expletives and language relating to emotional states, and all participants were informed that they would have the opportunity to withdraw from the study if production of language from these categories caused them distress. One male participant's responses (Participant 22) were excluded due to a failure to understand instructions.

B. Method

The methodology for this research was based on Jay & Jay's (2015) Study 2, a written expletive production study, and Study 3, a personality-related questionnaire on expletive behaviours and use. Key differences between Jay & Jay's (2015) methodology and this research are discussed in part C. Participants were asked to complete five tasks, summarised below:

Task I. Participants were asked to complete Nation & Beglar's (2007) online Vocabulary Size Test (VST), a measure of the total number of word families known by participants. Participants completed the 140-question version of the Vocabulary Size Test (VST), in which they selected

the best meaning of a given word from four multiple-choice options. This version of the test did not have an 'I don't know' option, and participants were required to answer all questions.

Task II.a Participants were asked to write down all of the examples of "swear words, slurs and profane language" that they knew, for a duration of two minutes. Participants were instructed in the task to write down only "unique word roots", an instruction which was intended to encourage participants not to write down related or derived forms within the same word family, that is, a 'base word and all its derived and inflected forms that can be understood by a learner without having to learn each form separately' (Bauer & Nation, 1993, p.253). The other aims with this instruction were to avoid confusing morphological knowledge with vocabulary size, and to maintain consistency with the word family approach of measuring general fluency that was used in the VST (Nation & Beglar, 2007) from Task I. For example, '*fuck, fucking, fucker, fucks*' would illustrate that the participant has knowledge of morphology, but does not provide any indication that they know any other word families apart from *fuck*. Not all participants followed these instructions, and each section of the results indicates the percentage of data that were excluded due to individual participants including more than one token from the same word family. Participants were told that their list should include but not be limited to the swear words, slurs and profane language that they used on a regular basis. A time announcement was given verbally by the researcher when participants had one minute and subsequently thirty seconds remaining in their allotted time.

Task II.b Participants were asked to look back at their responses for task II.a. and circle the word forms that they used regularly.

Task III. In a similar procedure to Task II.a., participants were asked to write down all of the examples of language describing emotional states that they knew, for a duration of two minutes. The emotional language category was described in the task as any word that could complete the sentence *I am feeling*___ or *I feel*____, drawing on Clore et al.'s (1987) research indicating that words capable of completing these sentence prompts are more emotionally-valenced than words that would complete the sentence prompts *I am being*___ or *I am*____. Participants were again instructed not to include any related or derived forms from the same word family. As well as the written instructions, participants were also verbally instructed that the list of emotional language should consist only of non-expletive tokens. Some participants did not follow this instruction, and their expletive responses were excluded from the analysis of Task III.

Task IV. Participants were asked to answer a survey regarding the frequency of their own expletive use in different situations, and how they perceived the overall frequency of their own expletive use compared with the expletive use of their peers. Section 1 of the survey presented nine different situations in which expletives might be used, and section 2 contained two questions about participants' perceived frequency of expletive use in comparison with that of their peers.

C. Key differences between Jay & Jay (2015) and the methodology of the current research

Task I. Controlled Oral Word Association Test (COWAT) vs Vocabulary Size Test (VST)

The COWAT used by Jay & Jay (2015) required participants to write down all of the words they knew beginning with F, A, or S for a two-minute period, and all of the words for animal names that they knew for a two-minute period. Although this test often falls under the category of general verbal fluency indicators, its parameters are actually better indicators of fluency in orthography and specific semantic categories than of overall vocabulary size (Strauss et al., 2006). As this research sets out to investigate overall vocabulary size, Nation & Beglar's (2007) VST was better suited to the task. It was also important for the purposes of this research to investigate whether Jay & Jay's (2015) results, which demonstrated the strength of the fluency-is-fluency argument regarding expletives, could be replicated using a different general fluency task. However, the COWAT is a productive task, while the VST is a receptive one, possibly leading to some of the discrepancies between Jay & Jay's results and the results of the current research.

Task II, Written Production Tasks vs Oral Production Tasks

Jay & Jay (2015) also included a study in which participants were asked to orally produce as many taboo words as possible, as many animal names as possible, and as many words beginning with F, A, and S as possible in one minute for each category. However, they observed a significant lag time for the taboo word category in comparison with the other two categories, possibly due to a reluctance to say taboo words out loud in a laboratory setting. In order to avoid this confounding factor, an oral production task was not included in this study. However, it is possible that the time-pressured environment of the written task also resulted in difficulty in recall for participants.

Task III. Emotional Words vs Animal Words

The animal naming task administered by Jay & Jay (2015) is the category most often used to measure semantic fluency through the COWAT (Strauss et al., 2006). However, there is no evidence that the lexical access route for animal naming is associated with the lexical access route for expletives. By contrast, links between expletives and the emotion centres of the brain have been observed by many researchers (Isenberg et al., 1999; Jay, 1992; LaBar & Phelps, 1998; Pinker, 2007).

Task IV. Big Five Index test vs self-designed questionnaire

The Big Five Index (John et al., 2008) used by Jay & Jay (2015) research assesses the personality traits of openness, conscientiousness, extraversion, agreeableness, and neuroticism based on a series of 44 test items. The current research aimed to investigate expletive use behaviours based on situational factors rather than overall personality traits, therefore a new questionnaire was designed based on situations in which expletives could occur, according to the situations presented by Jay (1992, 1999). However, a version of Jay & Jay's (2015) question about how often participants felt they used taboo language compared to their peers remained on the questionnaire used in this research.

IV. Results

General Notes On The Presentation of Results

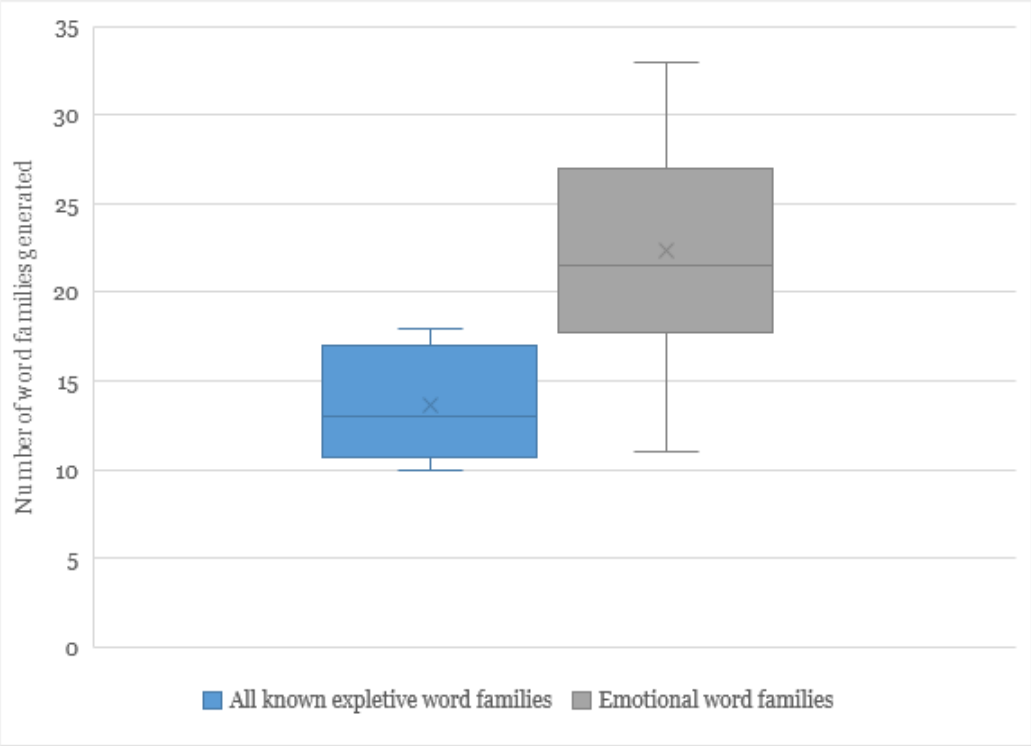
- Although an effort was made to ensure a relative balance of genders among participants (13 female and 10 male), gender differences were not a focus of the current research, and will not be discussed in the presentation of data. Previous research has found little significant difference between men and women regarding the use of expletives and types of expletives used (e.g. Allan & Burridge, 2006; Bayard & Krishnayya, 2001; De Klerk, 1992; Hughes, 1992; Jay, 2009; Jay & Jay, 2015)
- As indicated in the methodology section, participants were instructed in both the expletive and emotional vocabulary production tasks to avoid writing down related or derived forms within the same word family. Data presented in the results of the current research will be labelled as the following:
    - *Token*: A word produced by an individual participant, prior to word form or word family classification. E.g. Participant 1 producing *shitty*, Participant 2 producing *shitty* and Participant 3 producing *shit* would be counted as 3 tokens.
    - *Word form*: A category to classify each variant produced by all participants. E.g. Participant 1 producing *shitty*, Participant 2 producing *shitty* and Participant 3 producing *shit* would be counted as 2 word forms (*shitty*, with a frequency of 2, and *shit*, with a frequency of 1).
    - *Word family*: A category to classify each base form and all of its inflected or derived forms (after Bauer & Nation, 1993), produced by all participants. E.g. Participant 1 producing *shitty*, Participant 2 producing *shitty* and Participant 3 producing *shit* would be counted as 1 word family (*shit*, with a frequency of 3).
- Orthographic variations, e.g. *asshole / arsehole* and *nigger / nigga*, were counted as belonging to the same word family. For example, the data '*asshole, arsehole, shit, fuck*' would be represented in the current research as three word families, not four.
- The Vocabulary Size Test results indicated no correlation between the number of expletive word families, expletive word forms, and overall vocabulary size. This is a different result than that reached by Jay & Jay (2015), most likely due to the fact that a different vocabulary size assessment task was used for the current research.

A. Word Form and Word Family Frequencies

For task IIa, participants were asked to write down all of the "swear words, slurs, and profane language" they knew for a duration of two minutes, covering the three main subcategories of expletives. For Task IIb, they were asked to look at the list they created for Task IIa and to

circle the words that they used regularly. The results of the current research show some key areas of difference compared with frequency results obtained by Jay (1992), Bayard & Krishnayya (2001), and Jay & Jay (2015), particularly in the subcategory of profanity. Figure i represents the comparative distributions of all word families in the two productive tasks (IIa. and III.), and Figures ii-vii represent the most frequent word forms and word families produced by all participants. For Task IIa, participants produced 330 expletive tokens, made up of 88 word forms and 65 word families. In Task IIb, participants reported using 162 of these 330 expletive tokens regularly, with the tokens consisting of 38 word forms and 30 word families. In Task III, participants produced 491 emotional vocabulary tokens, consisting of 237 word forms from 230 word families. The results for Task III reflect the exclusion of 5 expletive tokens comprising 4 word forms and 3 word families, as participants were verbally instructed not to include expletives in the emotional vocabulary production task.

Figure i. Word families generated in expletive and emotional vocabulary production tasks

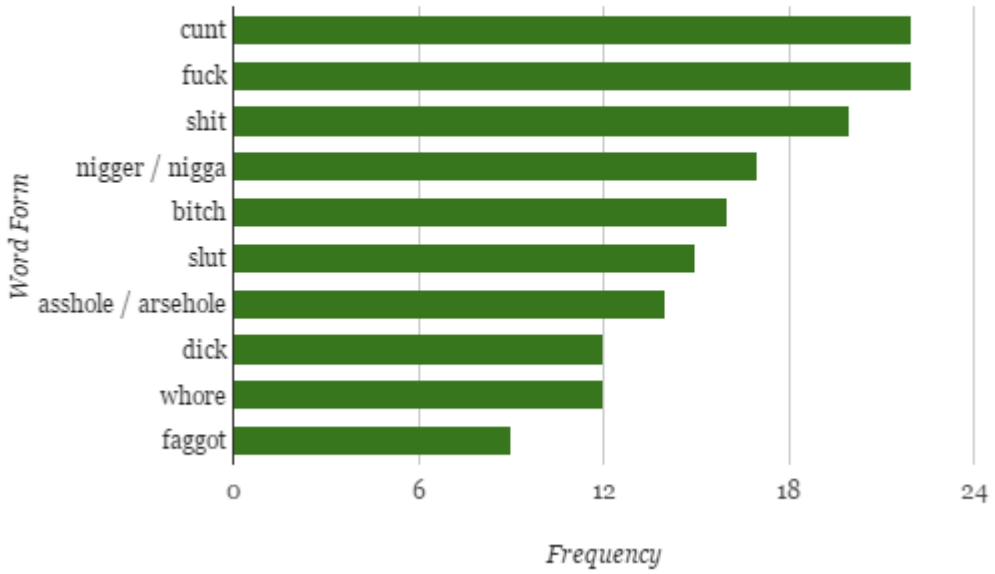


Despite having the same amount of time (two minutes) to generate emotional vocabulary and expletive vocabulary, participants produced a demonstrably larger number of emotional word families than expletive word families, with a median of 13 expletive word families produced and a median of 21.5 emotional word families produced. This is consistent with Jay & Jay (2015), where they found that participants produced more items when completing the F, A, S and animal name production categories compared to the expletive production category. The interquartile range (IQR), or the difference between the third quartile and first quartile for number of items produced, of the emotional non-expletive category is larger than that of the expletive category, and the two IQRs do not overlap. This suggests that the number

of word families considered to be expletives is smaller than the number of word families considered to be non-expletive emotional vocabulary, supporting previous research that identifies the expletive category as made up of a small yet highly-productive range of word families (Adams, 2016; Jay, 1986, 1992, 2009; Jay & Janschewitz, 2008; Jay et al., 2006).

1. Expletive Word Form and Word Family Frequencies

Figure ii. Top ten most frequent word forms among all expletives produced



All 23 participants wrote down *cunt* and *fuck* as expletive word forms that they knew, and 20 also included *shit*. In Jay & Jay (2015), the top ten most frequent word forms were (in descending order) *fuck*, *shit*, *bitch*, *cunt*, *ass*, *asshole*, *damn*, *bastard*, *motherfucker*, *hell*. Jay & Jay (2015) also observed that, in their full results, most slurs (excluding female sex-related slurs) occurred with a lower frequency than general expressives like *fuck* and *shit*. The data presented in Figure ii, by contrast, includes *nigger / nigga* and *faggot* as well as the additional female sex-related slurs *slut* and *whore*. Also notable is the lack of profanity or expletives with religious connotations on this list, whereas *damn* and *hell* appeared as the seventh-most and tenth-most frequent words in Jay & Jay's (2015) data respectively. In the current data, *damn* appeared as the sixteenth-most frequent word form, and *hell* did not appear in the data at all.

Figure iii. Top ten most frequent word families among all expletives produced

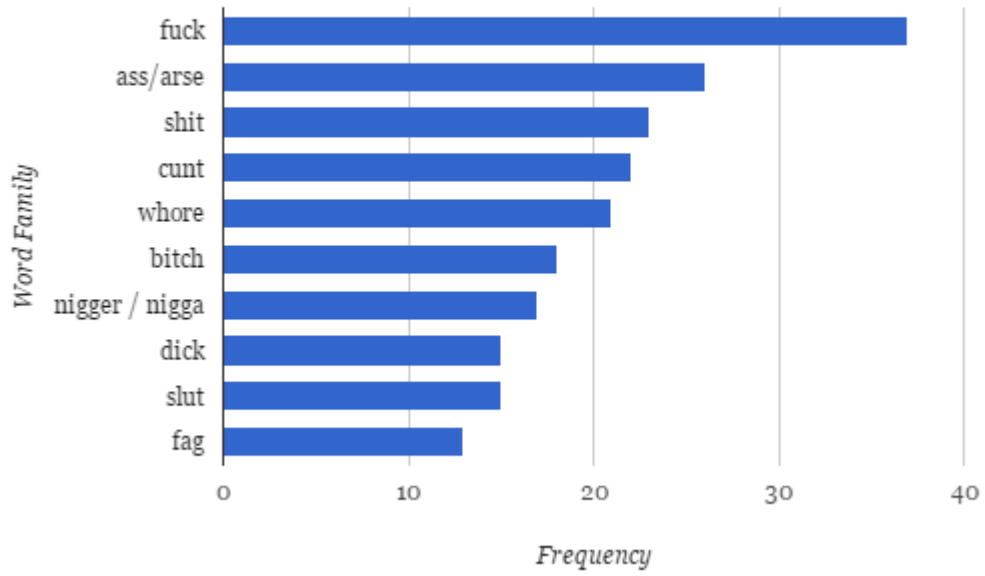


Figure iii, as well as the other 'word families' figures represented later in this paper, represents the total number of times that variations within a particular word family appeared in the data, which is why the 'Frequency' axis shows a larger number of occurrences than participants for word families like *fuck*, *ass / arse*, and *shit*. When categorised into word families, *fuck* becomes a leader for all expletive word families produced by participants, with eight different word forms represented in the data for the *fuck* word family. Notably, there were no variants on base forms produced for the expletives *cunt* and *nigger / nigga*, although they appear in both Figure ii and Figure iii among the top ten most frequent known expletives. The categorisation by word family also moves *cock* into the top ten most frequent known expletives, with three different variants produced by participants. The word family categorisation used in the current research was not used by Jay & Jay (2015), who categorised terms like *fuck* and *motherfucker* separately. In the current research, the inflected and derived variants *fucker, fuckhead, fucking, fuckwit, JAFA (Just Another Fucking Aucklander), MILF (Mother I'd like to Fuck),* and *motherfucker* were all considered to be part of the same word family with *fuck* as the base form.

Figure iv. Top eleven most frequent expletive word forms in regular use

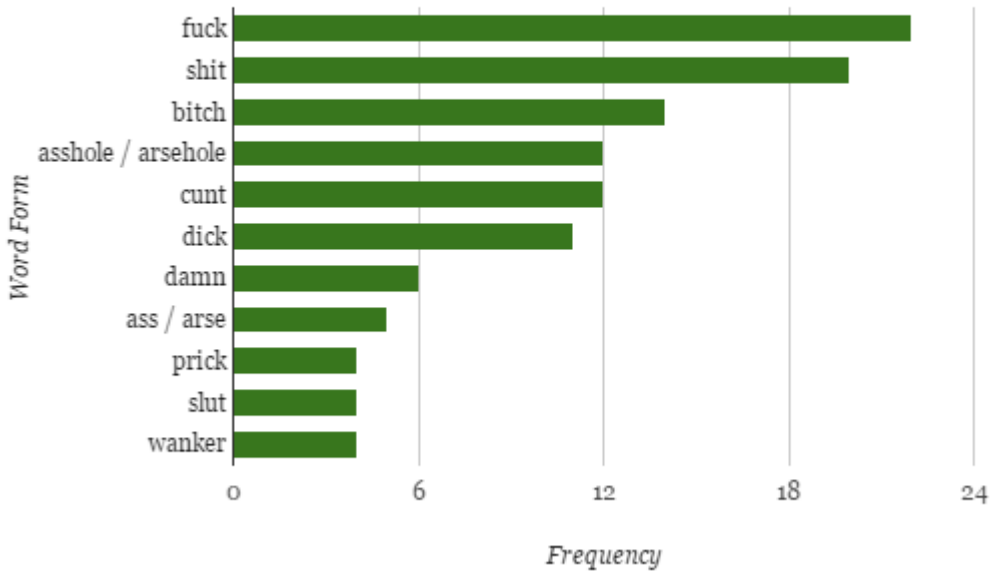
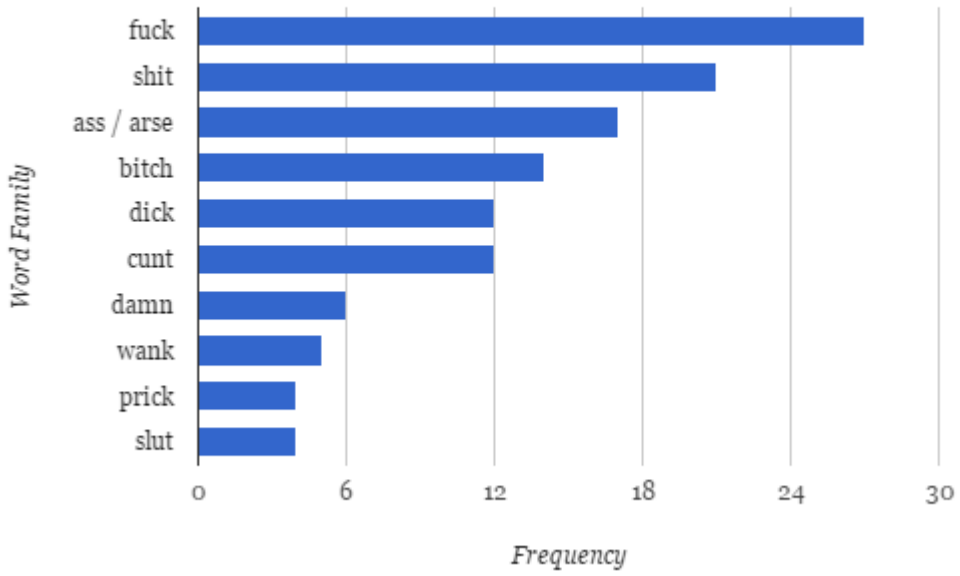


Figure iv shows the distributions of expletive word forms that participants indicated they used regularly themselves, in contrast to Figure ii, which shows the distribution of word forms that participants indicated they knew. It was necessary to include the top eleven word forms in Figure iv due to the fact that *prick*, *slut* and *wanker* (positions 9-11) all had an equivalent frequency of 4. There is noticeable decrease in frequency following the sixth-most frequent word in Figure iv, *dick* (freq = 11), which occurred nearly twice as many times as its nearest neighbour, *damn* (freq = 6). The top six most frequent expletives, *fuck, shit, bitch, asshole / arsehole, cunt*, and *dick*, make up 79.8% of the data within the top eleven most frequent word forms, and 58% of the data within all 38 word forms produced by participants. In addition, the top 11 most frequent words made up 73% of all word forms produced by participants, and 15 out of the 38 word forms produced by participants had a frequency of 1 (that is, produced by only one participant). This backs up previous research indicating that recorded oral swearing episodes are made up of a small set of words (Bayard & Krishnayya ,2001; Jay 1992, 2000; Jay & Janschewitz, 2008), although Figure iv differs from previous research in the word categories that participants reported. Jay (1992, 2000) and Jay & Janschewitz (2007), who surveyed American participants, and Bayard & Krishnayya (2001), who surveyed New Zealand participants, all report instances of profanity to be in the top ten most frequently-used lexical items, such as *oh my God / God*, *Jesus Christ*, and *hell*. In Bayard & Krishnayya (2001) in particular, *God* occurs twice as often as *cunt*, whereas in this data, *cunt* appears twice as often as its closest profane neighbour - and only instance of profanity - in Figure iv, *damn*.

Figure v. Top ten most frequent expletive word families in regular use



When condensed into word family categories, *ass / arse* becomes the third-most frequent expletive type in regular use by participants. There is again a noticeable frequency decrease between the top six most frequent expletive word families and the other four. In the word family category, the top six expletive word families made up 84.4% of the top ten most frequent expletive word families, and 78% of all 30 word families produced by participants, with 9 out of these 30 word families having a frequency of 1. Similar to Figure iii, the only instance of profanity in Figure v is the term *damn*. In terms of profanity among all participant data, *bloody* was the eleventh-most frequent word family, and *Christ* and *Jesus* both appeared with a frequency of 1 - these latter two terms were produced by the same participant, and no others.

Discussion

These data raise some interesting points about what words are currently considered to be taboo by the demographic surveyed (New Zealand 18-28-year-olds), particularly in the areas of profanity and slurs. *Damn*, the only example of profanity associated with religion to appear in these graphs, appears in the top ten frequency tables only in the category of regular use, and not in the category of all known expletives. Previous scholars (Adams, 2016; Allan & Burridge, 2006; Pinker, 2007) have noted that the historical definition of an expletive is a word that 'disrespects religious practice' (Adams, 2016, p.24), but this meaning no longer appears to be relevant to sample group in the current study, despite the fact that the instructions for the expletive production task specifically encouraged participants to produce "profanity". Furthermore, the slurs *nigga / nigger* and *faggot*, which are additions to the list of top ten most frequent known expletive word forms compared with previous written data (Jay & Jay, 2015), display the largest frequency differences between known expletives and regular use:

Frequency

Word	All known word forms	All known word families	All word forms in regular use	All word families regular use
nigger / nigga	17	17	2	2
faggot	9	13	2	2

This suggests that 18 to 28-year-old New Zealanders do still use some religious profanity, and that they do still consider some religiously-affiliated terms to be taboo, but that slurs such as *nigga / nigger* and *faggot* are most strongly associated with taboo properties, evidenced by the table above indicating that participants know these words but would be much less likely to use or say them. This supports Allan & Burridge's (2006, 239) comment that '-IST taboos', exemplified by these two slurs directed at particular target groups, have surpassed profanity and sexual expletives in terms of the degree of their taboo status.

The paucity of religious profanity in this data also demonstrates a difference between oral and written studies of expletives. Jay (1986, 1992, 2006) indicates that *hell, damn, goddamn, Jesus Christ,* and *oh my God* all appear among the top ten most frequent words in 'public taboo word episodes' (Jay, 2009, p.156), and in Bayard & Krishnayya (2001, p.10), *God* and *bloody* were recorded as the third- and fifth-most frequent instances of expletives in conversations recorded among flatmates. The frequency of these terms in recorded data categorised by researchers, compared with the infrequency of these terms in data produced by the speakers themselves, suggest that while profanity may be used regularly, it has become so mild that speakers no longer consider profane terms like *hell, Jesus Christ* and *God* to be part of the larger expletive category. This supports Adams' (2016, p.48) statements that motives for using expletives are 'no longer theological, but social', and that religious words are losing their taboo status.

The written expletive production study that the current research most closely follows, Jay & Jay (2015), was conducted with American college student participants, and despite the current survey using native New Zealand English speakers, some of the top ten (or top eleven) most frequent word forms and word families are common across both varieties - specifically *fuck*, *shit*, *bitch*, *cunt* and *ass* / *arse*. One participant did produce an expletive expression specific to New Zealand, *JAFA (Just Another Fucking Aucklander)*, but did not report this expression to be in regular use. *Bugger,* an expletive considered to be more endemic to New Zealand English (Bayard & Krishnayya, 2001), appeared outside the top ten most frequent words in all categories, whereas *nigger / nigga*, which has its origins in American English

(Rahman, 2012), appeared in the top ten most frequent word forms and word families among all known expletives. The pattern of reduced religious profanity in the current data can also be observed in the low frequency of *bugger*, which Grant (2012, p.174) suggests is 'so commonly used in NZE as to become acceptable'. Te Ara: The Encyclopedia of New Zealand suggests that a 1999 advertisement campaign for Toyota in New Zealand featuring the word *bugger*, which attracted over 100 complaints at the time about the repeated use of the expletive, is partly responsible for this word losing its taboo status in public (Phillips, 2010). Only 2 out of the 23 participants in this experiment listed *bugger* as part of the expletive production task, suggesting that like religious profanity, *bugger* may be losing its taboo status for young New Zealanders.

This data also supports the idea that expletive vocabulary in regular use is made up of a relatively small set of words (Jay, 1986, 1992, 2006, 2009; Jay & Janschewitz, 2008). The following table demonstrates how much of the frequency data for each category was made up of just the top ten (or eleven, in the case of Figure v) most frequent words in regular use:

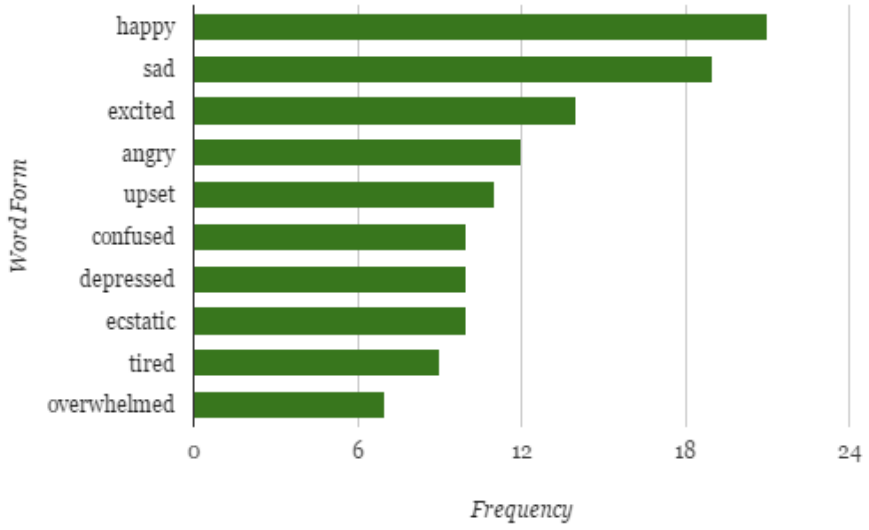
Category	**Proportion of total frequency data accounted for**
Top ten most frequent word forms among all expletives produced (Figure ii)	57%
Top ten most frequent word families among all expletives produced (Figure iii)	65%
Top eleven most frequent expletive word forms in regular use (Figure iv)	73%
Top ten most frequent expletive word families in regular use (Figure v)	78%

The fact that a large proportion of the total frequency data in each category is made up of the top ten or eleven entries is a reflection of Zipf's law (1935), regarding the frequency of these words and word families being inversely proportional to their rank in the frequency table. It also supports the argument that, although the parameters of the expletive category are hard to define, there is a small set of expletives that is generally agreed to be a part of the category.

2. Non-Expletive Emotional Word Form and Word Family Frequencies

Task III, the non-expletive emotional vocabulary production task, did not include a secondary category for emotional vocabulary in regular use. This was because the taboo and 'unspeakable' (Moore, 2012, p.175) properties possessed by expletives do not apply to non-expletive emotional vocabulary items - although as acknowledged in the results (Section IV., Part C of the current research) , it may have been an experimental design oversight to assume that all produced emotional word forms and word families corresponded exactly with all emotional word forms and word families in regular use. As indicated on p.17 , the complete results for Task III included 5 tokens (consisting of 5 word forms and 3 word families) that were expletives, despite participants receiving the verbal instruction not to include expletives in the emotional vocabulary production task. Participants' choice to produce these tokens indicates – even before calculating the correlations between expletive and emotional word categories – that non-expletive emotional vocabulary tokens were connected in some way to expletive vocabulary tokens for these participants. However, since these participants did not follow instructions, the expletive results were excluded from the data presented below.

Figure vi. Top ten most frequent emotional word forms produced



Previous research by Clore et al.(1987) has established a psychological taxonomy of emotional vocabulary that is quite relevant to Figure vi, as all of the word forms represented here are also represented in their data. Based on their taxonomy, these top ten most frequent word forms belong to the following categories:

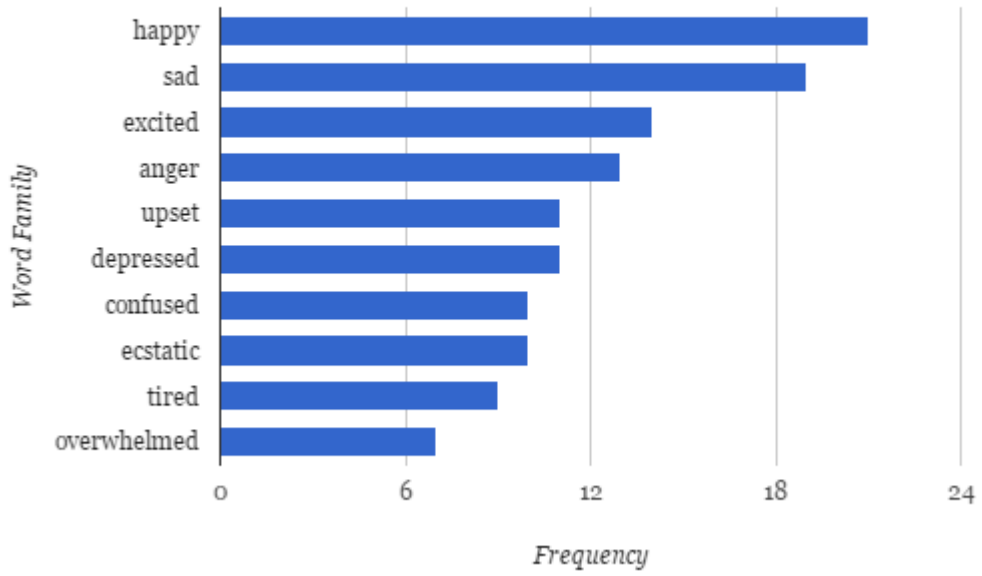
Word form	***Category***

happy	Affect-Focal
sad	Affect-Focal
excited	Affect-Focal
angry	Affect-Focal
upset	Affect-Focal
confused	Cognition-Focal
depressed	Affect-Focal
ecstatic	Affect-Focal
tired	Physical and Body States
overwhelmed	Affect-Focal

(after Clore et al., 1987, p.765)

Affect-Focal expressions, words in which the state of the referent's feelings are the focus of the word (Clore et al., 1987, p.752) dominate this list. The Affect-Focal category contrasts with the Cognitive-Focal category, in which the referent's mental state is the primary focus, and the Physical and Body States category, in which the corporeal state of the referent is the focus of the word's semantic meaning. The dominance of Affect-Focal terms in this list is particularly interesting considering that all participants completed the emotional vocabulary production task following the expletive vocabulary production task. Moore (2012) has previously observed that expletives carry an 'affective charge' (p.172), which suggests that producing a list of expletives as the first task may have primed participants to produce a list of non-expletive vocabulary items in which affect was focal.

Figure vii. Top ten most frequent emotional word families produced



The word families that make up the top ten most frequent for non-expletive emotional vocabulary mimic the word forms that make up the top ten most frequent for emotional vocabulary in the current research, although the ranking has changed slightly. With the addition of the variant *depressive*, the *depressed* word family became more frequent than *confused*. One reason that Figures vi and vii appear to be so similar is the presence of fewer variants within the emotional vocabulary production task, compared with the expletive vocabulary production task. This further supports the idea that expletive vocabulary, by comparison with other areas of non-expletive vocabulary, is highly productive with a small set of word families (Adams, 2016; Jay, 1986, 1992, 2009; Jay & Janschewitz, 2008; Jay et al., 2006). It follows that participants were able to produce more unique non-expletive emotional vocabulary tokens than expletive tokens in the time allotted, due to the larger number of potential word families for non-expletive emotional vocabulary.

B. Correlations Between Expletive Vocabulary Size and Emotional Vocabulary Size

Participants wrote down a total of 330 expletive tokens, consisting of the 88 word forms from 65 word families discussed in part A. When asked to circle the expletives that they regularly used for Task IIb., participants indicated 162 tokens in total, consisting of 38 word forms from 30 word families. As mentioned in the methodology section, participants were were told that only “unique word roots” would be counted, with the aim of getting participants to write down only one word form from each word family they knew. Not all participants followed this instruction, and 9.1% of the data (30 tokens) were excluded from the total known expletive word family data due to participants writing down more than one related form within the

same word family. For task IIb., 3.1% of the data (5 tokens) were excluded due to participants circling more than one related form within the same word family.

Participants produced a total of 498 emotional vocabulary tokens, consisting of 241 word forms from 234 unique word families. Participants were instructed to write down only "unique word roots", aiming to elicit only one form from each word family that participants knew. Participants were also told that expletives or taboo words were not to be included in the emotional vocabulary task. However, some participants did not follow these instructions, and their expletive responses (5 tokens, 5 word forms, and 3 word families) were excluded from the overall results.

Figure viii. Total expletive word families produced as a predictor of emotional word families produced

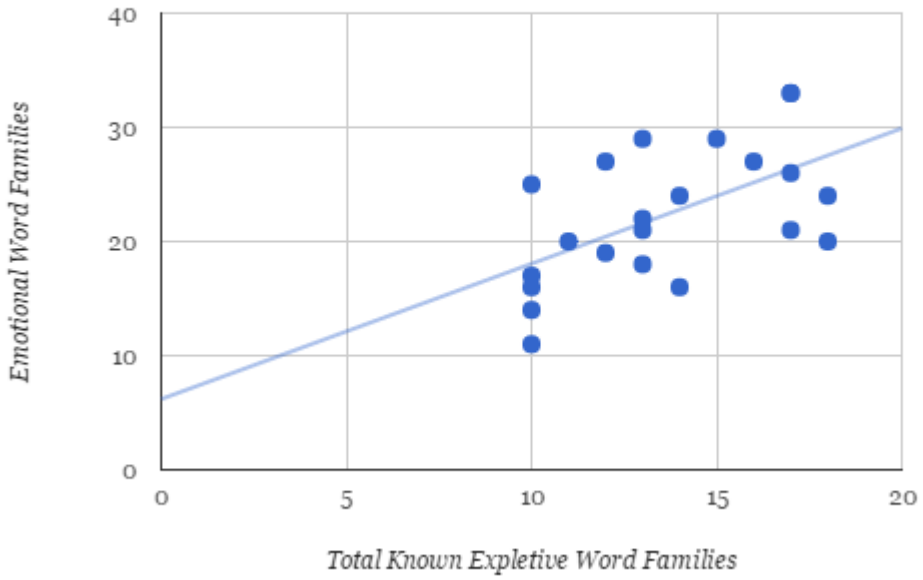
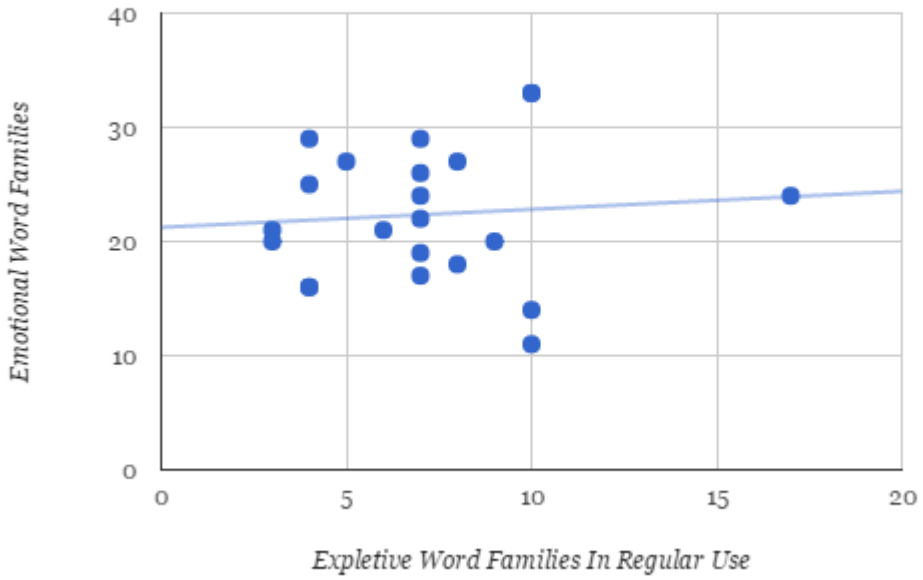


Figure viii shows a strong, positive and significant correlation between the total number of expletive word families produced and total number of emotional word families produced ($r=0.57$, $p = 0.004$ at $\alpha = 0.05$). This correlation accounts for 33% of the variance ($r^2 = 0.33$). The number of expletive word families produced ranged between 10 and 18, and the number of emotional words produced ranged between 11 and 33. This is a new finding, indicating that the number of expletive word families known by a speaker is an effective predictor of the number of emotional word families known by the same speaker. This correlation indicates that the poverty of vocabulary argument is not entirely sound regarding emotional vocabulary, showing that those who know a larger number of expletive word families do not lack other non-expletive emotional vocabulary items to express their feelings. It also shows

that there is a quantifiable connection between expletives and other non-expletive words used to express emotion, backing up previous qualititative assessments of expletives as essential vocabulary items for expressing strong emotion (Adams 2016; Allan & Burridge 2009, 2006; Jay & Janschewitz 2007; Moore 2012; Pinker 2007).

Figure ix. Total expletive word families in regular use as a predictor of emotional word families produced



In contrast to Figure viii, Figure ix indicates that the number of expletive word families in regular use is not an effective predictor of the number of emotional word families participants were able to produce. There is a very weak positive correlation between total number of expletive word families in regular use and total number of emotional word families produced ($r=0.09$, $p=0.68$ at $\alpha = 0.05$). This correlation accounts for a scant 1% of the variance ($r^2 = 0.01$), and the high p-value also indicates that this is a statistically non-significant result. The range for expletive word families in regular use (minimum = 3, maximum = 17) was larger than the range for total known expletive word families in Figure viii (minimum =10, maximum = 18), but in Figure ix, 21 of the 22 data points fall within the range of 3 to 10 expletive word families in regular use. Based on the interquartile range of this data, the participant who reported using 17 expletive word families regularly is an outlier. However, with this outlier removed, the correlation actually becomes weaker, with a value of $r=0.06$ and $r^2=0.003$. This indicates that the number of expletive word families in regular use by participants is not a reliable indicator of their access to emotional vocabulary. The weak correlation and non-significant result in Figure ix may also indicate that the comparison of these two categories is based on unsound logic. Task III was designed under the assumption that all of the non-expletive tokens produced by participants would be words that they used regularly, due to non-expletive emotional vocabulary lacking the 'unspeakable' (Moore, 2012, p.175) property

of expletives. As a result, there was no equivalent to Task IIa. (circling the words in regular use) for the non-expletive terms. Including an additional task where participants circled all of their regularly used emotional tokens would allow comparison of regularly used expletive and emotional word families and could lead to different results.

Discussion

The data presented in this section illustrate the differences between the categories of 'all known expletive word families' and 'expletive word families in regular use'. The data indicate that the number of expletive word families known by a speaker are an effective predictor of the number of emotional word families known by the same speaker, and that these two variables are positively correlated. By contrast, the data also indicate that the number of expletive word families regularly used by a speaker are not an effective predictor of the number of emotional word families known by the same speaker, although a very weak positive correlation remains between these two variables. Only one of these categories is able to be observed in conversational interaction – that is, expletive word families in regular use. The weak relationship between expletive word families in regular use and non-expletive emotional language families indicates that this comparison may have been based on inaccurate assumptions, and that a "regular use" task should have been included for the non-expletive emotional word category.

The data presented in this section set out to find quantitative evidence of the relationship between emotional language and expletive language that has been qualitatively assessed by many previous scholars (Adams 2016; Allan & Burridge 2009, 2006; Jay & Janschewitz 2007; Moore 2012; Pinker 2007). Results indicate that there is a strong, quantifiable, and significant relationship between these two variables, which merits further exploration with a larger sample size and a wider range of backgrounds. Like Jay & Jay (2015), the current study used only student participants aged between 18-28, yet it would be interesting to investigate whether the relationship between all known expletive word families and emotional word families changes in strength or direction when other populations are sampled. The connection between these two areas of vocabulary is also qualitatively implied by the fact that some participants chose to write down more expletives as part of the emotional vocabulary production task, despite being specifically instructed not to do this. This section presents the strongest indication that the poverty of vocabulary argument does not adequately express how expletive vocabulary is related to other areas of vocabulary, specifically emotional vocabulary.

C. Expletive Language Behaviour

In the language behaviour survey that constituted task IV, participants were asked to rate the frequency with which they would use expletives in a series of specific situations, based on a 9-point Likert scale ranging from a score of 1, 'never', to 9, 'always'. In the second part of the survey, participants were asked to rate how often they felt they used expletives in comparison

with their peers, on a 9-point Likert scale ranging from 1, 'much less often', to 9, 'much more often'. Participants were then asked to rate to if and to what extent they would like the frequency of their expletive use to change, on a 9-point Likert scale ranging from 1, 'I want to swear much less often', to 9, 'I want to swear much more often'.

Figure x. Expletive language behaviour in specific situations

*1= I would **never** use expletives in this situation, 9= I would **always** use expletives in this situation*

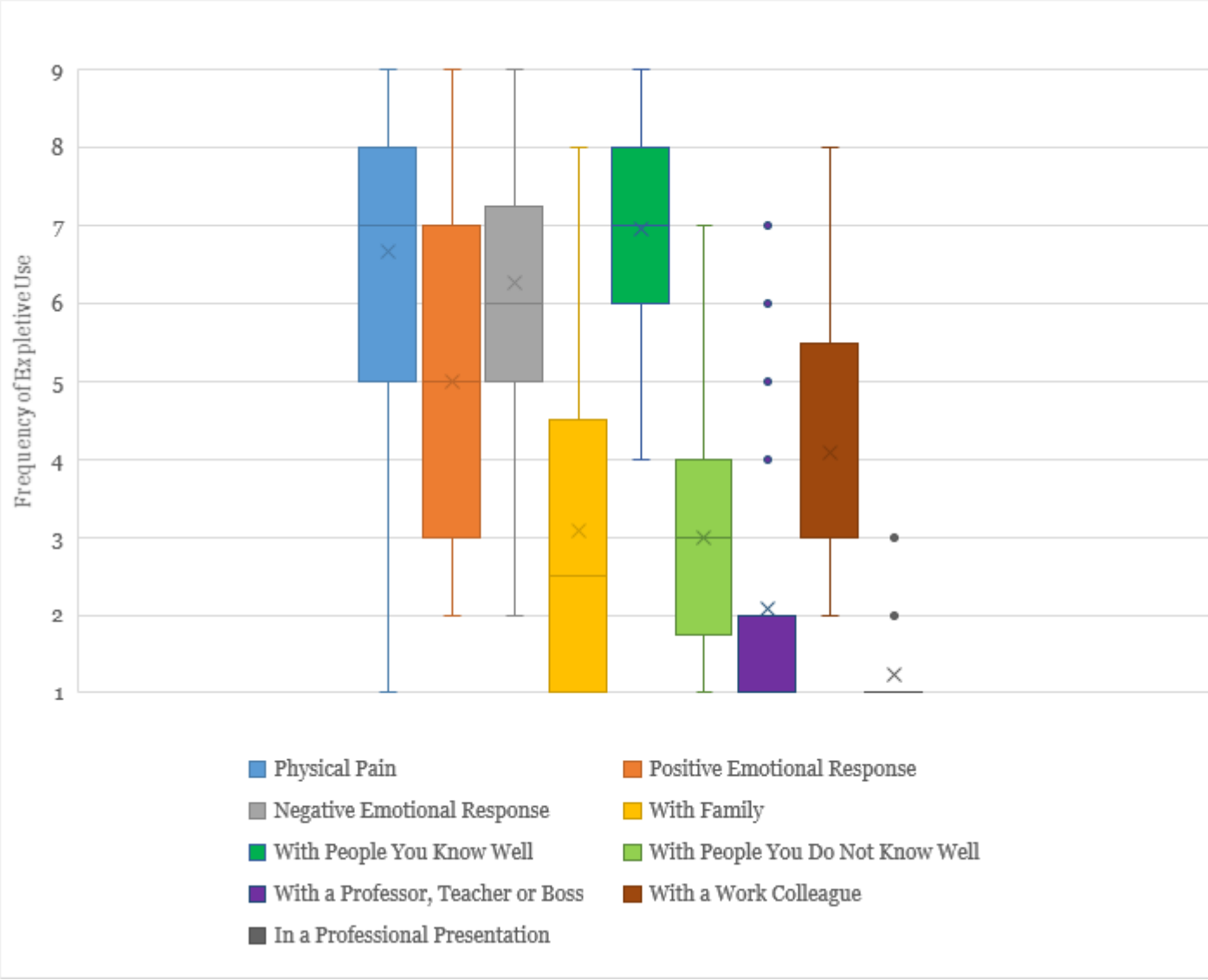


Figure x shows that participants rated the two 'professional' situations presented - using expletives with a professor, teacher, or boss, and using expletives in a professional presentation - with lower scores than the other categories, with outliers occurring outside of the values of 1 and 2, the two lowest possible scores for frequency of use. The categories of

experiencing physical pain and conversing with close acquaintances were ranked as the categories in which participants would use expletives the most often, with the largest median value occurring in the category for conversing with close acquaintances. However, the IQR for experiencing physical pain is larger than the IQR for people in close social proximity to participants. The largest range overall occurs in the category of experiencing physical pain, and the largest IQR occurs in the category of experiencing a positive emotional response.

Figure xi. Self-reported general frequency of expletive use compared with peers

1= I swear much less often than my peers, 5=I swear about the same amount as my peers, 9=I swear much more often than my peers

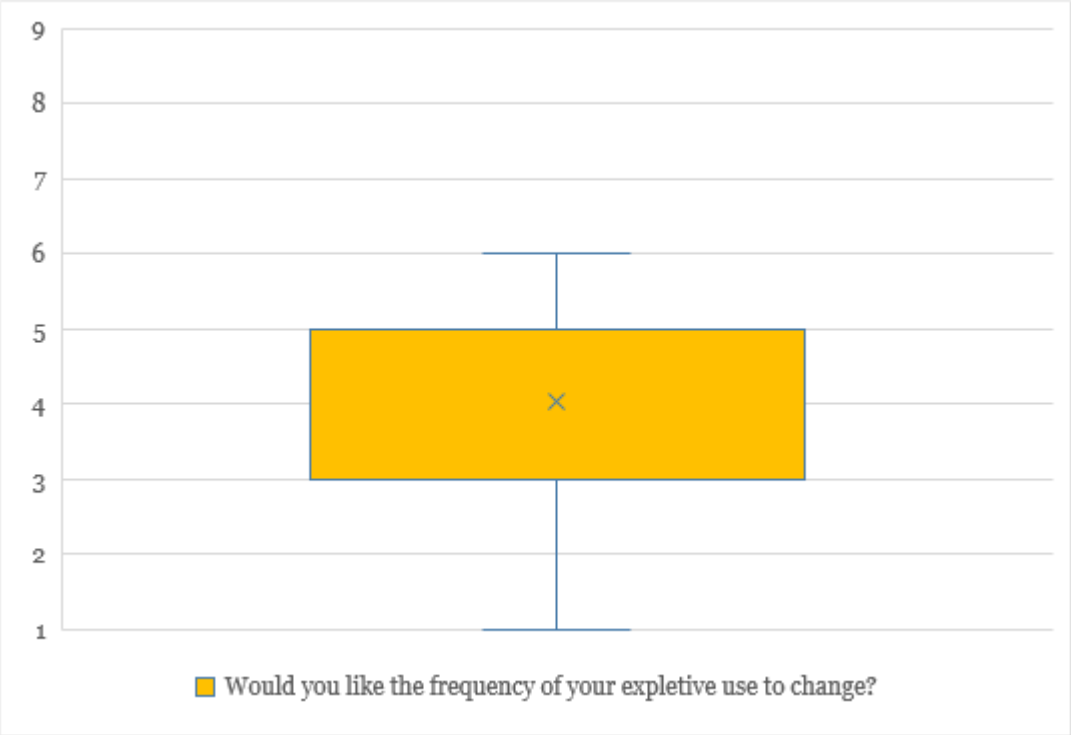
No participant ranked themselves as swearing 'much less often' than their peers (1). This may be due to the self-selecting nature of participants, as participants interested in a study on expletives are perhaps unlikely to be uncomfortable with or highly restrained in using them.

The IQR occurs above the midpoint of the scale, indicating that most participants believed they used expletives more often than their peers. However, the median value is at 5.5, which is close to the midpoint of the scale. These factors indicate that the participants in this sample

do not cluster at either of the extreme ends of the expletive frequency scale, and that a wide range of expletive use frequencies were represented by these participants.

Figure xii. Self-reported interest in changing frequency of expletive use

1= I want to swear much less often, 5=I feel I swear the right amount, 9=I want to swear much more often



Only one participant from this sample indicated that they would like to swear more often, entering a rating of 6. The IQR occurred between the values of 3 and 5, with the median occurring at a value of 4, indicating that most participants would like to maintain or slightly reduce their current frequency of expletive use. Two participants selected a value of 1 in this category, indicating that they would like to use expletives much less often.

Discussion

The responses to the language behaviour survey provide some context for the previous vocabulary size, expletive production and emotional word production tasks, indicating whether or not the data collected were skewed by any unusual expletive behaviour trends among this particular sample. Responses to part 1 of the language behaviour survey indicate that this group uses expletives the least often in the environments of giving a professional presentation or talking to a teacher, professor or boss. This is not a surprising finding, given previous research on the situations where expletive use is considered appropriate (Croom, 2010). However, it is a useful finding because it indicates that this sample of participants does not use expletives in a particularly unusual way. Participants indicated that they use expletives

most often when experiencing physical pain or conversing with people they know well. The latter category supports previous research identifying expletive use as an in-group or solidarity marker (Moore, 2012; Pinker, 2007). The function of expletives as an in-group marker is also reflected in the distribution differences between expletive use with people who are close acquaintances, work colleagues, and people who the participants do not know well.

It is also not surprising that the majority of participants ranked themselves as using expletives the same amount as or more often than their peers. As a requirement for human ethics considerations, the recruitment material for the study indicated that it would involve the production of expletives, and it may therefore be unlikely that participants who were generally uncomfortable using expletives or used expletives significantly less often than their peers would have been recruited for this study. However, 5 of the 23 participants – 2 females and 3 males – did rank themselves as using expletives less frequently than their peers, indicating that the current study did not solely represent participants who use expletives (or believe that they use expletives) more frequently than average.

The distribution of self-reports in Figure xii, in which the IQR is situated between 3 and the median value of 5 - 'I feel I swear the right amount' - illustrates normative attitudes that exist toward the practice of using expletives, one of which (the poverty of vocabulary argument) is the central focus of this research. The fact that 75% of participants feel they should not increase their expletive use is indicative of the generally negative view of expletive use that causes axioms like the poverty of vocabulary argument to persist. Figure xiv represents the sociocultural aspect of Jay's (1999) Neuro-Psycho-Social theory of expletive use, demonstrating the cultural context that has conditioned the majority of participants to believe that expletive use is not a practice that should be increased.

This survey elicited participants' views on their own expletive use, but did not ask for their opinions on the general appropriateness of using expletives in different situations, or their views on how others use expletives in these situations. This would be an interesting dimension for future research, particularly explore whether there are discrepancies between how participants report using expletives themselves and how they view them when used by other people. It would also be beneficial to obtain similar evaluations from a sample representing a larger range of backgrounds. Although the study by Jay & Jay (2015) included a similar sample made up of only university students, it would be valuable to compare this sample population's responses with those from different age, cultural, or educational backgrounds. Further research in this area could also explore whether self-reported measures of expletive behaviour in different areas are accurate predictors of the expletive vocabulary sizes of participants.

V. General Discussion and Conclusions

As stated in section II, the current research sets out the following aims:

- To test previous research (Jay & Jay, 2015) indicating that an increase in expletive production is positively correlated with an increase in vocabulary size, specifically focusing on the production of expletives and the production of non-expletive emotional language
- To collect data on word families and word forms that are currently considered expletives, and to investigate the situations in which these are most commonly used

These aims will be considered in order based on the results and general trends observed.

Investigating the relationship between expletive vocabulary production and non-expletive emotional vocabulary production - demonstrating connections between expletives and emotion

The current research proves that there is a strong, positive, and significant correlation between the number of expletive word families produced by participants and the number of non-expletive emotional word families produced by participants. This provides evidence supporting previous qualitative assessments of expletives as a semantic category linked with expressions of emotion and emotional affect (Adams, 2016; Allan & Burridge, 2006; Jay, 1999; Jay & Janschewitz, 2007; Moore, 2012; Pinker, 2007). There was also evidence of connections between expletive vocabulary and non-expletive emotional vocabulary in the tokens produced by participants for Task III, in which some participants included expletives in their emotional word data despite being specifically instructed only to write down non-expletive emotional word forms. All participants completed the four tasks in the same order, with the expletive production task preceding the non-expletive emotional vocabulary production task, so the expletive data produced for the non-expletive emotional vocabulary category could also be seen as evidence of priming. Furthermore, the majority of the top ten most frequent word families and word forms produced by participants for the emotional vocabulary task (see Figure vi, Figure vii) are categorised according to Clore et al.'s(1987) taxonomy as 'Affect-Focal' (p.765), an emotionally-valenced word category that focuses on emotional affect rather than on behavioural, cognitive or bodily effects. This could suggest that, after completing Task II for expletive production, the existing links between expletives and emotion put participants in a frame of mind to produce more affect-focal rather than behaviour-, cognitive- or bodily-focal tokens for Task III. In addition, the expletive frequency and behaviour survey for Task IV (Figure xii) indicates that the median response was at or above the midpoint of the frequency of expletive use scale for both the "positive emotional response" and "negative emotional response" categories. Across both emotional response categories, there were no participants who rated these categories at 1, for "I never use expletives in these situations". This is further evidence that expletive use and emotional expression are connected, as all of the participants in this study reported using expletives at least some of the time when confronted with either a negative or positive emotional

situation. All of these results indicate that speakers who use expletives in emotional situations do not lack the emotional vocabulary to express themselves without expletives.

Future research in this area should compare the expletive word families that participants report regularly using with the emotional word families they report regularly using, a connection that was not explored in this study. The current study shows that the number of expletive word families in regular use does not demonstrate any significant correlation with the number of non-expletive emotional word families known by participants (Figure ix), however, this is not really an effective basis for comparison, and was a limitation of the current study design. Comparing expletive word families in regular use with all emotional word families produced by participants assumed that the latter category would overlap completely with all emotional word families in regular use by participants, which may not be the case. This connection is worth further exploration, to investigate whether the "regular use" categories demonstrate the same strong, positive correlation as the "all known" categories between expletive and non-expletive emotional language.

Collecting data on word families and word forms that are currently considered expletives, and investigating situations where these are most commonly used - examining expletives that have gained or lost their taboo properties

The design of the expletive production task for the current study repeated the design of the expletive production task used by Jay & Jay (2015), including the recruitment of participants from the same age and educational background demographic as the participants used by Jay & Jay (2015). For these reasons, it is worth noting the similarities and differences between the the top ten most frequent tokens in both studies. In comparison with Jay & Jay's (2015) data, religious profanity is not present in the top ten most frequent list in the current research, for both all known expletive word forms and all known expletive word families by participants (Figure ii, Figure iii), although *damn* re-enters the top ten most frequent list for expletive word forms and word families in regular use by participants (Figure iv, Figure v). Ethnic and sexist slurs are more frequent in the current data, across both the "all known" and "regular use" categories. This suggests that most religious profanity has lost its taboo properties for young, university-educated New Zealanders (compared with the American university students used in Jay & Jay's study). Recorded studies of New Zealanders of similar ages and educational backgrounds indicate that they use religious profanity such as *oh my god* quite frequently in spoken data (Bayard & Krishnayya, 2001). However, in asking participants to produce "all of the examples of swear words, slurs, and profane language that you know", the current production study also elicited perception judgements from participants as to what words actually belong to these categories. It may be the case that participants do use religious profanity regularly, but no longer perceive it to be an example of any of the categories of "swear words, slurs, and profane language". It would be beneficial to repeat the expletive production task with a group from a different age group, cultural

background, or educational background to determine if the perception of religious profanity changes as a result of any of these social factors.

The expletive frequency and behaviour study included in the current research (Figure x) incorporated nine situations in which expletive use could occur (following Jay, 1999). Out of these nine situations, the most highly-distributed for frequency of expletive use were situations of i)experiencing physical pain, ii) conversing with close acquaintances, iii) experiencing a negative response, and iv) experiencing an emotional response. The lowest distributions for frequency of expletive use were situations of delivering a professional presentation, and conversing with a professor, teacher, or boss. Figure xi and Figure xii show information as to how participants viewed their own expletive frequency compared with their peers, with the majority of participants perceiving themselves to use expletives more often than their peers (Figure xi) and stating that they would like to reduce the frequency of their expletive use (Figure xii). All three of these figures illustrate how normative judgements on the use of expletives affect the expletive behaviour of participants. In Figure x, the low distributions for expletives in professional presentations and conversing with a professor, teacher, or boss may reflect the sociocultural restrictions placed on swearing in "professional" environments (Jay, 1999). Notably, conversing with a work colleague is situated between the distribution for a professional environment and the distribution for conversing with a close acquaintance. This suggests that, for this group of participants, work colleagues are perceived to be in between the professional setting and the in-group setting of conversing with close acquaintances, as expletive use is recognised by scholars to be an example of in-group marking (Croom, 2013; Moore, 2012).

Future research directions

The key findings of the current research merit further exploration with a larger sample and with a larger variety of social groupings, who may display different correlations with emotional vocabulary size, and different perceptions of expletive terms and situations for their use, compared with this group of 18 to 28-year-old New Zealand university students. In addition, the strong connection between expletive and emotional vocabulary demonstrated by the current research could be explored more fully in terms of the valence of the emotional words produced. From Task IV, two of the most highly-distributed situations for frequency of expletive use involved a painful or negative experience, and it is worth exploring whether negatively-valenced emotional words in particular are correlated with knowledge or use of expletives. Finally, the current research could be repeated with different time limits for the two production tasks, as it is possible that the word forms and word families produced by participants for these tasks did not actually represent all of the word forms and word families they knew in these categories, and that they simply ran out of time to write down more tokens within the two-minute time limit.

References

Adams, M. (2016). *In Praise of Profanity*. New York: Oxford University Press.

Allan, K., & Burridge, B. (1991) *Euphemism and Dysphemism: language used as shield and weapon*. New York: Oxford University Press.

Allan, K., & Burridge, B. (2006). *Forbidden Words: Taboo and the Censoring of Language*. Cambridge, UK: Cambridge University Press.

Bauer, L., & Nation, P. (1993). Word Families. *International Journal of Lexicography*, *6* (4), 253-279.

Bayard, D., & Krishnayya, S. (2001). Gender, expletive use, and context: Male and female expletive use in structured and unstructured conversation among New Zealand university students. *Women and Language, 24*(1), 1-15.

Clore, G.L., Ortony, A., & Foss, M.A. (1987). The Psychological Foundations of the Affective Lexicon. *Journal of Personality and Social Psychology*, *53*(4), 751-766.

Croom, A.M. (2013). How to do things with slurs: Studies in the way of derogatory words. *Language & Communication*, *33*, 177-204.

Croom, A.M. (2011). Slurs. *Language Sciences*, *33*, 343-358.

De Klerk, V. (1992). How taboo are taboo words for girls? *Language in Society, 21*(2), 277-289.

Grant, L.E. (2012). Culturally motivated lexis in New Zealand English.

Harris, C.L., Ayçiçegi, A., & Gleason, J.B. (2003). Taboo words and reprimands elicit greater autonomic reactivity in a first language than in a second language. *Applied Psycholinguistics, 24*, 561-579.

Hughes, S. E. (1992). Expletives of lower working-class women. *Language in Society, 21*(2), 291-303.

Isenberg, L., Silbersweig, D., Engelien, A., Emmerich, K., Malavade, K., Beati, B., et al. (1999). Linguistic threat activates the human amygdala. *Proceedings of the National Academy of Sciences*, *96*, 10456-10459.

Janschewitz, K. (2008). Taboo, emotionally valenced, and emotionally neutral word

forms. *Behavior Research Methods*, 40:4, 1065-1074.

Jay, K.L., & Jay, T.B. (2015). Taboo word fluency and knowledge of slurs and general

pejoratives: deconstructing the poverty-of-vocabulary myth. *Language Sciences*, *52*, 251-259.

Jay, T.B. (1986, April). *2170 Obscene words: Who, what, where, when.* Paper presented at the Eastern

Psychological Association conference, Boston, USA.

Jay, T.B. (1992). *Cursing in America: A psycholinguistic study of dirty language in the courts, the movies, in the schoolyards, and on the streets*. Philadelphia, USA: John Benjamins.

Jay, T.B. (1999). *Why We Curse : A neuro-psycho-social theory of speech*. Philadelphia, NL: John

Benjamins Publishing Company.

Jay, T.B. (2009). The Utility and Ubiquity of Taboo Words. *Perspectives on Psychological Science*, *4*(2), 153-161.

Jay, T.B., & Janschewitz, K. (2007). Filling the emotion gap in linguistic theory: commentary on Potts' expressive dimension. *Theoretical Linguistics*, *33*(2), 215–221.

Jay, T.B., King, K., & Duncan, D. (2006). Memories of punishment for cursing. *Sex Roles*, *32*, 123-133.

John, O., Naumann, L., & Soto, C. (2008). Paradigm shift to the integrative big five trait taxonomy: history, measurement, and conceptual issues. In O. John, R. Robins, & L. Pervin (eds.), *Handbook of Personality: Theory and Research* (pp.114-158). New York: Guilford Press.

LaBar, K.S., & Phelps, E.A. (1998). Arousal-mediated memory consolidation: Role of the medial temporal lobe in humans. *Psychological Science, 9*, 490-493.

McCready, E. (2010). Varieties of conventional implicature. *Semantics & Pragmatics 3*(8), 1-57.

Moore, R.L. (2012). On Swearwords and Slang. *American Speech*, *87*(2), 170-189.

Nation, P., & Beglar, D. (2007). A vocabulary size test. *The Language Teacher, 31*(7), 9-13.

Phillips, J. (2010, March 11). Advertising - Advertising and New Zealand society: Te Ara – the Encyclopedia of New Zealand. Retrieved from http://www.TeAra.govt.nz/en/video/22432/toyotahilux-advertisement-1999

Pinker, S. (1994). *The Language Instinct*. New York: W. Morrow.

Pinker, S. (2007). *The Stuff of Thought: Language as a Window into Human Nature*. New York: Viking.

Potts, C. (2007). The expressive dimension. *Theoretical Linguistics*, *33*(2), 165-198.

Rahman, J. (2012). The N Word: Its History and Use in the African American Community. *Journal of English Linguistics, 40*(2), 137-171.

Strauss,E., Sherman, E.M.S., & Spreen, O (eds.). (2006). *A compendium of neuropsychological tests : administration, norms, and commentary.* New York: Oxford University Press.

Wood, A., & Wood, D. (1996). *Elbert's Bad Word*. Singapore: Voyager Books.

Zipf, G.K. (1935, reprinted 2002). *The Psychobiology of Language*. Oxon, UK: Routledge.

Yeah nah as a pragmatic marker of cultural politeness in New Zealand English

Katharine Levendis

1. Introduction

There are many distinguishing lexical markers in New Zealand English (NZE) that set it apart from other varieties of English (Macalister 2006; Grant 2012; Hay, Maclagan & Gordon 2008; Bauer & Bauer 2003). *Yeah nah* is widely recognised by locals, and is often noticed by tourists and visitors as being typically Kiwi. It is even featured prominently as part of an alcohol consumption campaign as being a 'socially acceptable' way of declining alcohol (Health Promotion Agency n.d.). The magazine M2 even humorously gives a translation guide to the many possible variants, including *na yeah, yeah na yeah,* and *na yeah na* (Taylor 2016). Nevertheless, the juxtaposition of *yes-no* is not restricted to NZE alone; it has been noted in Australian English (Burridge & Florey 2002; Moore 2007), as well as in Dutch (Hoek 2013) and Afrikaans (Donaldson 1993). Previous research shows that both lexis and grammar can be used as a semantic means of expressing identity, while other New Zealand-specific studies offer evidence that forms of politeness and common New Zealand expressions can be used in pragmatically divergent ways to achieve the same result of marking identity. However, despite the prevalence of *yeah nah* in NZE, no formal research has yet been conducted on this phenomenon. After a review of the existing literature, this study will seek to develop an understanding of the pragmatic and discourse functions of *yeah nah* through a comparison with two studies into the nearest cultural equivalent, the Australian English (AE) *yeah no*. It will then attempt to consolidate the findings through an in-depth investigation of its pragmatic functions through the lens of politeness theory. The possibility that *yeah nah* is a politeness strategy that allows the expression of cultural identity in NZE will then be considered. The purpose of this present research, therefore, is to study *yeah nah* as a discourse marker, and to explore whether its pragmatic and semantic politeness function in NZE is a reflection of New Zealand culture.

1.1 *Yeah no* in Australian English

The most significant research to date on the discourse maker *yeah nah* has been conducted not in NZE but in AE, through the investigation of the Australian *yeah no*. Burridge & Florey (2002) first drew attention to *yeah no* as a discourse marker in their study of informal naturalistic conversations in New South Wales volunteers, while Moore (2007) provided a more detailed functional analysis yielding similar results. Burridge & Florey (2002) classified *yeah no* tokens as being either propositional, textual or expressive, following Traugott's (1982) theory of functional-semantic components (modified from Halliday & Hasan 1976). They found that *yeah no* could fall under all of these categories, however it was most

Wellington Working Papers in Linguistics 22 (2017) 153-180

commonly textual, with approximately 50% of their tokens serving a linking or orientating function (Burridge & Florey 2002: 160). *Yeah no* was also shown as a conveyor of feelings and attitudes in its expressive function. The corpus included examples of it being used as a hedging device or a softener to downplay or reduce 'the force of a disagreement' (Burridge & Florey 2002: 163), to shut down topics of conversation deemed unacceptable or too personal, as well as the enhancement of speaker solidarity through 'verbal cuddling' (Burridge & Florey 2002: 164). It was particularly prevalent in apologies and refusals, and appeared to be used as an escape hatch at turn-final occurrences where there was weak agreement (Burridge & Florey 2002). A final significant expressive function of *yeah no* was in receiving and downplaying compliments, attributed to Tall Poppy Syndrome, and during face-saving acts (Burridge & Florey 2002).

Moore (2007: 62-64) consolidated these findings from a functional perspective, and had little to add to Burridge & Florey (2002). Given that New Zealand and Australia share many cultural similarities, and that the influence of AE has resulted in shared cultural scripts with Australia (Grant 2012), further research as to how similar the New Zealand *yeah nah* and Australian *yeah no* forms are could yield interesting results.

It must be stated that both Australian studies varied considerably in their results pertaining to the most frequent users of *yeah no*. Burridge & Florey (2002) claimed this was speakers aged 35-39, with gender not a factor, while Moore (2007) argued that it was most likely to be used by males in their 20s and 30s. A genre bias was acknowledged by Moore (2007) as being a potential factor in this, as many of the tokens were drawn from sports-orientated shows targeted at males. Given these findings, further research with a more gender balanced approach is needed before any conclusions can be drawn. Both studies also lamented the difficulties of collecting naturally occurring tokens, with Moore describing the process as relying heavily upon 'recording programs and listening out for tokens'. The possibility of sociolinguistic interviews constructed to elicit specific discourse functions could be considered in the future as a way of gaining more data in naturalistic conversations, however that is beyond the scope of this present study.

It should be noted that both studies agree that none of the discourse functions of *yeah no* are by any means mutually exclusive, and tokens often employ multiple functions simultaneously within a single speech turn (Burridge & Florey 2002; Moore 2007). Nonetheless, and despite their inconsistencies in data collection, both studies offer a solid foundation for the present research into the functions of *yeah nah* as a discourse marker in NZE, and provide interesting possibilities for the link between discourse markers and cultural identity.

1.2 Applying politeness theory to discourse functions

While the previous studies were reasonably thorough in their analysis and categorisation of the discourse functions of *yeah no* tokens in AE, neither address pragmatics in great detail. Politeness theory is one proposed method for addressing this. Two such theories will be considered here: that of Brown & Levinson (1987), and that of Leech (2014).

Following Brown & Levinson (1987), politeness strategies can be assessed by indexing the culture-specific importance placed on power, social distance and the rank of imposition of a Face Threatening Act (FTA). Although FTAs are realised differently between cultures, politeness is a universal concept that can be utilised to deal with these acts, or not, through five overarching strategies: negative, positive, off-record, bald on-record politeness strategies, or complete avoidance of the FTA (Brown & Levinson 1987).

Negative politeness strategies are often indirect, and may hedge or moderate illocutionary force (Brown & Levinson 1987). Hedging and the moderation of illocutionary force are mentioned by Burridge & Florey (2002) as being a prime function of *yeah no* in AE, although they do not go as far as making the connection to politeness theory. Other negative politeness strategies applicable to the study of *yeah nah* could include the pragmatic function of ambiguity, the acceptance of compliments, *yeah nah* as a softener, and its reflection of the desire to be non-committal (Brown & Levinson 1987). Potential positive politeness strategies applicable to *yeah nah* in NZE could include opinion hedges to avoid being seen as overly negative when disagreeing, such as providing an alternative to the blunter *no*, as well as agreement seeking (Brown & Levinson 1987). In-group identification markers such as jargon and slang may also be politeness strategies that create common ground and intimacy, and by extension highlight the desire for informality that is salient in New Zealand culture (Brown & Levinson 1987; Holmes, Marra & Vine 2012). Off-record strategies such as understatement, contradictions, and vagueness could also be considered (Brown & Levinson 1987). Given the diversity of discourse functions research has shown *yeah no* to fill, it would not be unreasonable to conjecture that it might express multiple politeness strategies.

Leech (2014) provides an alternative and significantly more straightforwardly applied politeness theory. He defines politeness as being the 'avoidance of discord and promotion of concord or comity', stating that rather than being primarily concerned with face, politeness is a social goal (Leech 2002: 84-85). Essentially concerned with the distribution of value, speakers (S) assign greater value to the other person (O) in a speech act, or lesser value to themselves, according to the situation (Leech 2014: 90).

To differentiate this theory from Brown & Levinson, the underlying politeness strategies are given the terms *pos-politeness*, which 'gives or assigns some positive value to the addressee' (Leech 2014: 12), and *neg-politeness*, which has the function of mitigation or reduction of 'possible causes of offense' (Leech 2014: 11). Following this, Leech (2014) claims that not enough pos-politeness in a speech act is usually minimally disruptive, while insufficient neg-politeness can likely offend, and is therefore far more important (Leech 2014). Pos-politeness strategies include offers and invitations, compliments, congratulations, thanks and apologies, while neg-politeness is more indirect and utilises hedges and understatement (Leech 2014).

As many of the functions of Australian *yeah no* described by Burridge & Florey (2002) and Moore (2007) have significant overlap with both of the aforementioned politeness strategies, a comparative analysis of both function and politeness is a good launching point to further investigate *yeah nah* in NZE. Furthermore, by using the framework of politeness, it is possible to evaluate *yeah nah* at a pragmatic level in order to draw links between its use in NZE and New Zealand culture in a generalised manner.

1.3 Language as a semantic reflection of Australian and New Zealand society

Research in the area of society and culture links AE lexis and grammar to Australian culture, in particular in terms of address, derivation, illocutionary devices, and speech act verbs (Wierzbicka 1986). The difference between diminutives, or 'baby talk' is contrasted with depreciative abbreviations (i.e. *Salvation Army* becomes *Salvos*), which allows Australians to show affection for one another in a non-sentimental way without appearing weak (Wierzbicka 1986). Consequently, abbreviations are claimed to reflect Anglo-Australian characteristics of anti-intellectualism, informality, and toughness (Wierzbicka 1986). Furthermore, expressions such as *no worries* and *good on you* are related to the Australian ethos that incorporates 'amicability, friendliness…mateship… jocular toughness, good humour, and, above all, casual optimism' (Wierzbicka 1986: 363). By defining AE expressions through these underlying semantic formulae, Wierzbicka (1986) reveals that common Australianisms have multiple layers of often highly specific meaning, which in turn reflect cultural attitudes.

While NZE does not depreciate terms of address to the same extent as AE, it does share many of the same expressions and lexis, including *yeah nah/yeah no*. Furthermore, many of the underlying cultural values between New Zealand and Australia are extremely similar. This is a sentiment shared by Grant (2012), who argues that cultural scripts reflect shared assumptions about identity in New Zealand. NZE reflects New Zealand culture and distinguishes itself from other varieties of English through the incorporation of lexis related to farming and community life, New Zealand flora and fauna, and the Māori language (Grant 2012). While neither Grant (2012) nor Wierzbicka (1986) include *yeah nah* in their research, it is likely that they would consider it to be a cultural script; that is, part of a 'set of assumptions and evaluations which are widely known and shared' by a society (Wierzbicka 2001: 207). Moreover, as cultural

values and priorities are inherently connected to a society's manner of speech and their cultural scripts, semantics are vital for understanding them (Goddard & Wierzbicka 2004: 153). In this regard, further study on *yeah nah* has the potential to deepen and consolidate current knowledge of New Zealand culture through its semantic function as a cultural script NZE.

1.4 Pragmatics in New Zealand politeness and the discourse marker *eh*

More New Zealand-specific research has been done on politeness in Māori and Pākehā workplace interactions (Holmes et al. 2012). While both cultures differ in their perceptions of polite behaviour, there is a significant overlap in the manifestation of their underlying cultural values. The Māori concept of *whakaiti* encompasses the importance of humility, emphasising the group over the individual, and can be interpreted as potentially both a positive and negative politeness strategy (Holmes et al. 2012; Brown & Levinson 1987). Pākehā culture, in contrast, prefers more negative politeness strategies, in line with claims that the highest level of politeness in English is traditionally achieved through negative indirect speech acts (Blum-Kulka 1987, as cited in Brown & Levinson 1987). This is seen in the Pākehā avoidance of power demonstrations in the workplace, and the expectation that personal achievement will be evaluated by others and not the achiever themselves (Holmes et al. 2012). Somewhat surprisingly, both groups use different politeness strategies to express their differing values, and yet the final expression is remarkably similar. The result is a dual culture emphasis on egalitarianism. Both Māori and Pākehā New Zealanders are shown to place a high value on solidarity and collegiality, despite the difference in the pragmatic roots of their politeness and values (Holmes et al. 2012).

Meyerhoff (1994) explores the New Zealand-wide phenomenon of different ethnic groups using the tag *eh* for reasons that are pragmatically similar. The research deals with the prevalence of *eh* in NZE, and compares the negative attitude outsiders bear towards the two out of power groups who most commonly use it: young working class Pākehā women, and working class Māori men (Meyerhoff 1994). *Eh* was shown to be an in-group marker for both groups, however in each group, it was marking something different. In Māori men, *eh* marked ethnic solidarity, whereas young Pākehā women used it to signal similarity in age (Meyerhoff 1994). Interestingly, neither of these groups used the tag to mark uncertainty, which was negatively associated as being its stereotypical function (Meyerhoff 1994).

While at first seemingly disparate, these two articles have similar ramifications for any study into the pragmatics of *yeah nah* in NZE. They show that there is undoubtedly a strong correlation between the pragmatics of politeness, discourse markers and identity in NZE. They also raise the issue of whether any link exists between *yeah nah* and a particular New Zealand social or ethnic group identity, and if so, what it could be marking.

1.5 Summary

This literature review has presented research relevant to the cultural, pragmatic and discourse functions of *yeah nah* in NZE. In doing so it has revealed a gap not just in the study of *yeah nah*, but also in the semantic and pragmatic reasons underlying its use, and suggested that *yeah nah* may be a cultural script. It has also briefly demonstrated how politeness theory could serve as a framework for developing an understanding of *yeah nah'*s function in NZE. Although there is an abundance of research on New Zealand culture, of which only a sample is mentioned here, the implications of *eh* as a pragmatic particle, and the pragmatic roots of politeness in the workplace highlight the important link between language and identity. Whether or not such a pragmatic link between the use of *yeah nah* and New Zealand identity exists in the form of politeness strategies is a question that this research will now explore.

2. Methods

For the purposes of this study, tokens in NZE are labelled *yeah nah* to differentiate them from the AE *yeah no* and thus avoid confusion. While this may appear to be a false moniker given that *yeah nah* does not actually occur in the data, informal anecdotal evidence suggests that *yeah nah* is in fact just as widespread if not more so than *yeah no* in NZE.

Data were collected from the New Zealand Spoken English Database (NZSED), a corpus consisting of informal conversations and map tasks by Pākehā speakers from Wellington and Hamilton (Warren 2002). Speakers were both female and male, and categorised by the following age groups: young (18-30), mid-aged (31-45) and old (46-60). While some of the data were already transcribed as part of the corpus, the remaining tokens were transcribed using ELAN software.

A first pass of the corpus yielded relatively few tokens. One reason for the non-occurrence in the data could be that the corpus consisted of Pākehā speakers only. Another possibility is that there was a control effect of formality during the recordings. A third unsubstantiated possibility could be that usage of *yeah nah* has in fact significantly increased since the data were recorded in 2002.

The assessment of what did or did not constitute a *yeah nah* token was expanded to include both standard and complex forms. Standard forms were considered to be any token with a *yes* word and a *no* word spoken in immediate succession, while complex forms were any standard forms interrupted by discourse particles that still performed the same function as a standard token. For example, a standard form could be *yeah nah* or *nah yeah no*, while a complex form could be *yeah but nah*, or *nah um well yeah no*. This boosted the number of tokens produced, and allowed for a broader qualitative functional analysis, as well as the unexpected opportunity of investigating the variation apparent in the data.

Data were analysed following Traugott's (1982) functional-semantic components, and two corpus annotation systems: HCRC (Carletta, Isard, Isard, Kowtko, Doherty-Sneddon & Anderson 1997) and Switchboard-DAMSL (Jurafsky, Shriberg & Biasca 1997). This allowed a broader understanding of the function of *yeah nah* in NZE discourse, and to comparison with previous studies on AE that used the same methods (functional-semantic components in Burridge & Florey 2002; and all three in Moore 2007). The HCRC and Switchboard-DAMSL system results, while initially appearing less useful individually, proved particularly beneficial when combined, enabling the triangulation of the several similar conclusions (see section 3).

Next, the tokens were analysed following Leech's (2014) maxims of politeness. Specific functions were coded for by labelling each token with what was considered to be its best representation of function, and then matched with Leech's maxims. Thus, these categories were created expressly for this analysis. Elements from the previous analyses (functional-semantic components, HCRC, Switchboard-DAMSL) were useful in aiding this. Several examples were then extracted from the data for a more thorough quantitative individual analysis. Subsequently, politeness analysis constitutes the bulk of this research. Finally, the *yeah nah* functions pertaining to the maxims of politeness were compared with noted characteristics of New Zealand culture, in an attempt to demonstrate that *yeah nah* in NZE is a conduit for expressing Kiwi identity and cultural ideals.

3. Results

3.1 *Yeah nah* in the corpus

The data produced 30 tokens of *yeah nah,* of which the majority (15 tokens) were *yeah no.* 17 tokens were of the type *yes-no* (a *yes* word followed by a *no* word), while 2 were *no-yes*, 4 were *yes-discourse particle-no*, 5 were *no-discourse particle-yes*, 1 was *no-yes-no*, and 1 was *yes-no-discourse particle-yes*. A complete list of these can be seen in table 1, where they are classified as *yes* or *no*-commencing, while table 2 shows standard and complex forms. A brief analysis of turn location revealed that 17 of 30 tokens occurred in turn-initial position, with 2 of those comprising the entire turn. 12 tokens occurred turn-internally. Only 1 token appeared in the turn-final position, where it was a repetition of a turn-initial token.

Table 1: Tokens by *yes-no* or *no-yes* basic type

***Yes*-commencing type**	**No.**
yeah no	15
yeah and no	1

Table 2: Tokens by standard & complex form

Standard form tokens	**No.**
yeah no	15
yes…no	1

yes no	1
yes but oh no no no	1
yeah but no	1
yes well no	1
yeah, yeah, yeah yeah, no	1
yeah, no so yeah	1
	22

***No*-commencing type**	**No.**
no yeah	1
no no no yeah	1
no yeah no	1
no no, well yeah	1
oh no that's yea	1
no I I still do- yeah	1
oh no that's yea	1
nah it's yeah	1
	8
Total	**30**

yeah, yeah, yeah yeah, no	1
no yeah	1
no no no yeah	1
no yeah no	1
	20

Complex form tokens	**No.**
yeah and no	1
yes but oh no no no	1
yeah but no	1
yes well no	1
yeah, no so yeah	1
no no, well yeah	1
oh no that's yea	1
no I I still do- yeah	1
oh no that's yea	1
nah it's yeah	1
	10
Total	**30**

Although the data were insufficient to draw any concrete conclusions based on age and gender, a breakdown of these can be seen in table 3. Somewhat unexpectedly, given that anecdotal evidence suggests *yeah nah* is popularly used amongst younger speakers, *yeah nah* in all its forms was preferred by mid-aged females, who accounted for 50% of all tokens produced. However, it was in the realisation of complex forms that there was a striking difference. This can be seen by comparing tables 4 and 5. Only one male produced a complex form of *yeah nah*, while females produced 90% of them. Moreover, the majority of these (7 tokens) were produced by mid-aged females. While the sample size is small and not representative of the New Zealand population, notably in ethnicity due to corpus limitations, the fact that mid-aged females produced the bulk of both overall tokens and complex forms could suggest that a change in progress may well have been taking place, as women are

usually the innovators in change from below and use more incoming variants than men (Labov 1991). It could be that *yeah nah* was an incoming form in 2002. This would explain why so few tokens were produced by younger speakers and why mid-aged females were the most likely to 'play' with the form.

Table 3: Total tokens by age and sex

	Male	**Female**	**Totals**
Young	3	1	4
Mid age	3	15	18
Old	0	3	3
Age not given	3	2	5
Totals	9	21	30

Table 4: Standard tokens by age and sex

	Male	**Female**	**Totals**
Young	2	1	3
Mid age	2	9	11
Old	0	1	1
Age not given	3	2	5
Totals	7	13	20

Table 5: Complex tokens by age and sex

	Male	**Female**	**Totals**
Young	1	0	1
Mid age	0	7	7
Old	0	2	2
Age not given	0	0	0
Totals	1	9	10

3.2 Propositional-textual-expressive functional analysis

Following Traugott's (1982) functional-semantic analysis, the most frequently occurring function of *yeah nah* was split equally between two categories. These were the propositional/textual function, and the propositional/expressive function, both of which occurred at a rate of 33%. The next most frequent function was propositional, accounting for the marginally lower rate of 30% (see table 6). *Yeah nah* rarely fulfilled the textual function, and did not occur as an exclusively expressive function at all. Whether or not a token served

one or two functions, it was overwhelmingly likely to be propositional. These findings are similar to that of Moore (2007: 45), who found that *yeah no* in AE was most likely to serve the propositional/textual function (at 37.5%) followed by propositional (19.3%). However, there was a clear divergence between the two data sets in the propositional/expressive category.

Table 6: Functional-semantic analysis of *yeah nah* in NZE (following Traugott 1982)

Function	**No.**	**%**
Propositional	9	30
Textual	1	3
Expressive	0	0
Propositional & textual	10	33
Propositional & expressive	10	33
	30	**99**

While this was one of the most frequently occurring functions in NZE, it only accounted for 9.1% of the Australian tokens. Due to the small sample size, more data on *yeah nah* is needed before these findings can be confirmed. Nevertheless, the data suggest that while both variants are functioning reasonably similarly, NZE *yeah nah* is more likely to be expressive, and strongly favours the propositional function. However, further investigation is needed to confirm this, due to the effect of genre in Moore's (2007) data sample.

3.3 HCRC analysis

Tokens' preceding and following utterances were analysed following the HCRC annotation system (Carletta et al. 1997). The results can be seen in figures 1 and 2. Tokens were most frequently preceded by explanations and acknowledgements, both occurring at a rate of 33%. Replies, instructions and checks also preceded the tokens, at less remarkable rates of <10% each. Interestingly, given that *yeah nah* is at face value a Y-N response itself, only 13% of all preceding utterances were queries.

Figure 1: HCRC analysis of preceding utterances by %

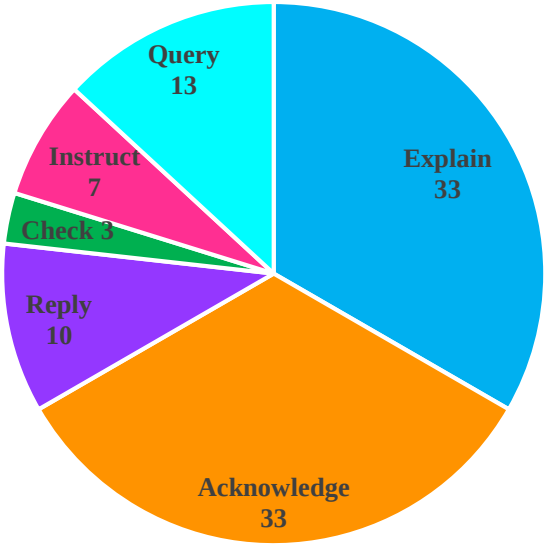
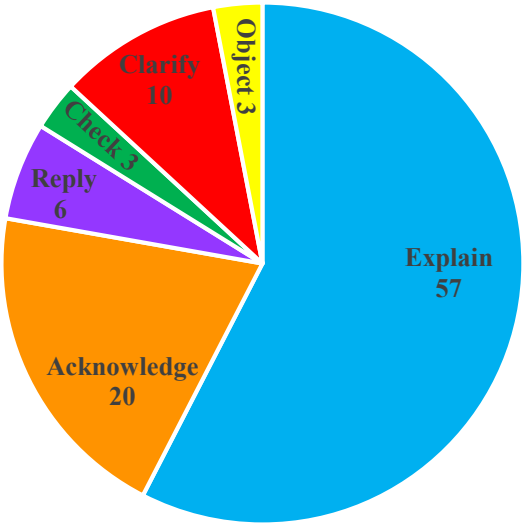


Figure 2: HCRC analysis of following utterances by %



The majority of the tokens were followed by an explanation (57%), or an acknowledgement (20%). As with preceding utterances, all other following utterance categories occurred at low frequencies. Given that over half of all tokens were realised in the turn-initial position, it seems striking that following utterances had such a marked preference for explanations.

From these data, it is evident that *yeah nah* is used primarily in conjunction with acknowledgements and explanations, a result which differs from its Australian counterpart's findings. The Australian *yeah no* was most frequently preceded by a query (24%) or an explanation (16%) (Moore 2007: 46). In following utterances, *yeah no* differed again from the Australian study, with acknowledgements, yes-replies and clarifications holding the top three spots (Moore 2007: 46). Consequently, it is clear that NZE *yeah nah* is occurring in quite different discourse contexts than it is in AE. Although there is greater variation in how *yeah nah* tokens are expressed in NZE, there seems to be less variation in what they are expressing in conversation – predominantly explanations and acknowledgments. However, results may be affected by the disparity in the two studies' token numbers, and more data are needed in NZE to ensure that there is not a data bias.

3.4 Switchboard-DAMSL analysis

The Switchboard-DAMSL corpus annotation system was not well suited to analysing *yeah nah* utterance locations, as categories were particularly difficult to allocate. This was attributed to its original purpose of annotating telephone conversations (Jurafsky et al. 1997). It could have

perhaps been more useful to use the categories to label individual tokens instead. Nevertheless, results were included to provide a comparison with Australian tokens, and they do highlight some findings which will be helpful in the analysis of *yeah nah* with politeness theory. These can be seen in table 7, which includes only the categories realised in the corpus.

Table 7: Switchboard-DAMSL analysis of preceding and following utterances of *yeah nah* tokens

			Preceding utterance	**Following utterance**
forward communicative function	**statement**	non-opinion	5	2
		opinion	7	10
	influencing addressee future action	Y/N question	2	0
		rhetorical question	1	0
		declarative question	1	0
		action directive	0	1
	committing speaker future action	commit	0	1
	other forward function	exclamation	2	1
backward communicative functions	**agreement**	accept	3	4
		reject-part	0	1
		reject	1	1
	understanding	signal non-understanding	1	0
		acknowledge	4	2
		acknowledge-answer	0	1
		collaborative completion	0	1
		summarise/reformulate	0	1
	answers	negative non-no answers	1	0
		statement expanding y/n answer	0	1
		expansion of y/n answer	0	2
other function		hedge	1	1

	coder unsure of which label to use	1	0
	Totals	**30**	**30**

Yeah nah tokens were most frequently preceded by an *opinion statement* or a *non-opinion statement* rather than a question (7 and 5 tokens respectively). Following utterances were overwhelmingly likely to be an opinion statement, with 10 tokens. This is likely due to the aforementioned high frequency of *yeah nah* tokens in turn-initial. *Agreement-accept* was also frequent in both positions, while *acknowledgements* were more likely to precede a token than follow, in line with HCRC analysis results.

As with the HCRC analysis, Switchboard-DAMSL revealed *yeah nah* to be performing different contextual functions than the Australian *yeah no. Yeah no* was most often preceded by the broader category function of *influencing-addressee-future action*, at a rate of 44% (Moore 2007: 47-48). The bulk of these were questions (Moore 2007: 47-48). In contrast, *yeah nah* was only preceded by questions in four instances, and was most commonly preceded by a (non-)opinion statement. Furthermore, Australian tokens were most often followed by answers, or answer-expansions (Moore 2007: 47-48), whereas *yeah nah* rarely did this. From combining both the HCRC and the Switchboard-DAMSL analyses, it seems clear that *yeah nah* is in fact not occurring as a reply to a question, as it is in AE, but instead acknowledging prior utterances and preceding an explanation or personal opinion.

3.5 Politeness functional analysis

Yeah nah as a politeness device was analysed according to the maxims of politeness (Leech 2014: 91). For ease of comprehension, table 8 provides a summary of these.

While the vast majority of the 30 tokens realised only one politeness maxim, some realised more than one, hence the total number of maxims being 34. As table 9 makes clear, it was pos-politeness that most frequently occurred, with 24 pos-politeness tokens compared with 10 neg-politeness tokens. This was surprising as most English-speaking cultures have a preference for neg-politeness strategies (Leech 2014: 276). *Yeah nah* was most frequently realised as M7 (agreement maxim – 10 tokens), of which 80% of those tokens were used in agreement. M9 (sympathy maxim – 9 tokens) was the next most frequent, and these tokens predominated in disagreements. Both maxims were pos-politeness strategies which place a high value on the opinions (M7) and feelings (M9) of O. Other pos-politeness maxims that occurred were M1 (generosity maxim – 3 tokens) and M5 (obligation maxim – 2 tokens).

Table 8: Summary of the maxims of politeness (from Leech 2014: 91).

Pos-politeness		
Maxim	**Label**	**Example of typical speech event**
(M1) give a high value to *O*'s wants	generosity	commissives (expression of commitment to future act)
(M3) give a high value to *O*'s qualities	approbation (approval, praise)	compliments
(M5) give a high value to *S*'s obligation to *O*	obligation (of *S* to *O*)	apologising, thanking
(M7) give a high value to *O*'s opinions	agreement	agreeing, disagreeing
(M9) give a high value to *O*'s feelings	sympathy	congratulating, commiserating
Neg-politeness		
Maxim	**Label**	**Example of typical speech event**
(M2) give a low value to *S*'s wants	tact	directives
(M4) give a low value to *S*'s qualities	modesty	self-devaluation
(M6) give a low value to *O*'s obligation to *S*	obligation (of *O* to *S*)	responses to thanks and apologies
(M8) give a low value to *S*'s opinions	opinion reticence	giving opinions
(M10) give a low value to *S*'s feelings	feeling reticence	suppressing feelings

S = Speaker O = Other

Neg-politeness maxims mostly dealt with feeling or opinion reticence, however these did not occur nearly as frequently as the most common pos-politeness maxims. M8 (opinion reticence – 4 tokens) and M10 (feelings reticence – 3) both assigned low value to S. Interestingly, the neg-politeness tact maxim (M2) only occurred once despite Leech (2014: 91) stating that Western cultures usually place a high importance on it.

Overall, 21 of the 34 maxims were dedicated to (dis)agreement. Realisation of opinions and feelings was even stronger, with 26 maxims dealing with these, regardless of to whom they were assigning value. This was congruent with the high number of personal opinions noted in the Switchboard-DAMSL analysis. From these results, it is extremely clear that *yeah nah* is most frequently being employed as a politeness strategy in disagreements and agreements, as well in conjunction with the expression of opinions and feelings.

Table 9: *Yeah nah* tokens according to Leech's (2014) maxims of politeness & discourse function

FUNCTION	Specification of function/secondary function	POS-POLITENESS M1	M3	M5	M7	M9	NEG-POLITENESS M2	M4	M6	M8	M10	function totals
disagreement	disagreement - rejection of suggestion	1										
	disagreement - correction of information					2						
	disagreement & downplay S wants	1										
	disagreement & introduction of S opinion					1						
	disagreement softener					2						
	correction softener					2						**9**
agreement	agreement				8							
	agreement & introduction of S opinion									2		
	agreement & negation of O amusement				1						1	**12**
feelings-oriented	opinion-reticence									1		
	turn conversation to S opinion									1		
	admission of feelings										1	
	downplay a compliment							1				
	reassurance of correct information					1						**5**
future-oriented	precedes an excuse			1								
	promise to complete a task			1								**2**
conversation management	discourse marker/reorients O to task	1					1					
	acknowledgement & turn to S opinion				1						1	
	acknowledgement & agreement					1						
	acknowledgement & reassurance							1				**6**
	Totals per maxim	**3**	**0**	**2**	**10**	**9**	**1**	**2**	**0**	**4**	**3**	**34**
	Totals per type of politeness	**POS = 24**					**NEG = 10**					

4. Discussion

An illustration of the use of *yeah nah* as a politeness strategy to express New Zealand culture will now be attempted through several examples. Due to the nature of the data, even with only 30 tokens an in-depth analysis of each would be impossible. Therefore, the categories focussed upon will be *yeah nah* as a politeness strategy in conjunction with compliments, hedges, disagreements and agreements.

4.1 *Yeah nah* and compliments

The first example (1), between a musician (JN) and a fieldworker (FW), shows the *yeah nah* token being used to downplay and deflect a compliment in line with Leech's (2014: 91) maxim of modesty and self-devaluation (M4). Although M4 as a politeness strategy only occurred twice in the data, the following example was chosen as it demonstrates an important aspect of New Zealand culture: self-effacement.

(1)

JN	I used to play in a chug band actually for a while when I was working up the coast after my, before I went to music school, I was playing chug band guitar, which was kind of fun, with a guy called Steve Kendrick who's a pretty cool, do you know Steve?
FW	mmm
JN	yeah yeah, used to play in his old chug band for a while
FW	hey didn't he used to play with Emma's brothers?
JN	Emma's brothers
FW	ah, the youngest hahaha
JN	ha ha ha ha
FW	no I'm talking about Emma Jamieson's, sorry Craig and Brad
JN	**yeah no** I never played with them, no I was never at their level, no no no, those guys are really, I mean those guys have, you know studied three years full time jazz and played for bands, in bands for years, so mostly I've just been sort of ah ah ah a private musician

Here JN uses the *yeah nah* token to serve two functions. The first is to disagree with FW, in preparation for an explanation (correction of information), the most common following HCRC function. More importantly however, the token serves as a compliment deflector. Compliments, both given and received, are often potential FTAs (Brown & Levinson 1987: 66). While FW has mistakenly suggested that JN was in a band with Emma's brothers, JN clearly perceives this as an unintentional compliment of his skill, and takes care to distance his own

musical skill (S's qualities) from the perceived much greater qualities of the brothers. In order to both disagree and deflect the compliment, *yeah nah* here helps to moderate the force of his negation and simultaneously compliment O (the brothers) while denigrating his own skills and still remaining polite.

Holmes (1986: 495) categorises responses to compliments in NZE as either *accept*, *reject*, or *deflect/evade.* Given that the majority of all compliments are accepted in NZE (Holmes 1986: 495), and that negative responses to compliments are rare in English (Leech 2014: 189) it is unsurprising that rejecting them is a delicate issue that requires politeness strategies in order to maintain face for all parties involved. Following Holmes' (1986: 495) subcategories, the above example demonstrates JN both rejecting the accuracy of the preceding statement (*disagreeing utterance*: 6.7%) and deflecting a misplaced compliment by shifting the credit (*shift credit*: 1.3%), two rather rare compliment responses. It is therefore no surprise that he takes such care to be polite. Furthermore, it could be said that his manner of doing this is typical of New Zealanders. According to Bönisch-Brednich (2008: 9), self-deprecation and modesty are 'vital for maintaining good relationships' in New Zealand. Similarly, New Zealanders consider it unacceptable for an individual to assess their own achievements, especially in what may be perceived to be a self-aggrandising manner (Holmes et al. 2012). Finally, being modest is strongly linked with the maintenance of social balance (Bönisch-Brednich 2008: 9). To this end, it is clear that modesty and self-deprecation are crucial elements of New Zealand culture, and this is something that JN clearly reveals through his use of *yeah nah* to downplay his musical talent when complimented.

4.3 *Yeah nah* as a hedging device

The data reveal that *yeah nah* was used in conjunction with the hedge *I think* at a remarkably high rate, occurring 8 times. Leech's (2014: 97) opinion-reticence maxim (M8) states that speakers 'frequently soften the force of their own opinions by using propositional hedges such as *I think*', as forcefully expressed opinions are often not tolerated, and may even be offensive. As one of the more common hedges, *I think* can express certainty, uncertainty, negative politeness and reassurance (Holmes 1987: 60-61). This can be seen in example (2), where *yeah, no so yeah* immediately precedes *I think* (underlined) to express personal opinions using neg-politeness. S011 utilises the token to qualify her earlier statement (in line 1) as an opinion, not because she is uncertain as to the situation of seatbelts in Australian buses, but because the fact is seemingly less important than her feelings about it. The token simultaneously emphasises her following opinion, that this should also be the case in New Zealand. In this way, *yeah nah* serves as a politeness strategy to moderate the strength of S011's opinion, so that she is not perceived as being too opinionated.

(2) S011 yeah, because you have to I think, in Australia on tour buses now, on the coaches, they all have seatbelts

S012 do they? I think I would prefer that particularly in the front seat, I can remember sitting in in one of those big coaches

S011 yeah that's a bit scary

S012 and the front seat with the big window in front of you

S011 yeah yeah yep

S012 and no seat belt and it is actually quite squa- scary

yeah

S011 **yeah, no so yeah**, I think it makes sense on those long distance hauls with funny corners and

S012 and actually school buses should probably have kids in

S011 ah school buses now, I don- do you catch the bus?

S012 oh only on wet days

Extracts (3)-(9) illustrate similar strategies where *yeah nah* co-occurs with the hedge *I think*.

(3) S011 right

oh yeah but no, it's not going to make much difference I don't think

(4) MPF029 **yeah no** I think they're probably probably quite well targeted actually. They used to have that one about the, the one where they were driving along and they do the breath testing

(5) YPM027 no. **Nah it's yeah**. I- I've always not enjoyed them but I've have always been interested by them cause, they, they do use very good methods I think, like very the creative writing, an you know there's-

(6) S056 **yes //but\ oh no no no** I do think they're efficient ahh effective

(7) S028 **yes well no** but I mean, but I mean yeah, and so I mean I don't think that it it's yeah so these countries are doing better than we are

in their in their whole attitude towards things

(8) YPF025 **yeah…no** absolutely, I totally agree with you there. I do think it is a factor, um, the ads do help in bringing it down

(9) Partner (laughs) so it's quite clever but it's very long and mm um **yeah no** I can't think of any other ones…those are the, I think it's the only one I've seen on TV- oh no there's, have you seen the one where there's

Once again, it is unsurprising that this is the case given that the tokens were so frequently preceded and followed by opinions (see section 3.4). They provide further evidence that *yeah nah* is being used less as a hedge of uncertainty, and more as a hedge to moderate illocutionary force, as arguably only example (9) is expressing uncertainty. Moreover, of the 8 exemplar tokens, 7 of the 9 maxims they produced were M7 or M8, both opinion value-assigning maxims. Personalising an opinion is a hedging strategy that enables safe disagreement[1], by claiming a statement as a personal estimation and not an absolute fact (Holtgraves 1997: 232). Holmes et al. (2012) have noted that solidarity is a highly important characteristic in the New Zealand workplace, that affects how politeness is enacted therein. It is likely that *yeah nah* as a moderator of strong personal opinions could be a means of reducing interspeaker differences and thus express solidarity. The fact that *I think* coincides so frequently with *yeah nah* proves that there is a strong tendency to hedge personal opinions in NZE in order to preserve face and not appear too opinionated in a culture that frowns upon this, as well as enabling safe disagreement. It also indicates that there is a high likelihood of a collocation link between *yeah nah* and *I think.* Thus, it can be stated that *yeah nah* is functioning as a politeness strategy in NZE not only to moderate the force of personal opinions as a hedge, but also to index cultural solidarity, a trait that is highly valued in New Zealand (Holmes et al. 2012).

4.3 *Yeah nah* and disagreement

Expression of agreement or disagreement comprised the overwhelming majority of token functions with respect to Leech's maxims. In this section I will consider disagreement, using the example of 3 tokens that were produced in the same conversation by one speaker. The following is a conversation between S027 and S028, both mid-aged females.

---

[1]While (8) is actually a counter example, as it is expressing emphatic agreement rather than enabling safe disagreement, it has been included here as it provides strong supporting evidence for its collocation with *I think*.

S028 so therefore maybe we shouldn't be using vehicles

S027 oh so that's your agenda

it would be very hard to drink and drive if we didn't use vehicles

S028 no it's not my agenda actually, no but I do think, I mean it is the case that it's you know it's

safety at reasonable cost

which is ou-, which is a New Zealand policy

it is not the policy of those countries which do better than us

so like countries like Sweden have zero tolence

S027 they also have a completely different society

umm

S028 but they have zero tolera- tolerence of

S027 child abuse, lets get onto that one

S028 yes

S027 shall we hahahaha

(10) S028 **yes well no** but I mean, but I mean yeah, and so I mean I don't think that it it's yeah so these countries are doing better than we are

in their in their whole attitude towards things

S027 did you read that thesis proposal I sent you?

S028 no

S027 haha oh

yeah things were in

S028 is this by thing

S027 hahaha

S028 yeah well I, I actually liked having him as a student

S027 I wondered if you'd be prepared to again cause I need someone who knows <unclear>

S028 for his masters

S027 we really can talk about anything can we? cool, I haven't seen Pamela for days because we have rooms on different floors

(11) S028 **yeah, yeah, yeah yeah, no** I haven't read it because you know I've been flat out

yeah I appreciate you have, he'll be on my back shortly

S028 but I don't, I like, I like supervising him as a student because he really works

S027 yeah he does umm there

S028 <unclear> at least his research he did

S027 there are some design flaws, well design issues with this thing, that I'd love you to have a look at if you ever do get time

(12) S028 **yeah no** I will, I will I will

S027 when do you get less busy, break,

S028 well there is the non-teaching period soon

S027 yeah okay, well I'll just tell him that I'm not gonna comment until sometime into that, it's just he'll be on my back about it

Strikingly, S028 uses 3 *yeah nah* tokens in the space of less than a minute to express different types of disagreement. The first token, *yes well no* (10), is ostensibly agreeing to a suggested topic change, however given that she keeps talking, it is actually a disagreement. In this, she uses M1 (the generosity maxim) by appearing to assign a high value to S027's desire to change the subject (Leech 2014: 91), while the token actually rejects the suggestion. When the topic is then changed regardless, S028 once again employs a token to precede justification when asked about a task requested of her. The repetition of *yeah* in (11) is here used for emphasis, and shows she places a high value on her obligation (M5). It also precedes her reason given for not doing the task, and thus makes it more acceptable. When S027 continues to indirectly but strongly insist that the task needs to be done, S028 once again uses *yeah no* (12) as a vehicle for the M5 expression of a promise to do the task in the future, as her disagreement avoidance has failed. Here, the high frequency of *yeah nah* realisations are being used as a politeness device in a conversation that is perhaps slightly more confrontational than either of the speakers are comfortable with.

Pomerantz (1985: 72) writes that, as disagreement is dispreferred, the disagreement act may sometimes be delayed by agreeing with a previous statement. This is clear in the examples mentioned, where the tokens reduce the force of the disagreement. It is also common to delay disagreements within a turn, something that *yeah nah* undoubtedly does in all of these cases (Holtgraves 1997: 225). The maxim of generosity (M1) is often used with 'intensifiedequivalents of *yes*' for agreement (Leech 2014: 93), which is demonstrated in token (11) through repetition of *yeah*, and in token (12) the repetition of *I will*. By token (12), S028 has finally agreed to the task, however it her strong use of the tokens appears to be a disagreement avoidance strategy, which is then altered when disagreement is no longer possible. Here, a maxim usually associated with agreement is used to avert being perceived negatively after an initial disagreement.

In her study on *I don't know* in NZE and British English, Grant (2010: 2290) found that where *I don't know* was used as a disagreement avoidance strategy, New Zealanders employed it far more than their British counterparts. This is only one small piece of evidence, but suggests that New Zealanders may disprefer disagreement more than other Anglo cultures. Group cohesion is an important aspect of New Zealand interactions, and certain cultural scripts have been noted for their use in conflict avoidance (Vine & Marsden 2016: 399, 401). There is also a strong link between the maintenance of social balance and the Tall Poppy Syndrome in New Zealand (Bönisch-Brednich 2008: 9). Egalitarianism is one of the highest ranking perceived characteristics of New Zealand identity (Sibley, Hoverd & Liu 2011: 23), with collegiality and friendliness also being extremely important (Holmes et al. 2012). Bönisch-Brednich (2008: 6) has observed that the emphasis placed on egalitarianism in New Zealand culture often involves 'playing down differences'. Downplaying a disagreement with a *yes* clearly demonstrates this in action. Consider Leech's (2014: 90) claim that 'collaborative speech events have no particular reason to involve politeness, as the goals of the interactants do not either compete with or contribute to the social goal'. In contrast, it is argued that in New Zealand culture, cooperation and getting along actually are social goals, as, even in cases where competing goals exist, the importance of appearing to be collaborative and egalitarian is extremely strong. Following this, collaborative speech events would in fact be expected to employ politeness strategies. In light of this evidence, it is no surprise that disagreement poses a particular problem in NZE. It seems apt then, that a cultural problem is solved by a culturally identifiable expression: *yeah nah*. It is evident, therefore, that *yeah nah* is an efficient politeness strategy and cultural marker that can moderate the expression of disagreement in a strongly egalitarian, cooperation-focussed society.

4.4 *Yeah nah*, agreement and cultural scripts

The final category to be discussed is *yeah nah* as a facilitator of agreement to express New Zealand cultural ideals. When measured against Leech's maxims, *yeah nah* most frequently filled the agreement function, and almost exclusively utilised M7 (the agreement maxim) and M8 to do this. Although *yeah nah* has been shown to be extremely useful in negotiating potential disagreements and downplaying the importance of personal opinions, it is also just as useful when dealing with opinion agreement, mainly working as a pos-politeness strategy to build up positive relationships through solidarity, harmony and informality. *Yeah nah* could also be argued to be a means of conveying affection and identity as a cultural script.

The following example (13) is only one of the many instances where *yeah nah* was used to express agreement. Here, S057 is relaying what happens in a drink driving ad which she particularly likes. Throughout the conversation, S058 repeatedly acknowledges her comprehension and shows her agreement (underlined) with S057. The token only occurs once the recount is concluded, as a final and emphatic way of expressing agreement with the other speaker's opinion.

(13) S057 /actually\\
the one I do like that I think's probably more positive is the one with the guys coming //back from the rugby game\

S058 /(bumps microphone)\\ oh yeah the o//pposite one where they\

S057 /[voc] and you sort o\\f think that they're all completely pissed including the driver

S058 yeah

S057 and he get breath- gets breath-tested and he's completely fe- clear and I thought that one was actually the first time I saw it I was quite impressed

S058 yeah - //yeah\

S057 /that it\\ gave off really positive messages ab//out - you can\ still

S058 /(bumps microphone)\\

S057 have a really really good time

S058 if one of you isn't //drinking yeah\

S057 /and an' an' i-\\ even he seemed to be having a good time

S058 exa- yeah //yep\

S057 /and he\\ wasn't sort of

S058 ye//ah\

S057 /the\\ nerdy non-drunk one or something

S058 **no that was a good one yeah**

Leech (2014: 97) states that 'agreement is the preferred response and disagreement is dispreferred' where opinions and judgments are concerned. This is particularly the case in New Zealand, where disagreement avoidance and the emphasis on harmony is high, and where being friendly and approachable is one of the most important perceived attributes of the national character and identity (Sibley et al. 2011: 23). It has been noted that New Zealanders' aversion to saying *no* and their indirect manner of getting around this problem can be a source of confusion to non-New Zealanders (New Zealand Immigration 2016). Tolerance and respect are also highly ranked perceived characteristics of New Zealand identity (Sibley et al. 2011: 23). The similarities between *eh* and *yeah nah* have earlier been remarked upon (see sections 1.4 and 4.3), and the data suggest that *yeah nah* is working as an indexical marker of culture and identity in the same way. In NZE, *eh* is strongly associated with 'group cohesion, good humour, non-seriousness and friendliness' (Vine & Marsden 2016: 399), all valued attributes in New Zealand society. When all of these attributes are considered

together, it is no surprise that New Zealanders seem to have a strong preference for agreement.

This preference is further reflected in the use of *yeah nah* as a cultural script. Vine & Marsden (2016: 389) describe New Zealand society as placing a high importance on characteristics such as 'being relaxed, informal, easy-going and laid-back'. Tinkle (2010) notes that informality and affection are becoming more and more common in the cultural scripts of death notices to demonstrate strong affection and familiarity. This indicates that, while not being universal nor universally appropriate, many New Zealanders consider informality to be more personal and thus more desirable in close relationships (Tinkle 2010). Another important aspect of cultural scripts is their ability to be 'expressively flexible' (Goddard & Wierzbicka 2004: 153). Just as previous examples have shown disagreement expressed through *yes-no* types, agreement is here proven to also be expressed through *no-yes* types. Token (13) is a *no-yes* type, as well as being a non-standard form. From this, it is clear that *yeah nah* is extremely flexible semantically and that it is context rather than word order that is important. This expressive flexibility only reinforces its nature as a cultural script.

While emphatic agreement could be expressed in many ways, replying with a phrase like *yes, I completely agree*, doesn't quite have the same level of familiarity or friendliness as a creative variation on a known cultural script, such as *no that was a good one yeah*. In this regard, *yeah nah* is not only able to express pos-politeness for agreement in NZE, but it is also a powerful means of doing so in a way that emphasises concord, cohesion and affection through informality, and thus expresses New Zealand cultural ideals.

5. Conclusion

This study has investigated the function of *yeah nah* in NZE as a method of simultaneously expressing politeness and cultural ideals. While *yeah nah* has many similarities both in expression and underlying pragmatic roots with the *yeah no* of AE, it differs markedly in its pragmatic use and semantic functions in discourse. *Yeah nah* also shows stronger realisation preferences than its Australian equivalent. It has been demonstrated to adapt to a wide variety of functions as a pos- and neg-politeness strategy, including compliment deflection and opinion hedging, and most frequently agreement and disagreement, in line with desired cultural characteristics. In all of these functions, *yeah nah* has proven itself to be an extremely potent indexical marker of New Zealand cultural ideals, and is far from static in its spoken forms. This research has broadened the existing understanding of what constitutes a *yeah nah* token, and proved that it shows considerable flexibility and creativity in how it is realised as a cultural script.

Further study is needed to verify claims that *yeah nah* is becoming more frequent in NZE, however evidence presented here suggests that this is the case. Similarly, little is still known

about who are the majority and minority users, and whether there is any variation in use outside of the Pākehā group sampled. Future investigation will no doubt bring to light a better understanding of *yeah nah* in NZE in this regard, however this research has provided valuable insight into its use. In answer to the question posed at the beginning of this study, whether *yeah nah* is a politeness strategy that indexes New Zealand culture, one is tempted to respond: yeah nah, it seems that way.

References

Bauer, Laurie & Winifred Bauer 2003. *Playground talk: Dialects and change in New Zealand English.* Wellington: Victoria University of Wellington.

Blum-Kulka, Shoshana 1987. Indirectness and politeness in requests: Same or different? *Journal of Pragmatics* 11(2): 131-146.

Bönisch-Brednich, Brigitte 2008. Watching the Kiwis: New Zealanders' rules of social interaction - an introduction. *Journal of New Zealand Studies* 6: 3-15. http://ojs.victoria.ac.nz/jnzs/article/view/131

Brown, Penelope & Stephen C. Levinson 1987. *Politeness: Some universals in language usage*. Cambridge: Cambridge University Press.

Burridge, Kate & Margaret Florey 2002. 'Yeah-no he's a good kid': A discourse analysis of yeah-no in Australian English. *Australian Journal of Linguistics* 22(2): 149-171.

Carletta, Jean, Amy Isard, Stephen Isard, Jacqueline C. Kowtko, Gwyneth Doherty-Sneddon & Anne H. Anderson 1997. The reliability of a dialogue structure coding scheme. *Computational Linguistics* 23(1): 13-31. http://hdl.handle.net/1842/1227

Donaldson, Bruce C. 1993. *A Grammar of Afrikaans*. Mouton de Gruyter : Berlin.

Goddard, Cliff & Anna Wierzbicka 2004. Cultural scripts: What are they and what are they good for? *Intercultural Pragmatics* 1: 153-166. doi:10.1515/iprg.2004.1.2.153

Grant, Lynn E. 2012. Culturally motivated lexis in New Zealand English. *World Englishes* 31(2): 162-176. doi:10.1111/j.1467-971X.2012.01738.x

Grant, Lynn E. 2010. A corpus comparison on the use of *I don't know* by British and New Zealand speakers. *Journal of Pragmatics* 42: 2282-2296. doi:10.1016/j.pragma.2010.01.004

Halliday, Michael Alexander Kirkwood & Ruqaiya Hasan 1976. *Cohesion in English*. London: Longman Group Limited.

Hay, Jennifer, Margaret A. Maclagan & Elizabeth Gordon 2008. *Dialects of New Zealand English.* Edinburgh: Edinburgh University Press.

Health Promotion Agency n.d. Say yeah, nah. http://www.alcohol.org.nz/resources-research/campaigns/say-yeah-nah (11 August 2016)

Hoek, Jet 2013. Yeah no, I agree? The interpretation of yes and no in Dutch. Unpublished Master's thesis, Radboud University, Nijmegen, The Netherlands. https://www.google.co.nz/search?q=yeah+no+i+agree&ie=utf-8&oe=utf-8&client=firefox-b-ab&gfe_rd=cr&ei=L2mtV_frD8fr8AeV2oLYDA#q=yeah+no+i+agree+ja+nee+hoek

Holmes, Janet, Meredith Marra & Bernadette Vine 2012. Politeness and impoliteness in ethnic varieties of New Zealand English. *Journal of Pragmatics* 44(9): 1063-1076.

Holmes, Janet 1987. Hedging, fencing and other conversational gambits: An analysis of gender differences. In Anne Pauwels (ed.), *Women and Language in New Zealand Society*. Sydney: Australian Professional Publications. 59-79.

Holmes, Janet 1986. Compliments and compliment responses in New Zealand English. *Anthropological Linguistics* 28(4): 485-508. http://www.jstor.org.helicon.vuw.ac.nz/stable/30028355

Holtgraves, Thomas 1997. Yes, but…:positive politeness in conversation arguments. *Journal of Language and Social Psychology* 16(2): 222-239.

Jurafsky, Daniel, Elizabeth Shriberg & Debra Biasca 1997. Switchboard SWBD-DAMSL shallow-discourse-function annotation coders manual, draft 13. Technical Report TR 97-02, University of Colorado at Boulder and SRI International. https://web.stanford.edu/~jurafsky/ws97/manual.august1.html (20 October 2016)

Labov, William 1991. The intersection of sex and social class in the course of linguistic change. *Language Variation and Change* 2(2): 205-254. doi:10.1017/S0954394500000338

Leech, Geoffrey 2014. *The Pragmatics of Politeness*. New York: Oxford University Press.

Leech, Geoffrey 2002. Language, culture and politeness. *House Humanities Journal* 58: 57-89. http://www.dbpia.co.kr.helicon.vuw.ac.nz/openurl/?arid=1841500

Macalister, John 2006. The Māori presence in the New Zealand English lexicon, 1850-2000: Evidence from a corpus based study. *English World-Wide* 27(1): 1-24.

Meyerhoff, Miriam 1994. Sounds pretty ethnic, eh?: A pragmatic particle in New Zealand English. *Language in Society* 23(3): 367-388. http://www.jstor.org/stable/4168535

Moore, Erin 2007. Yeah-No: A discourse marker in Australian English. Unpublished honours thesis, University of Melbourne, Melbourne, Australia. http:hdl.handle.net/11343/39316

New Zealand Immigration 2016. Customs and communication. https://www.newzealandnow.govt.nz/living-in-nz/settling-in/customs-communication (30 October 2016)

Pomerantz, Anita 1985. Agreeing and disagreeing with assessments: Some features of preferred/dispreferred turn shapes. In J. Maxwell Atkinson & John Heritage (eds), *Structures of social action: Studies in conversation analysis*. Cambridge: Cambridge University Press. 57-101. doi:10.1017/CBO9780511665868

Sibley, Chris G., William James Hoverd & James H. Liu 2011. Pluralistic and monocultural facets of New Zealand national character and identity. *New Zealand Journal of Psychology* 40(3): 19-29.

Taylor, Isaac 2016. Here's how to translate any combination of "yeah, nah." *M2.* http://www.m2now.co.nz/heres-how-to-translate-any-combination-of-yeah-nah/ (11 August 2016)

Tinkle, Jenna 2010. 'Love ya and miss ya heaps!': Evidence of changing cultural scripts in New Zealand death notices. *NZ Words (Online)* 14: 3-5. Melbourne: Oxford University. Press. http://ndhadeliver.natlib.govt.nz.helicon.vuw.ac.nz/delivery/DeliveryManagerServlet?dps_pid=IE2605464

Traugott, Elizabeth Closs 1982. From propositional to textual and expressive meanings: Some semantic-pragmatic aspects of grammaticalization. In Winifred P. Lehmann & Yakov Malkiel (eds), *Perspectives on Historical Linguistics*. Amsterdam: John Benjamins.

Vine, Bernadette & Sharon Marsden 2016. Eh at work: The indexicality of a New Zealand English pragmatic marker. *Intercultural Pragmatics* 13(3): 383-405. doi:10.1515/ip-2016-0016

Warren, Paul 2002. NZSED: Building and using a speech database for New Zealand English. *NZ English Journal* 16: 53-58. http://search.informit.com.au/fullText;dn=596453763969271;res=IELNZC

Wierzbicka, Anna 2001. Australian culture and Australian English: A response to William Ramson. *Australian Journal of Linguistics* 21(2): 195-214.

Wierzbicka, Anna 1986. Does language reflect culture? Evidence from Australian English. *Language in Society* 15(3): 349-373.

Wellington Working Papers in Linguistics (WWPL)

Policy Guidelines

1. The WWPL are a production of the School of Linguistics and Applied Language Studies at Victoria University of Wellington.

2. The primary objective of the WWPL is to provide an initial avenue of publication for high quality material in the area of linguistics produced by students and staff of the department.

3. Contributions may take the form of papers, reviews, squibs, critical commentary etc.

4. Issues of the WWPL will be produced as opportunity to publish appropriate material arises, with the aim of producing at least one issue per year.

5. Any member of staff (including Research Fellows) may act as editor of an issue of WWPL. Guest editors may be appointed on occasion.

6. The content of the WWPL will usually include material produced by post-graduate students and staff, but, in special circumstances, may include contributions from people outside the School.

7. Copyright remains with the author(s) of contributions. Authors are welcome to publish contributions to WWPL in other journals. It would be appreciated if a re-published article contained an acknowledgment that the article had been first published in WWPL.

8. The School should be informed of issues planned by individual staff members.
9. Authors will receive one free copy of the issue in which their contribution appears.

Contents of Volumes 1-21

Maria Stubbe
What's the score? Qualitative analysis in gender research.

Number 6, 1994

Anita Easton
Talk and laughter in New Zealand women's and men's speech

Jen Hay
Jocular abuse in mixed gender interaction

Janet Holmes & Allan Bell
Consonant cluster reduction in New Zealand English

Camille Plimmer
Language maintenance and shift in the Italian community in Wellington

Number 7, 1995

Laurie Bauer
Is the morpheme dead?

Jen Hay
The Adjacency Condition and the Atom Condition: compatible morphological constraints

Elizabeth Pearce
V-movement and optionality

Paul Warren
The sound of desert trains: delay strategies and constraints in spoken sentence processing

Number 8, 1996

Jen Hay
No laughing matter: gender and humour support strategies

Gary Johnson
The management of interaction in the television interviews of Maggie Barry

Shelley Robertson
Maori English and the bus-driving listener: a study of ethnic identification and phonetic cues

Ben Taylor
Gay men, femininity and /t/ in New Zealand English : Report on Research in Progress

Janet Holmes & Chris Lane
Interactional variation in environmental interviews

Book Review
Mary Crawford *Talking Difference.* Reviewed by Janet Holmes

Number 9, 1997

Diane Massam
Three faces of Niuean *aki**

Elizabeth Pearce
DP licensing and Spec roles in Maori

Elizabeth Pearce
Genitive case in the Maori DP

Shizuka Torii
Two types of evaluation time and subject marking in Japanese

Gloria Hu
Phonological awareness in young Cantonese-Mandarin bilinguals

Megan Rae & Paul Warren
The asymmetrical change in progress of NEAR and SQUARE vowels in NZE: psycholinguistic evidence

Jen Hay & Paul Warren
Experiments on /r/-intrusion

Volume 15, 2003

Edited by Paul Warren

Helen Ainsworth
How she says it and how he says it – differences in the intonation of dairy farming women and men in South Taranaki

Patricia Vermillion
The ups and downs of Kiwis: An experiment investigating tonal cues used to identify NZE intonation

Paul Warren, Shari Speer & Amy Schafer
Wanna-contraction and prosodic disambiguation in US and NZ English

Joel Zwartz & Paul Warren
This is a statement? Lateness of rise as a factor in listener interpretation of HRTs

Volume 16, 2004

Julia de Bres
Intergenerational attitudes towards Dutch language maintenance in New Zealand

Jeh Sie Tan
The use of *got* in Malaysian English

Stephanie Schnurr
How female leaders use humour to integrate their professional and their gender identities

Janet Holmes
Monitoring, mentoring and managing: the complexities of workplace discourse

Luke McCrohon
'2B or nt 2B': Txt speak as an in-group marker

Ann Weatherall
'Whr r u? tb!': A preliminary study of language use in young people's text messages

Volume 17, 2005

Kalangis Bembe & Elizabeth Pearce
Unua texts

Laura Dimock
The bilabial trill in Unua

Glorious Oxenham, Elizabeth Pearce & Agnes Terraschke
Roviana text

Martin Paviour-Smith
Mood marking on Malakula

Martin Paviour-Smith & Willy Makenzie
Exacting the hen's revenge: An initial enquiry into the nature of narrative in Aulua

Elizabeth Pearce
The reflexes of Proto-Oceanic *na in Unua