

**A comparative corpus-based analysis of the
cross-cultural lexico-grammatical differences
between master's level academic writing in New
Zealand and the United States.**

By Pakkawan Udomphol

A dissertation submitted to
Auckland University of Technology
in partial fulfilment of the requirements for the degree of
Master of Language and Culture

November 2022

School of Language and Culture

Abstract

While lexico-grammatical differences in academic writing have been a key focus of research in cross-cultural rhetoric, there have been no studies focusing on the differences between English-medium master's level academic writing in New Zealand and the United States. This is despite the fact that many international post-graduate students and academic literacies courses in New Zealand rely on coursebooks developed in the United States, for example, Swales and Feak's (2012), *Academic Writing for Graduate Students*.

In order to examine lexico-grammatical differences in English-medium master's level writing between these two countries, two 860,000-word corpora of master's level writing were compiled: one containing master's level academic writing from universities in New Zealand, and the other containing master's level academic writing from universities in the United States. Using the resources of corpus analysis, such as frequency, collocation and concordance analysis, the occurrence of a number of lexico-grammatical features across the two corpora were examined and compared. These features examined included pronominal choice, phrasal verbs, reporting verbs, and the use of hedges and boosting, all areas that had been identified in contrastive rhetoric studies as exemplifying cross-cultural difference.

This study reveals that overall there are many similarities between master's level academic writing in New Zealand and the United States. The notable exceptions, however, involve pronominal use, and the degree of confidence expressed towards academic claims, whether the student's own, or those reviewed from the scholarly literature. The study concludes with a number of implications for teachers and supervisors of L2 master's students studying in a New Zealand university, and for coursebook writers of English for Academic Purposes at the post-graduate level.

Table of Contents

Chapter 1: Introduction.....	8
1.0 Overview	8
1.1 Differences in academic writing across cultures.....	8
1.2 English as the academic lingua-franca	10
1.3 English language instruction in universities and the US oriented course books.....	10
1.4 The aim of the study.....	12
1.5 Organisation of chapters.....	13
Chapter 2: Literature review	15
2.0 Introduction.....	15
2.1 Writing across cultures.....	15
2.2 Cross cultural characteristics of student academic writing.....	17
2.2.1 Hedges in academic writing across cultures	17
2.2.2 Boosters in academic writing across cultures	19
2.2.3 Authorial identity in academic writing across cultures	20
2.2.4 Phrasal verbs in academic writing across cultures	21
2.2.5 Reporting verbs in academic writing across cultures	22
2.3 The implications of cross-cultural research into academic writing....	24
2.4 Academic writing and corpus analysis.....	25
2.4.1 The corpus analysis of academic writing across cultures	27
Chapter 3: Methods	30
3.0 Introduction.....	30
3.1 Research paradigm	31
3.2 Corpora and corpus linguistics.....	31
3.3 Corpus data	32
3.3.1 Data collection.....	32
3.3.2 Corpus size.....	35

3.4 Corpus analytical procedures.....	35
3.4.1 Sketch Engine.....	35
3.4.2 Frequency analysis	36
3.4.3 Concordance analysis	36
3.4.4 Collocation analysis.....	37
3.4.5 Statistical Significance.....	37
3.5 The scope of the analysis.....	37
3.6 General vs discipline specific academic analysis.....	38
3.7 Conclusion	38
Chapter 4: Results.....	40
4.0 Introduction.....	40
4.1 Hedges and Boosters	40
4.1.1 Modal verbs	41
4.1.2 Modal adverbs.....	44
4.1.3 Modal adjectives.....	46
4.1.4 Summary: Hedges and Boosters	48
4.2 Personal pronouns	49
4.2.1 Verb collocations with I.....	50
4.2.2 Summary: Personal pronouns	52
4.3 Phrasal verbs.....	53
4.3.1 Summary: Phrasal verbs	55
4.4 Reporting verbs.....	56
4.4.1 Summary: Reporting verbs	59
Chapter 5: Discussion	60
5.0 Introduction.....	60
5.1 Overall findings.....	60
5.2 Key findings in the various areas of analysis	61
5.2.1 Hedges and boosters	61
5.2.2 Authorial identity.....	61
5.2.3 Phrasal verbs	62
5.2.4 Reporting verbs	62

5.3 Implications	62
5.3.1 Implications for academic writing lecturers and their students...	62
5.3.2 Implications for supervisors of master's level academic writing	64
5.3.3 Implications for general academic writing course book writers.	64
5.4 Limitations of the research	65
5.5 Possibilities for further research.....	66
5.6 Conclusion	66
References	67

List of tables

<u>Table 3.1:</u> The data collected for the MNZAW	33
<u>Table 3.2:</u> The data collected for the MUSAW	33
<u>Table 4.1:</u> The top ten most frequent modal verbs in the MNZAW corpus and MUSAW corpus	41
<u>Table 4.2:</u> The distribution of the levels of modal verbs represented in the MNZAW corpus and MUSAW corpus	42
<u>Table 4.3:</u> The top ten most frequent modal adverbs in the MNZAW corpus and MUSAW corpus	44
<u>Table 4.4:</u> The distribution of the levels of modal adverbs represented in the MNZAW corpus and MUSAW corpus	45
<u>Table 4.5:</u> The top ten most frequent modal adjectives occurring (after ‘It is’) in the MNZAW corpus and MUSAW corpus	46
<u>Table 4.6:</u> The distribution of the levels of modal adjectives represented in the MNZAW corpus and MUSAW corpus	47
<u>Table 4.7:</u> The five most frequent self-mentions in the MNZAW corpus and MUSAW corpus	49
<u>Table 4.8:</u> Verb collocations (lemmas) occur with “I” in the MNZAW corpus and MUSAW corpus	50
<u>Table 4.9:</u> Concordances of I wanted in the MNZAW corpus	51
<u>Table 4.10:</u> The eighteen most frequent phrasal verbs in the MNZAW corpus and MUSAW corpus	53
<u>Table 4.11:</u> The top nineteen most frequent reporting verbs in the MNZAW corpus and MUSAW corpus	56
<u>Table 4.12:</u> The distribution of three main classifications of reporting verbs in the MNZAW corpus and MUSAW corpus using Hyland’s (2002) framework	58

List of figures

<u>Figure 2.1:</u> Cultural thought patterns in intercultural education	15
--	----

Attestation of Authorship:

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed:

Date: 11/11/2022

Acknowledgements

I would like to extend my sincere thanks to all those who have assisted me during my study and were invaluable to the completion of this project. Firstly, I would like to express my deepest appreciation to my supervisor Dr Darryl Hocking, who guided me step by step through the study and provided insights into corpus linguistics, as well as the knowledge and tools required to learn statistics. He provided much support and motivated me during this study. Words cannot express my gratitude for his invaluable patience and feedback. Without Darryl's assistance and outgoing personality, the project would not have been as near as complete as it is today. Thank you for contributing to my initial research ideas, taking an interest in my topic, and believing in me and my potential. Furthermore, I would also like to extend my gratitude to the AUT School of Language and Culture, and in particular, the Pro Vice-Chancellor International's Excellence Scholarship which contributed \$20,000 in tuition fees for my first year. I would also like to thank my lecturer from Thailand, Dr Anuchit Toomaneejinda for not only providing the scholarship reference letter, but for his tireless efforts in keeping me motivated. Finally, I wish to acknowledge the support I have received from my family and friends during this study. A special thank you to my father Chatchai Udomphol and my mother Ananya Udomphol who were my personal cheerleaders throughout this project, as they have been throughout my entire life. I also thank my special friend, Bhurivith Sukasem, for looking after me and being an emotional support. Their belief in me has kept my spirits, enthusiasm, and motivation high during this process.

Chapter 1:

Introduction

1.0 Overview

This dissertation employs a corpus-based analysis to examine cross-cultural lexico-grammatical differences between master's level academic writing in New Zealand and the United States, both countries where English is an official language and the main medium of instruction in higher education. The study will add to the research on cross-cultural differences in academic writing, in particular to the small number of studies which focus on differences in academic writing between countries where English is a first or official language.

In order to provide a background and motivation for the study, this chapter will firstly introduce the notion of difference in writing across cultures. Secondly, it will discuss the concept of English as an academic lingua franca, and the issues that this raises for L2 speakers of English, especially those L2 international students who attend universities in the New Zealand context where US produced course books are often used for the teaching of academic writing. Finally, the focus of the study will be discussed, after which a description of the organisation of the subsequent chapters will be provided.

1.1 Differences in academic writing across cultures

Language and writing are generally understood as a specifically cultural phenomena, with each language having its own identity and rhetorical rules (Connor, 1996). One of the first to express this view was Kaplan (1966) when he examined the writing processes of students from various countries and found that they used writing patterns and styles that were extremely dissimilar

from those of English speakers. In a later study, Kaplan (1987) examined the studies of ESL students and discovered that, in addition to grammatical and surface issues, they also exhibited characteristic differences at the paragraph level. Kaplan classified these into five different patterns; English, Semitic, Oriental, Romance and Russian, and showed, for example, that in contrast to Asian writing, whose development of ideas might be described as circular, Anglo-European explanatory writings follow a linear development (see Section 2.2 for further details). Although they are now often critiqued as ethnocentric (Hinds, 1983), the field of Contrastive Rhetoric, nevertheless, which emerged from Kaplan's studies and was further developed by Ulla Connor (1996, 2002), has had important implications for the teaching of academic writing to international L2 speakers in English medium universities, especially given the ever-increasing number of international students attending these universities (Zhang, 2018).

Since Kaplan's initial observations, many applied linguists have examined the differences in academic writing styles among authors of different cultural backgrounds (e.g., Khoutyz, 2013; Le Ha, 2011; Mauranen, 1993; Siepmann, 2006; Valero-Garcés, 1996). The majority of these studies have focused on a range of lexico-grammatical differences in writing between English academic writing and writing from other cultural backgrounds. As an example, Zhang (2018) investigated differences in the different academic writing styles of Chinese and British students. He found that in terms of argumentation, Chinese scholars exhibited high collectivism and avoid uncertainty, while British scholars tended to use the academic features expressing individualism and exhibited low uncertainty avoidance. Moreover, Can and Cangir (2019) compared the use of self-mention markers in English language doctoral dissertations from Turkey and the United Kingdom. Their study indicated that the first-person singular pronoun is preferred in the Turkish context, while the British context, on the other hand, tends to employ the first-person plural. Interestingly, very few studies have examined differences between the writing of L1 English-speaking countries, such as Australia, England, New Zealand and the United States. Chapter 2 will provide a more in-depth overview of studies on cross-cultural differences in academic writing.

1.2 English as the academic lingua franca

By the late 20th century, cross-cultural differences in writing became a serious topic of research. In part, this is because, as English came to be used by more people than any other language worldwide, it became the language of international communication, in particular for academic and scientific writing (Gotti, 2012). English ultimately became acknowledged as an academic lingua franca, with the majority of content in academic journals published in English, especially in the scientific disciplines (Hyland, 2006). As such, the Anglo-American academic writing style has therefore unavoidably become the norm for contemporary international academic communication. One consequence of this is that non-Anglophone academics and post-graduate students have been compelled to re-evaluate their own writing styles in light of what is required of them in order to publish in English medium journals (Lakić et al., 2015). In doing so, they encounter differences in style that make writing challenging; distinctions which, as discussed, are often seen as resulting from differences in cultural backgrounds (Clyne, 1987; Flowerdew, 1999; Fox, 1994; Nasiri, 2012). Nevertheless, some academic writers from non-English speaking cultures, tend to adhere to their own national writing styles, even when they are writing in English for international journals. This is because they are often not familiar with the expectations of academic communication and academic writing patterns in English (Lakić et al., 2015). In this way, they risk having their articles rejected by the editors of international publications. Alternatively, when they are accepted for publishing, research articles shaped by their national writing styles might receive a poor reception from international readers due to their much less powerful communicative effect. Findings from the field of contrastive rhetoric can help prevent the difficulties that these L2 writers of academic English might face.

1.3 English language instruction in universities and the US oriented course books

While rare, studies in contrastive rhetoric have also identified differences in the academic and formal writing expectations of those cultures where English is a first or official language (e.g., Biber, 1987; Connor & Lauer, 1988;

Kruger et al., 2019). Such differences may have consequences for the teaching of academic writing in these countries. L2 students, for example, often prepare for the writing requirements and expectations of their study in English medium universities by attending classes in English for Academic Purposes. In the New Zealand context, these courses often draw upon, or are at least influenced by textbooks developed in the United States and written by US academics, including for example, *Academic Writing for Graduate Students: Essential Tasks and Skills* (Swales & Feak, 2012), *English in Today's Research World: A Writing Guide* (Swales & Feak, 2011), *Academic Writing: Exploring Processes and Strategies* (Leki, 1998) and *Introduction to Academic Writing* (Oshima & Hogue, 2007). A number of these EAP courses and their textbooks are targeted at L2 post-graduate students (e.g., Swales & Feak, 2011, 2012), and are often driven by a formalist writing pedagogy that focuses on discrete and transferable skills (Hocking & Toh, 2010), providing little attention to the concept of academic writing as a culturally specific phenomenon.

While the use of US produced course books for academic writing instruction in the New Zealand context is, in part, due to the absence of locally produced books, a preference for materials produced by the US also has a long history in language teaching. As a result of the exponential increase in the number of non-native English speakers over the past several decades, English Language Teaching (ELT) publishers have more generally created coursebooks for a global market, saying that the prepared materials are able to cater to the needs of all learners around the world (Parsaiyan & Garshasbi, 2021). According to Parsaiyan and Garshasbi (2021), numerous English language schools who base their curriculum on these coursebooks, train their teachers accordingly, share their content with language learners, use them as a gauge of progress, and alter their educational system because they are seen as standard and quality-controlled products. Furthermore, the US coursebooks and materials adopted in many countries are generally perceived as prestige varieties (Buckledee et al., 2010).

Interestingly, a few studies have undertaken a cultural analysis of the mainstream ELT materials used in non-native English countries (Bayyurt,

2006; Sung, 2014; Takahashi, 2014). These studies generally found that both the American and British textbooks were strongly oriented towards target-culture information. Furthermore, in another study, Aliakbari (2004) carried out an analysis of local English textbooks in high schools in Iran and found that these books were not efficient in developing intercultural competence, or cultural understanding among students, since international cultural elements were often excluded from these books (see also Bori, 2021). Bori also noted, however, that teachers in non-native English countries were “against locally produced textbooks, biased by the powerful propaganda of the global ELT industry, which favours native speakers and US produced textbooks as the major authority in language education” (p. 195). As a result, the majority of the course books for both general and academic English continue to be produced in the United States.

1.4 The aim of the study

In order to evaluate evidence of a difference in the academic writing conventions of New Zealand and the United States, this study carries out a comparative corpus-based analysis of the lexico-grammatical differences between master’s level academic writing of the two countries. The focus is specifically on master’s level writing because of the large number of easily accessible master’s theses available on university websites in both New Zealand and the United States. Masters’ programmes are also seen as an important first step into the research world and are perhaps the first academic level associated with the writing, submission, and publication of journal articles. The study is also corpus-based, as corpus linguistics enables a researcher to count, analyse and consider large collections of authentic written texts stored on computers (Kennedy, 2014; McEnery et al., 2006; Reppen & Simpson-Vlach, 2019), and as Reppen and Simpson-Vlach (2019) suggest, corpus linguistics is a very potent instrument for the analysis of natural language and can offer enormous insights into how language use differs across various contexts. In particular, corpus linguistics has also proved useful at analysing cross-cultural lexico-grammatical differences in academic writing (Hardt-Mautner, 1995; Hyland, 2002; Tribble, 2014). As a result, and in order to carry out this study, two specialised corpora containing

master's level theses were developed. The first involves master's theses collected from a range of New Zealand universities, while the second involves master's theses collected from a range of universities in the United States. This study seeks to answer the following question:

What are some of the key lexical and grammatical differences between master's level academic writing in New Zealand and the United States?

As indicated, the study will contribute to research on cross-cultural differences in academic writing, in particular to those rare studies which focus on differences in academic writing in countries where English is a first or official language. A secondary outcome of the study is to evaluate whether the popular US produced academic writing course books are suitable for the teaching of academic writing instruction in the New Zealand context.

1.5 Organisation of chapters

This study is divided into five chapters. Chapter 2 provides a review of the existing scholarly literature related to this study. The literature review will begin with a focus on introducing early studies on writing across cultures, as well as the theoretical discussions that surrounded these studies. The chapter will then focus more intently on studies examining a variety of distinct cross-cultural traits of student academic writing. It will also review studies which employ corpus analysis to investigate how academic master's level papers differ between two or more cultures. Finally, the study will discuss some of the benefits that cross-cultural academic writing studies may offer to students.

Chapter 3 first provides an overview of the methods used in this study. It begins by providing a brief review of the research paradigm underpinning the study, after which the collection and composition of the two specialised corpora developed for this analysis are discussed. It then provides details of the corpus-assisted resources and approaches used to carry out the analysis of the two corpora, including frequency, collocation and concordance analysis. The chapter also introduces the Sketch Engine software (Kilgarriff et al.,

2014) which facilitates the comparison and contrast of the lexico-grammatical characteristics of the two corpora.

Chapter 4 provides the results of the analysis into the different lexico-grammatical features of master's level writing in New Zealand and the United States, focusing in particular on a number of key features regularly discussed as exhibiting cross-cultural differences in the scholarly literature, including hedges and boosters, authorial identity, phrasal verbs, as well as reporting verbs. These results will initially focus on frequency tables, however where necessary, concordance lines illustrating characteristics from the two corpora will be presented so that further conclusions regarding the employment of the features in their broader textual contexts can be drawn. The study also involves collocation analysis in order to learn more about the specific link between certain terms and how they might differ across the two corpora.

Chapter 5 concludes with a consideration of the major findings. Following that, this study discusses the implications the study may have for future research in the area for students, their instructors and supervisors, as well as for course book writers. The chapter then discusses the potential limitations of the study. Lastly, the chapter provides a final overall reflection.

Chapter 2:

Literature review

2.0 Introduction

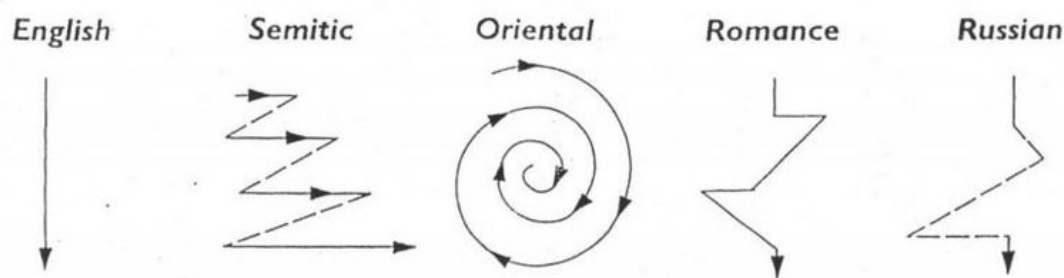
In order to provide a background for this study on the cross-cultural differences between master's level academic writing in New Zealand and the United States, this chapter will provide an overview of scholarly literature that has investigated cross-cultural features of academic writing. The chapter will begin by introducing early research into writing across cultures, including the debates that pervaded these studies. The chapter will then look more specifically at studies focusing on a range of specific cross-cultural characteristics of student academic writing. It will then review research that uses corpus analysis to investigate cross-cultural differences in academic writing. Finally, the study will discuss some of the outcomes for students offered by research into academic writing across cultures.

2.1 Writing across cultures

One of the earliest works on cross cultural comparison of writing is Kaplan (1966). Kaplan suggested that different writing styles might reflect the different languages and cultures of writers. He based his views on an investigation of cross-cultural differences in paragraph organization of five different groups of students: English, Semitic, Oriental, Romance and Russian.

Figure 2.1

Cultural thought patterns in intercultural education (Kaplan, 1966: 21)



As represented by the diagrams in Figure 2.1 above, Kaplan found that English writing (which also includes Germanic languages such as German, Dutch, Norwegian, Danish, and Swedish) involves a direct and linear form of communication, while Oriental languages, such as Chinese and Japanese involve an indirect form of communication. He also found that Semitic languages, such as Arabic or Hebrew, are based on a series of parallel coordination clauses, and that there is a similarity between Romance languages (i.e., French, Italian, Romanian and Spanish) and Russian languages, both of which often communicate in a digressive way. Kaplan (1966) concluded by stating that cultural differences in thought have an impact on writing patterns.

However, some studies have criticised Kaplan's description of the impact of cultural thought patterns on writing. For example, Matalene (1985) argued that Kaplan's framework is unreliable because his focus was on the examination of paragraphs produced by non-native students in US institutions, rather than the study of the discourse tactics of writers in their real-world cultural contexts. Similarly, Mohan and Lo (1985) examined various examples of ancient and modern Chinese literature and found that, in contrast to Kaplan (1966), both Chinese and English reflected a straightforward style of expression. They concluded that there was no evidence that such texts were organised in a culture-specific manner. Other research has identified important parallels in the writing practices of different cultures, for example, Silva (1993) and Long (2004). Nevertheless, despite these studies and the earlier critiques of Kaplan's work, there is an increasing amount of research which has identified significant disparities in the lexicogrammar and discourse structure of written texts across various languages and

cultures (Paltridge, 2012). Of these, Connor's (1966) publication *Contrastive Rhetoric: Cross-cultural Aspects of Second Language Writing* provides an important progression for the field of cross-cultural writing by investigating the effects of culture on many aspects of textual organisation, including cohesion, coherence, and schematic structure. Importantly, Connor (1966) argues that knowledge of contrastive rhetoric is helpful for second language learning and teaching, in particular academic writing. As a result, the lexicogrammar and discourse structure of student academic writing across different languages and cultures became the subject of much research in the field of contrastive and intercultural rhetoric. These studies will be discussed in the next section.

2.2 Cross cultural characteristics of student academic writing

Studies investigating cross cultural differences in student academic writing have compared differences in academic writing between a range of different countries, and have focused on different areas of academic writing, including hedging, the use of boosters, authorial identity (including the use of personal pronouns), phrasal verbs and reporting verbs. The following sub-section discusses the findings of a number of these studies. It is important to note that some of the studies focus on cross-cultural differences in academic writing in different languages, while other studies focus on the differences in academic writers from different cultures writing in English. In this latter group of studies, the comparison is sometimes between native speakers of English and non-native speakers (e.g., academics from non-English speaking cultures writing in English, or ESL students at English medium universities writing in English). In only a few instances, it is between native speakers of English from different cultural backgrounds (i.e., American English and British English).

2.2.1 Hedges in academic writing across cultures

According to Hyland, (1998), hedges, such as *possible*, *might*, and *perhaps*, are lexical devices used to express a writer's lack of confidence or to cautiously state something. They can also be used to express scepticism,

imply that information is being provided as an opinion, or express reverence, humility, and respect for others' opinions.

Yang (2013), for instance, investigated the use of hedges in English and Chinese scientific writing, focusing in particular on the frequency and types of hedges across different cultures. She found that hedges were much more frequently employed in English scientific articles than in Chinese scientific journal articles. Yang suggested that for Chinese academics the use of hedges suggests ambiguity and vagueness and can be seen as undermining their research's trustworthiness. Chinese researchers also tend to express scientific claims more authoritatively and extensively, while English-researchers frequently use hedges to reduce knowledge claims or the author's commitment to their assertions. However, according to Yang (2013), both English and Chinese researchers use similar types of hedges, including epistemic adverbs, adjectives, and nouns, as well as lexical verbs.

Similarly, Mur-Duenas (2021), who analysed the use of hedges in English and Spanish research articles in the field of Business Management, demonstrated that hedges were employed in greater numbers by English scholars compared to Spanish scholars. He suggests that different cultural customs and traditions might explain the differences in hedge usage, or, more broadly, why researchers offer information in a more or less hesitant manner. In addition, Spanish researchers may be influenced by the possible inclination in Spanish culture for powerful communication. Their study also found that hedges are mostly located in the Discussion section and least frequently in the Methods sections of both English and Spanish research articles. According to Mur-Duenas (2021), lexico-grammatical hedging categories, modal verbs, and lexical verbs were the most frequently used in the scholarly disciplines.

In another example, Loi and Lim (2019) compared the use of hedges in English and Malay educational research articles. They found that hedges were employed less by the Malay writers (writing non-English texts) than the English writers, particularly in the Discussion sections where the English writers used over twice as many hedges. This comparatively more frequent

usage of hedges in English texts is consistent with the findings of Yang (2013), Donadio and Passariello (2022), Vassileva (2001) as well as Mur-Duenas (2021), who all illustrated that their sampled collection of non-English texts, in Chinese, Italian, Bulgarian, and Spanish respectively employed fewer hedges than conventionally found in English writing. Importantly, these studies suggest that many writers of non-English nationality strive to maintain their cultural identity through the general organisation of their speech and, in particular, the expression of detachment, regardless of the language they employ.

2.2.2 Boosters in academic writing across cultures

Boosters refer to a writer's confidence and devotion to the claims that authors use in discourse to express conviction and assert a proposition, such as *clearly*, *obviously*, and *certainly*. The use of boosters can also indicate a desire for reader involvement and unity, emphasising the notion of shared information, group membership, and direct connection with readers (Hyland, 1998). As with the use of hedges, a number of studies have demonstrated cross-cultural differences in the use of boosters.

Hu and Cao (2011), for example, examined boosters in the abstracts of Applied Linguistics journal articles in English and Chinese. They found that boosters were used slightly more in the Chinese abstracts, than they were in English abstracts. Hu and Cao (2011) argued that the observed differences in booster use are possibly due to cultural factors. They suggest that Chinese rhetorical norms encourage the framing of ideas in non-polemical terms, compared to Anglo-American rhetorical standards. Thus, it can be seen that the writers of abstracts in English seemed more cautious and tentative, and used boosters less, whereas the authors of abstracts in Chinese tended to adopt more authority and confidence.

Hu and Cao's (2011) study is very similar to that of Vassileva (2001), who investigated differences in the use of boosters in English and Bulgarian linguistics journal articles. They focused on the three main parts of the article, namely the introduction, discussion, and conclusion. Vassileva demonstrated that boosters were employed at a moderately lower rate in the English articles,

than they were in the Bulgaria articles, particularly in the Discussion section. The study pointed out that Bulgarian writers preferred to declare their opinions clearly and strongly, without allowing for potentially conflicting ideas.

On the other hand, Donadio and Passariello (2022) explored the use of boosters in English and Italian medical research articles in terms of frequency and function. They found that the use of boosters in the English articles was dramatically higher than in Italian, particularly in the disciplinary fields of Cardiology, Oncology, and Psychiatry. However, they also observed that the boosters were used in far lower numbers than hedges in both languages, indicating that authors were more concerned with avoiding dangers than stressing what they perceive to be certainties. As a result, it could be argued that the researchers examined in this study softened their academic language and strengthened their protection against possible debates which could be related to their assertions.

2.2.3 Authorial identity in academic writing across cultures

According to Hyland (2002), authorial identity is the writers' expression of their personal self in the text. It typically involves the use of pronouns which are crucial to meaning and credibility, as these encourage writers to prove their personal connection and commitment to their words and develop a relationship with their readers. Hyland, however, found that students tend to utilise authorial references infrequently and prefer to avoid them in their arguments or claims.

Çandarlı et al. (2015) investigated such authorial presence markers used by American students in argumentative essays. She found that first-person pronouns were the least commonly used authorial presence markers in American students' English essays (Çandarlı et al., 2015). In terms of student's attitudes, Çandarlı et al. (2015) pointed out that they were mostly aware of the use of stance markers. In addition, Çandarlı et al. (2015) indicated that a culturally conditioned power dynamic limited their usage of the first-person singular pronoun as they were taught to avoid the use of the first-person pronoun in their academic writing.

Tang and John (1999), who examined how the first-person pronoun revealed the identities of student writers and considered the implications of findings for critical thinking and writing education, found several functions in the use of the first-person pronoun. Students mostly used the first-person pronoun in a representative role in order to indicate common knowledge and represent the authors' viewpoint in the linguistics discourse community (Tang & John, 1999). They suggested that students should be aware of such language choices in their academic writing as it could reflect their identities. Therefore, providing students with an understanding the lexico-grammatical options available regarding authorial identity may help students best present themselves in their writing.

In another example, Işık-Taş (2018) compared the representation of authorial identity through the use of first-person pronouns in sociology research articles written by Turkish and English scholars. She found that for both groups, first-person pronouns were mainly employed when expressing authors' opinions. Işık-Taş also demonstrated that English native speakers tended to use the first-person pronouns significantly more often than Turkish writers, suggesting that Turkish educational institutions typically encouraged students to avoid the first-person pronouns in their academic texts. Thus, a contrast is clearly evident between the way that English and Turkish academic writers establish authorial identity in their respective writing cultures.

2.2.4 Phrasal verbs in academic writing across cultures

Alangari et al. (2020) describe phrasal verbs as two- or three-part verbs consisting of a lexical verb followed continuously or discontinuously by an adverbial particle that acts lexically or syntactically as a single verb to some extent. Using corpus analysis, Alangari et al. (2020) investigated the use of phrasal verbs in professional academic writing across various academic disciplines, with a particular focus on exploring frequency and semantics. They found that phrasal verbs in academic writing are mostly employed to discuss ideas, but are used in limited and rather specific senses compared to their usage in more general English.

Phrasal verbs have also been the focus of a number of cross-cultural studies. Mendis (2010), for example, compared the uses of phrasal verbs in academic writing in Sri Lankan English and British English. According to Mendis (2010), although there are significant differences in phrasal verb usage and frequency between Sri Lankan and British English, the most frequent phrasal verbs are very similar in both dialects, including *look at*, *find out*, *make up* and *look into*. Mendis (2010) found, however, that these phrasal verbs are more frequently used in the academic writing of British English than in Sri Lankan English, as phrasal verbs in Sri Lankan are seen as too informal.

In another cross-cultural study of phrasal verbs, Chen (2013), who compared students' use of phrasal verbs in American and British English in two different genres, i.e., argumentative and academic writing, also found that not only did American students use far more phrasal verbs than British students in these genres, but they also utilised a more comprehensive range of phrasal verbs. Nevertheless, Chen (2013) pointed out that both British and American students tended to employ fewer phrasal verbs in academic research writing than they do in more general argumentative writing.

Based on these studies, it would appear that despite the more frequent use of phrasal verbs in American English compared to British English, there are similarities regarding their discourse functions across the two cultures, particularly in more formal academic writing contexts.

2.2.5 Reporting verbs in academic writing across cultures

Reporting verbs are an essential component of academic writing. They allow writers to represent their responsibility towards their statements, credit text to another source, and express their opinion about the referenced message (Loan & Pramoolsook, 2015). Reporting verb usage has also been the subject of a number of cross-cultural studies.

Liu and Wang (2019), for instance, compared the use of reporting verbs used in academic articles written in the English language and the Chinese language across three disciplines, i.e., linguistics, economics, and social science. They found that overall English authors used reporting verbs more frequently than

Chinese writers in these three fields. However, in terms of their specific function, discourse verbs (e.g., *believe*/认为, *point out*/指出, *propose*/提出 and *say*/说) were the most frequently used in English articles, whereas research verbs (e.g., *find*/发现, *show*/表明, *provide*/提供 and *observe*/观察) accounted for a greater percentage in Chinese articles. As a result, Liu and Wang suggest that English writers tend to focus more on developing a discussion between the writer and other authors, while Chinese writers are more likely to cite other research statements and illustrate their findings. Interestingly, Liu and Wang also found that cognition reporting verbs (e.g., *consider*/考虑, *according to* and *in one's opinion*/在。。。看来) were employed the least in both languages.

Similarly, Hu and Wang (2014), as well as Xu and Nesi (2019) studied engagement strategies used by British and Chinese research article writers, focusing in particular on reporting verbs. Both studies demonstrated that Chinese and English reporting verbs were frequently used to represent their writer's standpoint and referred to their views. For example, *discover* and *point out* were used almost twice as often by Chinese compared to British writers. Interestingly, *suggest* was most frequently used by the British academics in order to indicate a more argumentative stance, evoking a debatable situation. As a result, when the British writers took a neutral stance on another piece of research, they might have been slightly more provocative when they expressed their opinions (Xu & Nesi, 2019).

In another study, Yeganeh and Boghayeri (2015) compared the use of reporting verbs in the introduction and literature review section of research articles written in Persian and English, focusing in particular on their frequency and function. Overall, they also found that English writers used reporting verbs slightly more frequently than their Persian counterparts. In contrast, they found that there was only a marginal difference in the choice of reporting verbs used. Interestingly, *argue* was the most prominent reporting verb used by both groups. Their study is similar to Jogthong (2001), who carried out a comparison of research article introductions in Thai and English. She found that Thai writers used very few reporting verbs, whereas English

writers utilised a variety of verbs to cite previous research. Jogthong suggested this is because there are few reporting verbs in the Thai language. He concludes that different socio-cultural, linguistic, and research factors all contribute to the disparities between Thai and English RAIs (Research Article Introductions).

Therefore, it can be seen although some studies showed that English academic writers used reporting verbs marginally more than Chinese, Persian and Thai authors, differences in the type of reporting verb usage were also found.

2.3 The implications of cross-cultural research into academic writing

Researchers of cross-cultural differences in academic writing often indicate that their findings have implications for researchers, teachers and learners alike.

Nasiri (2012), for example, in her comparison of the academic writing of non-native English speakers and English speakers writing academic English, found that while the student authors' own culture has a significant impact on their academic writing, and is often associated with their identities, non-native writers ultimately adapt to the norms and conventions of the cultures for which they write. As a result, Nasiri (2012) pointed out that the students and teachers of English for Academic Purposes should increase their awareness of the learners' target norms.

In addition, Huh (2005), who examined different viewpoints regarding cross-cultural writing theories by comparing academic writing samples of native speakers and Korean graduate students, argued that it is normal for students from a particular cultural background to write on an issue in a particular way. However, for Huh, these discrepancies should be appreciated as cultural or linguistic distinctions in academic contexts, rather than as evidence of minority students' misunderstanding of English's standard written discourse.

In another example, Pérez-Llantada (2010), who investigated the functions of metadiscourse in cross-cultural and cross-linguistic academic writing, argued

that it has been asserted that the progressive loss of rhetorical traditions is caused by the consistent embrace of the standardised norms developed for academic English writing. Therefore, she suggested that in order to encourage cultural diversity in an English-medium academic, the hybrid use of metadiscourse features in cross-cultural English written texts would make it advisable to sensitise both native and non-native English scholars towards the standard.

As a result, it seems to be crucial to understand insights into the use of different features in academic writing across cultures. Loi and Lim (2019), for instance, suggest that exposing L2 learners to information about the differences in hedging between academic English and their own cultures can help L2 student writers appropriately present their propositional claims and arguments, while Mendis (2010) and Chen (2013) have shown that an awareness of the particular phrasal verbs used in different cultural contexts of academic writing can be particularly useful for student writers. Furthermore, in terms of the use of authorial presence in students' academic writing, Çandarlı et al. (2015) indicated that students should be encouraged to develop a critical awareness of rhetorically productive alternatives and techniques in order to understand the cultural distinctions between writing in L1 and L2. This led to a representation of their appropriate identity and a creation of effective arguments through the use of marker choices in their writing.

2.4 Academic writing and corpus analysis

Corpora have been widely used in ESP/EAP throughout the last few decades, particularly in the field of writing instruction. As indicated by Charles and Frankenberg-Garcia (2021) corpora typically have two major roles in the field. Firstly, they are a resource for learners to consult by themselves, and secondly as data that researchers, instructors, and authors use in order to develop learning materials. Charles and Frankenberg-Garcia (2021) state that in the teaching of writing, both functions have been employed and are frequently blended in practice.

Tribble (2014) has also argued that relevant corpus resources can assist students in improving their writing abilities. For example, he states that corpus analysis can be used to build a better understanding of how texts operate in social contexts, especially those associated with language usage and communicative intent, and when combined with discourse and genre analytic frameworks, corpus analytical tools and resources can help both EAP learners and teachers. As an example, Tribble (2014) uses the corpus tool *WordSmith* to analyse sophisticated part-of-speech tags to provide an insight into the aboutness of texts. He suggests that this information can be used to help students identify the meaning of contexts and comprehend text cohesion and lexical choices in the writing.

Similarly, Römer and Wulff (2010) have shown how corpus linguistics and corpus methodologies can be beneficial for writing research, particularly for understanding the lexical and grammatical features of advanced student academic writing. They stated that:

Software tools for corpus access enable users to see things that would be hard (or impossible, even) to see if the texts in a corpus were accessed without the help of such tools. One major advantage of a corpus/software-based approach to texts over a manual (non-computer-based) approach is that a much larger amount of language data can be examined in a short period of time, and new aspects about language (in our case student academic writing) can be captured and described. (p.125)

As an example, they carried out a case study of the use of “attended” (with an accompanying noun) and “unattended” (without a noun) forms of the demonstrative pronoun *this* in the Michigan Corpus of Upper-level Student Papers, which covers a variety of academic disciplines, including the humanities, social sciences, biological and health sciences, and physical sciences. Their study found that the average percentage of attended *this* was significantly higher than the unattended *this*.

Corpus analysis is now routinely used to analyse the features of academic

writing, for example, the structure of academic abstracts (Can et al., 2016; Doró, 2013; Tseng, 2011), formality (Chang & Swales, 2014; Larsson & Kaatari, 2020) the use of different types of grammatical expressions in journal research articles, such as inclusive and exclusive pronouns (Dogan-Ucar & Akbas, 2022; Harwood, 2005), demonstrative pronouns (Rustipa, 2015; Römer & Wulff, 2010), stance adverbs (Çakır, 2016; Hyland & Tse, 2005) and linking adverbials (Gao, 2016; Lei, 2012). Moreover, several studies have employed corpus analysis to investigate metadiscourse features in academic writing, including transitions (Baker, 2018; Gardner & Han, 2018), evidentials in academic research articles (Dehkordi & Allami, 2012; Khedri, 2018), frame markers (Belli, 2019) and endophoric markers (Burneikaitė, 2009) in master's thesis abstracts, and attitude markers (Duruk, 2017; Dueñas, 2010) and engagement markers in university student writing (He & Rahim, 2019; Khatibi & Esfandiari, 2021; Taki & Jafarpour, 2012).

Some of the primary analytical resources used in these studies involve frequency analysis (Baker, 2006; Stubbs, 1996), concordance analysis (Anthony, 2006; Krieger, 2003), and collocation analysis (McEnery et al., 2006). Although useful, the corpus analytical resources of diachronic analysis (Hyland & Jiang, 2016; Rezaei Keramati et al., 2019) and keyword analysis (Baker, 2006; Scott & Tribble, 2006) are less common in studies investigating the lexico-grammatical features of academic writing.

2.4.1 The corpus analysis of academic writing across cultures

Corpus analysis has been particularly valuable for examining cross-cultural differences in academic writing (Paltridge, 2004). This is because, firstly, it has become increasingly simple to collect large samples of academic texts, either from academic journals, or theses and dissertation repositories, that are representative of specific cultural groups. Secondly, the use of corpus analysis to compare large corpora representative of different cultural groups is able to provide statistically robust information, about differences and similarities in their use of certain lexico-grammatical or structural features (Paltridge, 2004). This statistical information predominantly involves the respective frequencies of these features in the corpora.

Chen (2013), for example, created a corpus of Chinese English majors' argumentative essays and compared it to four different corpora (a US and UK corpus of argumentative essays, and a US and UK corpus of academic writing) in order to examine the Chinese students' use of phrasal verbs compared to their American and British counterparts. While he found similarities in the use and frequency of phrasal verbs between the Chinese and British students in their argumentative writing, he found significant differences in both the academic and argumentative writing between the Chinese and American students. Most notably, the overall frequencies of phrasal verbs were considerably higher in the latter (American), than in the former (Chinese).

In another example, Gao (2020) compared a 1.3-million-word corpus of English academic writing by native speakers of English with a 1.3-million-word corpus of English academic writing by native Chinese speakers to investigate the informal features across four disciplines. His findings demonstrated that English professional writers used informal features of writing more than the Chinese group, but also showed that the distribution of certain informal features was represented in several ways. The Chinese writers, for example, used imperatives and sentence-initial conjunctions or conjunctive adverbs more than the English writers, while first- person pronouns and pronominal anaphoric references were used more by the English writers.

Donadio and Passariello (2022) compared a 162,065-word corpus of English medical research articles with a 147,189-word corpus of Italian research articles to examine differences in the use of hedges and boosters in academic writing between English and Italian academic writers. They found that both hedges and boosters were considerably more often utilised in the medical RAs written in English than in those written in Italian. Additionally, Işık-Taş (2018) used corpus analysis to carry out an investigation of the differences in the construction of authorial identity in research articles in sociology written by English and Turkish speakers, using, respectively, a 393,057- and a 292,889-word corpus. She illustrated that Turkish writers employed first-person pronouns significantly less than English writers.

In addition, Abdollahzadeh (2019) used a 120,939-word corpus of English graduates, a 99,142-word corpus of Iranian graduates, and a 105,115-word corpus of English professionals to compare hedging in master's dissertation discussion sections written in English. His study also investigated article discussions written by professional writers in an applied linguistics field, focusing particularly on the categories and frequencies of hedges. He found that there were several types of hedging devices used by professional writers that were not used by graduate writers. Furthermore, in comparison to the English graduates and professional writers, the Iranian graduate writers used fewer hedges, albeit with the exception of modals.

The studies reviewed throughout this chapter indicate that research into contrastive rhetoric can have considerable implications for the understanding and teaching of student academic writing. Nevertheless, there have been no cross-cultural corpus-based studies that focus on the difference between master's-level academic writing in New Zealand and the United States. This is despite the fact that, as mentioned in Chapter 1, many international post-graduate students and academic literacies courses in New Zealand rely on coursebooks developed in the United States, for example, Singh and Lukkarila's (2017) *Successful Academic Writing*, Johnson's (2016) *Academic writing: Process and product*, Swales and Feak's (2012), *Academic Writing for Graduate Students* and Oshima and Hogue's (2007) *Introduction to Academic Writing*. As a result, and drawing upon the resources of corpus analysis, this study will investigate the primary cross-cultural lexical and grammatical differences between master's-level academic writing in New Zealand and the United States. The following chapter will provide a discussion of the corpus-based methodology used for this study, including details of the corpora and analytical resources employed, as well as the particular scope of the analysis.

Chapter 3:

Methods

3.0 Introduction

This study aims to investigate cross-cultural lexico-grammatical differences between master's level academic writing in New Zealand and the United States. In order to achieve this aim, the study uses the analytical resources of corpus-analysis, in particular comparative frequency, collocation and concordance analysis (Baker, 2006; McEnery et al., 2006; Scott & Tribble, 2006) to examine differences in a number of key lexical and grammatical features of two corpora; one containing master's level writing from New Zealand universities and the other containing master's level writing from universities in the United States. The study seeks to answer the following research question:

What are some of the key lexical and grammatical differences between master's level academic writing in New Zealand and the United States?

This chapter will begin by providing a brief overview of the research paradigm underpinning the study, followed by a general overview of corpus linguistics. Following that, it will offer details about the two corpora used for this study, including the procedures involved in collecting and compiling the corpus data. Next, the chapter will discuss the methods used to carry out the analysis, followed by a discussion of the scope of the analysis.

3.1 Research paradigm

The methodology for this study uses corpus linguistics which characteristically involves both quantitative and qualitative research. Frequency analysis, keyword analysis and collocation analysis involve the interpretation of statistical results, and are therefore predominantly quantitative, while concordance analysis involves a strong qualitative and interpretative dimension. Hence, corpus analysis is mixed-methodological and tends to be underpinned by a pragmatic worldview, which prioritises the use of a range of available approaches, both qualitative and quantitative, that are seen as necessary for responding to the particular question at hand (Creswell & Creswell, 2017; Patel, 2015).

3.2 Corpora and corpus linguistics

A corpus is a large, digitized collection of authentic texts representative of a particular language community or specific genre, which has been purposely assembled for linguistic research (Kennedy, 2014; Leech, 1992; Gries & Berez, 2017; McEnery & Wilson, 1996). Corpus linguistics is the study of this collection of machine-readable texts in order to answer a particular set of research questions (McEnery & Hardie, 2011). Given the digital nature of these large electronically stored texts, Baker (2010) and Rayson (2015) explain that the field of corpus linguistics has developed alongside the advancement of increasingly potent computers and software tools. Hence, corpus linguistics and specialist computer software are now inexorably intertwined as a result of the computer's extraordinary speed, complete accountability, reproducibility, statistical dependability, and capacity for handling large amounts of data (Kennedy, 2014). In short, modern corpus-based software and online tools, such as Sketch Engine (Kilgarriff et al., 2014), WordSmith (Scott, 2022) and English-Corpora.org (Davies, 2010) have provided language-based researchers with easy access to computer-based corpora, allowing them to investigate huge volumes of text-based data (McEnery & Wilson, 2003).

In order to carry out a corpus analysis of a particular set of texts or feature of language, many researchers compile their own specialised corpora.

According to Hunston (2002), a specialist corpus is a type of corpora which represents a particular text type and explores “a particular type of language” (p. 14). Specialist corpora also tend to have certain limitations on the texts that can be included in them, depending on the language variety or varieties under examination, as well as the research questions that the corpus is meant to answer (Baker, 2010; Hunston, 2002).

3.3 Corpus data

In order to carry out an analysis into the cross-cultural lexico-grammatical differences between master’s-level academic writing in New Zealand and the United States, two specialist corpora were developed for this study. The first corpus contains a collection of master’s level academic writing from New Zealand universities (hereafter the MNZAW corpus) and the other corpus contains a collection of master’s level writing from universities in the United States (hereafter the MUSAW corpus).

3.3.1 Data collection

Each corpus contains a balanced representative range of master’s level writing compiled from a range of different universities and different disciplines, including science, education, law, engineering, business, arts, as well as medical and health science (see Tables 3.1 and 3.2). The collected data includes both master’s theses and dissertations, ranging from approximately 15,000 to 30,000 words. All data is collected from theses that were published from 2015 – 2022. The data for the two corpora were collected from the respective universities’ online theses repositories.

Due to the different average word count of the individual texts, and the attempt to compile similarly sized corpora, the MNZAW corpus contains six texts from each discipline, while the MUSAW corpus contains eight texts from each discipline. In total, the MNZAW corpus consists of 42 master’s level texts randomly collected from eight New Zealand universities, while the MUSAW corpus consists of 56 master’s level texts randomly collected from fourteen universities in the United States. The range of universities that the

texts are collected from, and the range of disciplines represented is identified in Tables 3.1 and 3.2 below.

Table 3.1

The data collected for the MNZAW

	New Zealand Universities	Science	Education	Laws	Engineering	Business	Arts	Medical and Health Science	Total
1	Auckland University of Technology	1	1		1	1	1		5
2	The University of Auckland	1	1	1	1		1	1	6
3	The University of Waikato		1	1		1	1	1	5
4	University of Otago	1			1	1	1	1	5
5	University of Canterbury	1		1	1			1	4
6	Victoria University of Wellington	1	1	1		1	1		5
7	Lincoln University	1	1	1	1	1		1	6
8	Massey University		1	1	1	1	1	1	6
	Total	6	6	6	6	6	6	6	42

Table 3.2

The data collected for the MUSAW

	United States Universities	Science	Education	Laws	Engineering	Business	Arts	Medical and Health Science	Total
1	Harvard University	1	1	1	1	1	1	1	7
2	Yale University	1		1				1	3
3	California State University	1	1	1	1	1	1	1	7
4	Boston University	1	1	1	1	1	1	1	7
5	Webster University		1	1	1	1		1	5
6	University of Washington	1	1	1	1	1	1	1	7
7	Duke University	1		1		1		1	4

8	Stanford University	1	1		1		1		4
9	The Florida State University		1	1	1	1		1	5
10	University of Florida	1	1				1		3
11	University of South Florida						1		1
12	University of Chicago				1				1
13	University of North Texas					1			1
14	Columbia University						1		1
	Total	8	8	8	8	8	8	8	56

3.3.2 Corpus size

As indicated, the MUSAW corpus consisted of 56 academic writing texts – six from eight each of different discipline, and involved a total of 856,829 words. The MNZAW corpus consisted of 42 academic writing texts – eight from eight each of different discipline, involving a total of 892,502 words. The final word count for each corpus was determined, in part, by the limitations on storage offered by the online Sketch Engine corpus-tool used for the analysis (Kilgarriff et al., 2014), and the time constraints of carrying out a sixth-month dissertation, given that compiling the corpora involved cleaning up the data, eliminating all images, tables, figures and website URLs, and converting the results to plain text, before uploading the texts to the Sketch Engine corpus tool. In general, there is no theoretical consensus regarding the recommended size for a corpus analysis, and as Baker (2006) states, it is not necessary that corpora need to contain millions of words (Baker, 2006). Nevertheless, corpora of one million words are generally viewed as being of a suitable size for a robust corpus analysis, and many well-developed corpora, for example, the Wellington Corpus of Written New Zealand English (WWC) only contain one million words in total.

3.4 Corpus analytical procedures

3.4.1 Sketch Engine

The online corpus-tool Sketch Engine, currently one of the most popular corpus tools for lexicography, was used to carry out the analysis of the two corpora (Kilgarriff et al., 2004, 2014). As well as containing a huge number of pre-loaded and ready-for-use corpora, Sketch Engine also provides advanced resources for developing, installing, analysing, and administering the researcher's own specialist corpora. Importantly, when compiling the corpus in Sketch Engine, all texts are tagged according to Part of Speech (Kilgarriff et al., 2004, 2014). This enables a researcher to count, analyse and compare different word forms. The following sub-sections discuss the corpus analytical methods used in the study.

3.4.2 Frequency analysis

The analysis of word frequency, and the creation of frequency lists are the primary analytical methods used in the study. Frequency-sorted word lists are a fundamental methodology for corpus exploration (Baron et al., 2009), and as Sinclair (1991) states “anyone studying a text is likely to need to know how often each different word form occurs in it” (p. 30). Thus, Tribble and Jones (1997), as well as Baker (2006) point out that measuring frequency is perhaps the most productive way to begin an analysis when attempting to understand a collection of texts.

As Evert (2009) notes, a frequency comparison can be used to operationalize numerous linguistic investigations. For instance, recent corpus-based research on academic writing used frequency statistics to study a broad range of lexico-grammatical and pragmatic structures such as the use of phrasal verbs (e.g., Alangari et al., 2020; Chen, 2013; Mendis, 2010), reporting verbs (e.g., Liu & Wang, 2019; Xu & Nesi, 2019), and the personal pronouns (e.g., Çandarlı et al., 2015; Işık-Taş, 2018). Following these studies, in this investigation, the frequency statistics of certain lexico-grammatical features in the MUSAW and the MNZAW corpora are established and compared to come to conclusions about the difference or similarities of master’s level academic writing in New Zealand and the United States.

3.4.3 Concordance analysis

On occasion, the study also involves the qualitative analysis of concordances. A concordance is essentially a list of all the occurrences of a certain search word or phrase in a corpus, displayed in the context in which they appear; typically, a few words to the left and right of the search term (Baker, 2006). According to Baker, the analysis of concordance lines is one of the most useful techniques in a corpus study, as it enables the analyst to carry out a close examination of the search word or phrase in its grammatical and lexical contexts, so that patterns or trends can be observed. A concordance is also known as the listing of key words in context (KWIC) (Baker, 2006).

3.4.4 Collocation analysis

According to Baker (2006), collocation refers to the characteristic and statistically significant co-occurrence of certain words, either lexical or grammatical, in corpus data. A collocation analysis is able to provide information about the more important lexical combinations within a corpus.

3.4.5 Statistical Significance

The statistical significance of the quantitative results produced by Sketch Engine were calculated using the online UCREL Significance Test System, especially developed by Lancaster University for the identification of statistical significance in corpus-based data (<http://corpora.lancs.ac.uk/sigtest/>). In order to provide a particular focus throughout the study on those lexico-grammatical features exhibiting a clear and evident difference, in many cases, findings that were statistically significant at the 0.1 percent level, or $p < 0.001$ were seen as of most interest. As is often employed, this level of significance is signalled in the tables in Chapter 4 using the symbol ***. This 0.1 percent level of significance suggests that there is less than a 0.1 percent possibility that the findings have occurred by chance (McEnery et al., 2006). However, where relevant, findings that were statistically significant at the 5% level ($p < 0.05$) represented by the symbol *, or at the 1% level ($p < 0.01$) represented by the symbol ** were also discussed.

3.5 The scope of the analysis

Given the six-month time constraint of this dissertation, along with the vast number of lexico-grammatical items that could have been analysed, it was decided that the study should be limited to a focus on a limited range of features. The decision as to which features to focus on was a consequence of the literature review process (Chapter 2), where it became evident that a particular set of lexico-grammatical features; that is, hedges, boosters, modal verbs, modal adverbs, modal adjectives, personal pronouns, phrasal verbs, and reporting verbs were prominent in academic writing research, and particularly in contrastive rhetoric research into academic writing. Hence, it was determined that this study into the key lexical and grammatical differences

between master's level academic writing in New Zealand and the United States would be limited to a focus on these same lexico-grammatical features.

3.6 General vs discipline specific academic analysis

While it is acknowledged that certain academic disciplines have preferences for certain lexico-grammatical features (Hyland, 2012), and studies in contrastive rhetoric often focus on the examination of the cross-cultural differences in the academic writing of specific disciplines (Xing et al., 2008), this particular study is nevertheless primarily focused on analysing the more general lexico-grammatical differences found between master's level academic writing in New Zealand and the United States, rather than specifically examining disciplinary differences. Interestingly, in the field of English for Academic Purposes (EAP), there have been a number of ongoing debates about whether academic writing instruction should involve general instruction (e.g., Dudley-Evans, 1997; Hyland, 2002; Spack, 1988). It is acknowledged here that subject specific instruction has many benefits, however pragmatically, it is not always possible for the academic writing instructor to be familiar with the unique lexico-grammatical or structural requirements of every individual discipline, or similarly for an institution to offer specialised writing instruction for each discipline, especially at master's level. Furthermore, the types of course book used in L2 academic writing courses, while sometimes making mention of subject specificity, generally provide examples and instruction about the more general lexical and grammatical characteristics of academic writing. Taking into consideration the primary focus on general academic writing in this study, the data collected for the corpora, as discussed in Section 5.3.3, represents a very balanced collection of master's level writing from a broad range of disciplines.

3.7 Conclusion

The methodological information for this study was introduced in this chapter. It began by providing a general introduction of corpus linguistics, after which the chapter discussed the process of data collection, the compilation of the

two corpora, the analytical methods employed, and the scope of the analysis.
The next chapter provides the results of the study.

Chapter 4:

Results

4.0 Introduction

The chapter uses the resources of corpus analysis to compare the occurrence of certain lexico-grammatical features in the MNZAW corpus and the MUSAW corpus. These include hedges and boosters (modal verbs, modal adverbs, and modal adjectives), personal pronouns, phrasal verbs, and reporting verbs.

4.1 Hedges and Boosters

Takimoto (2015) states that hedges and boosters provide “interactional strategies for increasing or reducing the force of propositional statements” (p. 98), and that while hedges predominantly involve the use of low modality, boosters primarily involve the use of high modality. Modality, therefore, is largely employed to express writers’ uncertainty and certainty in their academic writing (Serholt, 2012) and typically involves language forms such as modal verbs and modal adjuncts (adjectives and adverbs) that convey or qualify a writer’s confidence about the reality of the proposal expressed (Bybee & Fleischman, 1995; Coates, 1995; Lyons, 1977). Furthermore, Gabrielatos and McEnery (2005) point out that “the ability to qualify statements appropriately” (p. 314) is a key component of effective academic writing, however, as indicated in Chapter 2 (Section 2.3), different cultures tend to express and use modality in different ways (Carrió Pastor, 2014; Hyland & Milton, 1997; Orta, 2010; Oh, 2007). Therefore, it is of interest to examine differences in the deployment of modality across the two corpora to evaluate whether differences in modal use are also apparent across US and NZ master’s level writing. In order to examine these differences, the following sections describe a comparison of the frequencies of modal verbs,

modal adjectives and modal adverbs across both corpora, along with an examination of the distribution of the levels of modality expressed by these three different modal forms.

4.1.1 Modal verbs

Table 4.1 compares the top ten most frequent modal verbs in the MNZAW corpus and MUSAW corpus. The table provides the raw frequencies and relative frequencies each modal across both corpora. It also provides the log-likelihood statistic and its equivalent level of significance expressed in the conventionally used p-value.

Table 4.1

The top ten most frequent modal verbs in the MNZAW corpus and MUSAW corpus

Rank	Item	NZ Frequency	NZ Relative frequency	US Frequency	US Relative frequency	LL	P- Value	
1	can	2772	2592.61	2571	2522.13	1.59	0.21	
2	would	1489	1392.64	1324	1298.83	4.12	0.04	*
3	may	1479	1383.29	1305	1280.19	4.94	0.03	*
4	will	1419	1327.17	1457	1429.30	3.25	0.07	
5	could	1217	1138.24	972	953.52	18.40	0.00	***
6	should	803	751.04	684	671.00	5.30	0.02	*
7	must	386	361.02	348	341.38	0.72	0.40	
8	might	263	245.98	355	348.25	17.76	0.00	***
9	shall	22	20.58	56	54.94	16.75	0.00	***
10	ought to	11	10.29	19	18.64	2.50	0.11	
Total		9861	9222.86	9091	8918.19	7.77	0.01	

In Table 4.1, with only a few exceptions, the relative frequencies of each of the modal verbs are similar across the MNZAW and the MUSAW corpora. The ranking of the respective modal verbs by frequency is also more or less the same across the two corpora. The modal *can*, which expresses the low modalities of ability and possibility, for example, is the most frequently used modal in both corpora, while *ought to*, which expresses the high modalities of obligation and necessity, is the least frequently used in both corpora.

Of the exceptions, there is a strong statistically significant difference ($p < 0.0001$) in the relative frequencies of the modal verbs *might* and *shall* in the two corpora. The modal *might* occurs a third more in the MUSAW corpus than it does in the MNZAW, while *shall* occurs more than twice as often. Coates (2015) defines *might* as “the modal of epistemic possibility” (p. 146), whereas *shall* is defined as “the modal of volition and prediction” (p. 185), although the modal *shall* is also utilised in the legal context to refer to obligation. *Might* and *shall* respectively represent low and medium modality. The increased frequency of *might*, in particular, may suggest that claims in US academic writing are at times slightly less confident than in New Zealand academic writing at master’s level, however, Table 4.1 also shows that *could*, representing low modality, and largely employed to express “possibility” (Coates, 2015, p. 107) is used moderately more frequently in New Zealand master’s level academic writing ($p < 0.0001$). Hence, these differences may be the result of stylistic variation, rather than cultural differences in expressing academic certainty. Baker (2017), for example, has suggested that American speakers of English continue to regularly use the modal *shall*, even though it is declining in British English.

In order to better capture an overall picture of these differences in modal verb use and establish whether a certain level of modality is in fact more prominent in either corpus, Table 4.2 compares the distribution of the levels of modal verbs represented in the MNZAW and MUSAW corpora.

Table 4.2

The distribution of the levels of modal verbs represented in the MNZAW

corpus and MUSAW corpus

Modality levels	NZ relative frequency	US relative frequency
High modality		
must	361.02	341.38
ought to	10.29	18.64
Total	371.31	360.02
medium modality		
would	1392.64	1298.83
will	1327.17	1429.30
should	751.04	671.00
shall	20.58	54.94
Total	3491.42	3454.07
low modality		
can	2592.61	2522.13
may	1383.29	1280.19
could	1138.24	953.52
might	245.98	348.25
Total	5360.13	5104.10

As seen in Table 4.2, even though the individual modals *might*, *shall* and *could* exhibit a significant difference in frequency, overall, there is a close similarity in the three modal levels used across both corpora, with only a very small increase in the use of low modality in the MNZAW corpus. Interestingly, the table also demonstrates that both US and NZ master’s level academic writing mainly employs low and medium levels of modal verbs, considerably more than the high-level group. As a result, it can be argued that overall both New Zealand and American academic writers tend to make careful, guarded, and neutral assertions in their academic writing.

4.1.2 Modal adverbs

Table 4.3 illustrates the top ten most frequent modal adverbs in the MNZAW corpus and MUSAW corpus. The raw frequencies and relative frequencies of each modal verb for both corpora are shown in the table.

Table 4.3

The top ten most frequent modal adverbs in the MNZAW corpus and MUSAW corpus

Rank	Item B = Booster H = Hedge	NZ Frequency	NZ Relative frequency	US Frequency	US Relative frequency	LL	P- Value	
1	actually (B)	100	93.53	100	98.10	0.08	0.77	
2	perhaps (H)	74	69.21	95	93.19	3.54	0.06	
3	necessarily(B)	71	66.41	71	69.65	0.06	0.81	
4	probably(H)	49	45.83	29	28.45	4.40	0.04	*
5	possibly(H)	47	43.96	27	26.49	4.69	0.03	*
6	maybe(H)	31	28.99	23	22.56	0.89	0.35	
7	certainly(B)	29	27.12	51	50.03	7.06	0.01	**
8	hopefully(H)	10	9.35	6	5.89	0.85	0.36	
9	deliberately(B)	10	9.35	15	14.71	1.22	0.27	
10	Inevitably(B)	6	5.61	8	7.85	0.37	0.54	
Total		427	399.37	425	416.92	0.28	0.59	

Table 4.3 shows that the modal adverb *certainly*, a booster, is used significantly less in NZ master's level academic writing than it is in US master's academic writing ($p < 0.01$), while the opposite is found for the hedges *probably* and *possibly* ($p < 0.05$). Furthermore, overall, the table demonstrates that whereas all hedges (low modality) are used slightly more in the MNZAW corpus, most of the boosters (high modality) are used more frequently in the MUSAW corpus, with the exception of modal adverb

perhaps. As is further indicated in Table 4.4, the regularity of this pattern across the modal adverbs suggests that US academic writing at the master's level provides a slightly greater assurance towards the statements presented than can be found in New Zealand academic writing, and that this primarily occurs through the use of modal adverbs.

Table 4.4

The distribution of the levels of modal adverbs represented in the MNZAW corpus and MUSAW corpus

Modality levels	NZ relative frequency	US relative frequency
Hedges (low/medium modality)		
perhaps	69.21	93.19
probably	45.83	28.45
possibly	43.96	26.49
maybe	28.99	22.56
hopefully	9.35	5.89
Total	197.34	176.58
Boosters (high modality)		
actually	93.53	98.1
necessarily	66.41	69.65
certainly	27.12	50.03
deliberately	9.35	14.71
inevitably	5.61	7.85
Total	202.02	240.34

4.1.3 Modal adjectives

Table 4.5 compares the top ten most frequent modal adjectives in the MNZAW corpus and MUSAW. As these modal adjectives are more often found in contexts not related to the expression of certainty and uncertainty when making academic claims, only frequency statistics for those modal adjectives found after the bigram *it is ...* were included in the table, for example, *it is possible (that) ...*, *it is likely (that)*. As previously, the table provides the raw frequencies and relative frequencies for each modal adjective across both corpora, as well as the log-likelihood statistic and its equivalent level of significance expressed in the conventionally used p-value.

Table 4.5

The top ten most frequent modal adjectives occurring (after 'It is') in the MNZAW corpus and MUSAW corpus

Rank	Item	NZ Frequency	NZRelative frequency	US Frequency	US Relative frequency	LL	P-Value	
1	possible(H)	43	40.22	32	31.39	0.72	0.38	
2	likely(H)	25	23.38	34	33.35	2.19	0.14	
3	clear(B)	21	19.64	41	40.22	8.09	0.00	**
4	necessary(B)	20	18.71	12	11.77	1.32	0.25	
5	impossible(H)	9	8.42	9	8.83	0.03	0.85	
6	unlikely(H)	4	3.74	6	5.89	0.58	0.45	
7	significant(B)	2	1.87	2	1.96	0.01	0.93	
8	obvious(B)	2	1.87	2	1.96	0.01	0.93	
9	probable(H)	1	0.94	0	0.00	0.00	0.00	
10	certain(B)	0	0.00	1	0.98	0.00	0.00	
Total		127	118.79	139	136.35	1.14	0.29	

Table 4.5 shows that there is little difference between the relative frequency of each modal adjective in the corpora; nevertheless, it is of interest that the relative frequency of *clear* is significantly over twice as frequent in the MUSAW corpora than it is in the MNZAW corpus ($p < 0.001$). A comparison of the frequencies of those modal adjectives used as hedges and those used as boosters (Table 4.6), indicates that while the use of modal adjectives as hedges is relatively similar across the two corpora, with the exception of *necessary*, the use of modal adjectives as boosters more frequently occurs in US master's level academic writing. Although, with the exception of *clear*, these differences are very marginal, it does follow the findings regarding the use of boosters in the analysis of the modal adverbs (Section 4.1.2).

Table 4.6

The distribution of the levels of modal adjectives represented in the MNZAW corpus and MUSAW corpus

Modality levels	NZ relative frequency	US relative frequency
Hedges (low/medium modality)		
possible	40.22	31.39
likely	23.38	33.35
impossible	8.42	8.83
unlikely	3.74	5.89
probable	0.94	0.00
Total	76.70	79.46
Boosters (high modality)		
clear	19.64	40.22
necessary	18.71	11.77
significant	1.87	1.96
obvious	1.87	1.96
certain	0.00	0.98
Total	42.09	56.89

4.1.4 Summary: Hedges and Boosters

In conclusion, these findings show that despite the fact that the use of modality as hedges and boosters appearing in the MNZAW and the MUSAW corpora are similar, there are some differences between the individual modals. Overall, the use of hedges, across the two corpora is very similar, however, in terms of the modal adverbs and adjectives, boosters, are found slightly more in the master's US academic writing. This may indicate that overall master's US academic writing tends to express their claims more confidently than occurs in master's NZ academic writing.

4.2 Personal pronouns

Ivanič (1998) points out that first-person pronouns are often used in academic writing and signal the ways in which authors represent themselves and are represented by their rhetorical choices. In addition, first-person pronouns are frequently used to reveal writers' self-perceptions, relationships with readers, and connections to the discourse community (Hunston & Thompson, 2000; Hyland, 2002; Kuo, 1999; Tang & John, 1999). Nevertheless, and as discussed in Chapter 2 (Section 2.3), different cultures express the writer's identity through the use of personal pronouns in different ways and to different degrees (Dueñas, 2010; Kashima & Kashima, 1998; Kim, 2009;). As a result, it is of interest to carry out an analysis of the differences in the use of first-person pronoun across US and NZ master's level academic writing. In order to investigate these differences, this section will compare the frequencies of the range of first-person pronouns occurring in the MNZAW corpus and MUSAW corpus.

Table 4.7 compares the five most frequent first-person pronouns (including singular and plural) in the MNZAW corpus and MUSAW. The table demonstrates the raw and relative frequency of each first-person pronoun for the two corpora.

Table 4.7

The five most frequent self-mentions in the MNZAW corpus and MUSAW corpus

Rank	Item	NZ Frequency	NZ Relative frequency	US Frequency	US Relative frequency	LL	P- Value	
1	i	2247	2101.59	1653	1621.58	68.22	0.00	***
2	we	948	886.65	1263	1238.99	58.80	0.00	***
3	my	898	839.89	483	414.96	110.31	0.00	***
4	me	315	294.62	225	220.72	11.62	0.00	***
5	our	339	317.06	523	513.06	47.44	0.00	***

Total		4747	4439.81	4147	4009.31	19.73	0.00	
-------	--	------	---------	------	---------	-------	------	--

Table 4.7 indicates a significant difference in the frequency of first-person pronouns across the two corpora. As demonstrated in Table 4.7, the relative frequency of the first-person singular pronouns, including *I*, *me* and *my*, are considerably greater in the MNZAW corpus ($p < 0.0001$), while the first-person plural pronouns, such as *we* and *our*, are significantly higher in the MNZAW corpus ($p < 0.0001$). Overall, this table indicates that the first-person singular (*I*, *me*, *my*) is mainly used in the master's level NZ academic writing, whereas the first-person plural (*we*, *our*) is predominately employed in the US academic writing.

4.2.1 Verb collocations with *I*

To further examine these findings, a frequency comparison of important verb collocations (lemmas) with the pronoun *I* was carried out (Table 4.8). In the MNZAW corpus it can be seen that *I think* exhibits one of the most statistically significant differences (Rel Freq. = 131.88, $p < 0.0001$), given that in the MUSAW corpus the collocation has a comparatively low relative frequency (Rel freq. = 37.28). This suggests that, as was evident in Section 4.1, the claims in master's level academic writing in NZ are expressed in a more personal and less confident manner. However, it is interesting that other similar verb collocations such as *I believe* (MNZAW Rel freq = 21.51, MUSAW Rel freq = 14.71), *I feel* (MNZAW Rel freq = 24.32, MUSAW Rel freq = 28.45) and *I argue* (MNZAW Rel freq = 12.16, MUSAW Rel freq = 21.58) show little comparative difference.

Table 4.8

Verb collocations (lemmas) occur with "I" in the MNZAW corpus and MUSAW corpus

Rank	Item	NZ Frequency	NZ Relative frequency	US Frequency	US Relative frequency	LL	P- Value
------	------	-----------------	-----------------------------	-----------------	-----------------------------	----	-------------

1	am	284	265.62	279	273.7	0.07	0.78	
2	have	223	208.57	153	150.09	10.41	0.00	**
3	think	141	131.88	38	37.28	58.94	0.00	***
4	want	48	29.93	17	16.68	14.17	0.00	***
5	feel	26	24.32	29	28.45	0.31	0.58	
6	believe	23	21.51	15	14.71	1.39	0.24	
7	argue	13	12.16	22	21.58	2.72	0.10	
Total		758	693.99	553	542.49	88.01	1.70	

Another statistically significant difference between the two corpora is the collocation *I want* (MNZAW Rel freq = 48.00, MUSAW Rel freq = 16.68 $p < 0.0001$). However, it is not immediately clear why *I want* was used so frequently in the MNZAW corpus. A brief analysis of concordance lines with *I want* [lemmas] in the MNZAW found that it was often employed in the past simple form to explain research choices. This pattern was also found in the MUSAW corpus, but as mentioned, was used less frequently.

Table 4.9

Concordances of I wanted in the MNZAW corpus

doc#1	witnessed many friendships and interactions that occur between infants who come from various cultural backgrounds.	I wanted	to explore other researchers' thick descriptions of infants' peer interactions, in relation to notions of
doc#21	Considerations with the Problem Constraints Surface and Underlying Features As mentioned previously,	I wanted	a question set which had a mix of surface and underlying features. I considered contextual features and input
doc#24	Although we did not often meet, it was nice to know there were people I could talk to about research if	I wanted	to, despite having different approaches. There were also members in this group who had more research
doc#39	likely to guide a student rather than instruct, while within an OoHM context I tended to instruct my	I wanted	to find out more about teaching contexts and their ability to influence music-teaching

	students. Thus,		practice. Theoretical
doc#41	teaching and home language retention because I have met the problem of my own children's Chinese learning. Therefore,	I wanted	to find out the answers for the following research questions: What are the benefits of children speaking and

4.2.2 Summary: Personal pronouns

In conclusion, these findings show that the use of the first-person pronouns occurring in the MNZAW and the MUSAW corpora exhibit some degree of difference. Overall, it can be seen that the first-person single pronouns tend to be employed across the MNZAW corpora, whereas the first-person plural pronouns are found significantly more often in the MUSAW corpora, pointing to a difference in the way that authorial identity is presented in US master's academic writing and NZ master's academic writing. The comparison of the bi-grams with *I*, such as *I think*, may indicate the more subjective, and perhaps less confident authorial stance of the New Zealand master's students, supporting the findings in Section 4.1.

4.3 Phrasal verbs

Liu and Myers (2020) state that phrasal verbs are a group of lexical elements in the English language that are often used in written texts in order to form a new word with a meaning distinct from the original terms. According to Liu and Myers (2020), as well as Alangari et al. (2020), phrasal verbs are defined as multi-lexical verbs consisting of a single verb and adverbial or prepositional particles. Because phrasal verbs are one of the most challenging topics for English learners (Liao & Fukuya, 2004), and tend to be a characteristic of spoken language (Swales & Feak, 2004), they are often avoided in academic writing (Chen, 2013; Dagut & Laufer, 1985). Garnier (2022) points out, however, that it is occasionally more suitable to employ a phrasal verb in academic writing since most phrasal verbs are neutral rather than informal, and furthermore certain phrasal verbs such as *point out*, *carry out*, *account for* and *look into* are commonly employed in academic writing. Therefore, it is important for learners to be aware of the correct use of phrasal verbs which, as seen in Chapter 2 (Section 2.3), are often used differently in different language contexts (Chen, 2013; Jarvella et al., 2001; Virtanen & Lindgrén, 1998; Zhang & Hu, 2008;). Table 4.10 provides a comparative frequency analysis of the eighteen most frequent phrasal verbs in the MNZAW corpus and MUSAW corpus.

Table 4.10

The eighteen most frequent phrasal verbs in the MNZAW corpus and MUSAW corpus

Rank	Item	NZ Frequency	NZ Relative frequency	US Frequency	US Relative frequency	LL	P- Value	
1	carry out	115	107.56	59	57.88	16.14	0.000	***
2	account for	66	61.73	149	146.17	36.36	0.000	***
3	point out	63	58.92	122	119.68	21.63	0.000	***
4	take on	49	45.83	29	28.45	4.40	0.036	*

5	go on	46	43.02	47	46.11	0.09	0.764	
6	make up	44	41.15	62	60.82	3.85	0.050	*
7	find out	38	35.54	17	16.68	7.39	0.007	**
8	set up	36	33.67	26	25.51	1.24	0.266	
9	put forward	31	28.99	5	4.90	19.85	0.000	***
10	turn up	25	23.38	0	0.00	0.00	0.000	
11	look into	24	22.45	24	23.54	0.02	0.888	
12	end up	24	22.45	14	13.73	2.27	0.132	
13	turn to	17	15.90	36	35.32	7.76	0.005	**
14	open up	15	14.03	9	8.83	1.28	0.258	
15	take up	12	11.22	16	15.70	0.75	0.387	
16	come up	12	11.22	15	14.71	0.47	0.494	
17	pick up	11	10.29	11	10.79	0.01	0.924	
18	turn out	5	4.68	16	15.70	6.52	0.011	*
Total		633	592.04	657	644.51	1.96	0.16	

Table 4.10 illustrates that overall the relative frequencies of phrasal verbs are similar, although some do exhibit significant differences. *Account for* and *point out*, for example, are employed over twice as much in the MUSAW corpus; while *carry out* and *put forward* are used considerably more in the MNZAW corpus ($p < 0.0001$). In addition, Table 4.10 also illustrates that at the master's level, there is a higher relative frequency in the phrasal verb *find out* in New Zealand academic writing, while there is a greater relative frequency in the phrasal verb *turn to* in American academic writing ($p < 001$).

An analysis of concordance lines indicates that each of the four most statistically significant phrasal verbs has a particular function in the writing of the master's students. For instance, *carry out* is used to refer mainly to the performance or execution of a study or analysis, while *account for* is used for explanative purposes, and *point out* is employed for reported speech. Moreover, the writers use the phrasal verb *put forward* to offer or suggest ideas in their academic writing. According to the results of Table 4.10, *carry out* tends to be characteristic of New Zealand master's level academic writing, while US writing uses the words such as *conducted to*, *attended to*, and *tended to* in their writing. Interestingly, US master's level writing seems to prefer to use the phrasal verbs *account for* and *point out* rather than singular verbs (*show*, *identify*, *state*, and *explain*).

4.3.1 Summary: Phrasal verbs

Overall, there is a similar frequency in the usage of most phrasal verbs across the two corpora, however, there are a couple of phrasal verbs used more frequently in the US masters' academic writing than in the NZ masters' academic writing. According to this study, despite the fact that there are some exceptions in the use of academic writing, it can be seen that there are some acceptable and commonly used phrasal verbs that writers can use when reporting their studies, e.g., *carry out*, *point out* and *account for*, depending on meaning and expression.

4.4 Reporting verbs

In his research on academic writing academic writing, Hyland (1998) identified that authors often use reporting verbs as a resource for communicating their own stance. Furthermore, Thompson and Ye (1991), as well as Bloch (2010), state that authors use reporting verbs to both convey their own claims or ideas, and also to express their attitude towards other's assertions, while some studies suggest that the appropriate choice of reporting verbs is crucial for asserting credible claims in academic writing (Bloch, 2010; Manan & Noor, 2014; Wen & Pramoolsook, 2021). Nevertheless, and as demonstrated in Chapter 2 (Section 2.3), there are often differences in the use of reporting verbs across cultures (Dueñas, 2010; Nádvorníková, 2020; Yasmin et al., 2020). As a consequence, it is of interest for this study to examine variations in reporting verb usage between academic writing by US and NZ master's students.

In order to carry out this analysis, a comparative frequency analysis of the top nineteen most frequent reporting verbs in the MNZAW and MUSAW corpora will be provided in this section. As verbs that function as reporting verbs are often found in contexts not specifically related to reporting, this component of the analysis follows the approach taken in Thompson and Ye's (1991) research on reporting verbs, where only those verbs in the corpora following parentheses were considered (e.g., Smith (2007) *finds* . . .). This approach ensures that only verbs used in sentences in which reference was most likely made to an author's citation, i.e., reporting verbs, were counted.

Table 4.11

The top nineteen most frequent reporting verbs in the MNZAW corpus and MUSAW corpus

Rank	Item	NZ Frequency	NZ Relative frequency	US Frequency	US Relative frequency	LL	P- value	
1	find	101	94.46	113	110.85	1.25	0.26	
2	argue	82	76.69	74	72.59	0.15	0.70	

3	suggest	59	55.18	20	19.62	18.57	0.00	***
4	note	43	40.22	71	69.65	8.14	0.00	**
5	state	34	31.8	20	19.62	3.12	0.08	
6	describe	32	29.93	35	34.33	0.28	0.59	
7	explain	26	24.32	20	19.62	0.56	0.45	
8	define	21	19.64	8	7.85	5.52	0.02	*
9	discuss	20	18.71	38	37.28	6.44	0.01	*
10	investigate	17	15.9	6	5.89	5.04	0.02	*
11	identify	17	15.9	12	11.77	0.67	0.41	
12	conclude	16	14.96	24	23.54	1.95	0.16	
13	report	16	14.96	9	8.83	1.71	0.19	
14	observe	16	14.96	0	0	0.00	0.00	
15	show	14	13.09	11	10.79	0.25	0.62	
16	believe	13	13.16	0	0	0.00	0.00	
17	support	10	9.35	0	0	0.00	0.00	
18	indicate	6	5.61	5	4.9	0.05	0.81	
19	examine	0	0	10	9.81	0.00	0.00	
Total		543	508.84	476	466.94	2.10	0.15	

In Table 4.11, with only a few exceptions, the relative frequencies of each of the reporting verbs are similar across the MNZAW and the MUSAW corpora. What is of interest, however, are the respective rankings of the reporting verbs by frequency across the two corpora. As demonstrated in Table 4.11, for example, the reporting verb *find*, which typically employs a neutral stance to indicate the result of some study, is the most frequently used reporting verb in both corpora, while some items are only found in one of the corpora. These include *examine*, which does not appear in the most frequent reporting verbs of the MNZAW corpus, or *observe*, *believe* and *support*, which do not appear in the most frequent reporting verbs of the MUSAW corpus.

Interestingly, there is a statistically significant difference ($p < 0.0001$) in the relative frequencies of the reporting verbs *suggest* in the two corpora. The reporting verb *suggest* occurs over twice as often in the MNZAW corpus as compared with the MUSAW corpus. It is also the third most frequently used reporting verb in the MNZAW, but only the seventh equal in the MUSAW corpus, where it is preceded by *find*, *argue*, *note*, *describe*, *discuss* and *conclude*. *Suggest* is used almost twice as often as *state* in the MNZAW but occurs equally with *state* in the MUSAW. This perhaps indicates a tendency for the NZ masters' level writers to be more cautious or less confident in their reporting of others' research outcomes than the US writers. Similarly, the relative frequency of *note* is significantly over a third more frequent in the MUSAW corpora than it is in the MNZAW corpus ($p < 0.001$), suggesting that the master's US academic writing tends to express the authors' view with more assurance than the master's level academic writing in New Zealand.

In order to examine the overall functional differences in the use of the reporting verbs in the two corpora, the distribution of three main classifications of reporting verbs, using Hyland's (2002) framework, is presented in Table 4.12.

Table 4.12

The distribution of three main classifications of reporting verbs in the MNZAW corpus and MUSAW corpus using Hyland's (2002) framework.

Reporting verbs	Function (Hyland, 2020)	Functional category	NZ relative frequency	US relative frequency
find, identify, show	procedures	Research acts	30.86	15.7
investigate, observe, examine	findings		123.45	133.41

believe	tentative	Cognitive acts	13.16	0
suggest, support, indicate	doubt	Discourse acts	70.14	24.52
argue, note, state, describe, explain, define, discuss, conclude, report	assurance		256.27	284.48

As we can see in Table 4.12, overall, the finding firstly illustrates that the reporting verbs are employed with more variety in the NZ masters' academic writing than in the US masters' academic writing. The table also shows that reporting verbs predominantly function as discourse acts in both corpora; that is, they indicate the stance of the student writers towards the claims or studies they are reporting on. Next, they function as research acts; that is, they more neutrally refer to the research procedures or findings. It is evident, therefore, that reporting verbs are predominately used across the two corpora to express an assessment of the citation and its accuracy, with the US students perhaps expressing a greater confidence towards the claims or studies they are reporting on than the New Zealand students.

4.4.1 Summary: Reporting verbs

In conclusion, besides illustrating that the reporting verb *find* is the most frequently used in both corpora, the findings suggest an over-similarity in the occurrence of each reporting verb in both the MNZAW and the MUSAW corpora, with only a few exceptions. The findings also reveal that, in US and NZ master's level academic writing, reporting verbs predominantly function as discourse acts. Overall, and in keeping with previous results, the master's level academic writing in the MUSAW corpus tends to exhibit a greater sense of confidence than the MNZAW writing.

Chapter 5:

Discussion

5.0 Introduction

The study carried out an exploratory corpus-based analysis of a number of cross-cultural lexico-grammatical differences between master's level academic writing in New Zealand and the United States. This concluding chapter begins with a consideration of the major findings found in Chapter 4. Following that, the study's limitations and its implications for future research are discussed. Lastly, the chapter provides a brief summary of the study. As indicated in Chapter 3, the primary aim of the study was to answer the research question:

What are some of the key lexical and grammatical differences between master's level academic writing in New Zealand and the United States?

5.1 Overall findings

Overall, the study finds that the lexico-grammatical characteristics of master's level academic writing in New Zealand and the United States are generally very similar. The main differences, summarised in the next section, are relatively minor, and predominantly involve subtleties in pronominal choice, phrasal verb, and reporting verb choice, as well as the degree of hedging and boosting employed. These differences are often related to a general perception that the master's level writers in the United States tend to convey a greater sense of certainty and confidence in their writing than their

New Zealand counterparts who tend to exhibit a greater sense of subjectivity and academic caution.

Furthermore, and as pointed out in Chapter 1, a secondary motivation for this study was related to a concern that instructional books on graduate writing used in New Zealand tertiary settings, such as Swales and Feak (1994), Leki (1998), as well as Bailey (2003), might not necessarily exemplify the type of writing expected of graduate students in the New Zealand context. However, with a few exceptions, it is suggested that writing lecturers and their students can be relatively confident that these course books are suitable for general graduate writing instruction in the New Zealand context.

5.2 Key findings in the various areas of analysis

Given institutional time constraints, the study focused in particular on four key areas of academic writing that were shown in the literature to frequently exhibit cross-cultural differences (see Chapter 2). These areas were hedges and boosters, authorial identity, phrasal verbs, and reporting verbs. This section summarises and discusses the key findings of the study relevant to each of these specific areas.

5.2.1 Hedges and boosters

According to the findings, the use of modal verbs, adjectives and adverbs as both hedges and boosters are generally similar in the MNZAW and the MUSAW corpora. Interestingly, however, while it was found that, overall, the use of modality for hedging was used more frequently than modality for boosting, modal adverbs and adjectives tended to be used more by the US master's level writers for boosting. As a consequence, it could be argued that, at least through these grammatical forms, the United States masters' community tend to convey a greater sense of certainty and confidence in their writing than the New Zealand masters' community.

5.2.2 Authorial identity

The study found that there is a different sense of authorial identity between master's level writing in New Zealand and the United States. This can be seen

in the way that the first-person singular (*I, me, my*) is used considerably more in master's level academic writing in New Zealand than it is in the United States, while the first-person plural (*we, our*) is employed considerably more in master's level academic writing in the United States. The binomial *I think* was also found to be used significantly more frequently in the master's level academic writing of the New Zealand students, suggesting that their claims are expressed in a more personal and perhaps less confident manner.

5.2.3 Phrasal verbs

This study indicated that, despite general similarities in the use of phrasal verbs between master's level academic writing in New Zealand and the United States, there are a few exceptions of note across the two corpora. Overall, however, it could be argued that the reporting verb usage of the US students perhaps expresses a greater confidence towards the claims or studies they are reporting compared to the reporting verb usage of the New Zealand students. In terms of implications, while this difference is relatively subtle, Liu (2011) has nevertheless suggested that an awareness of the specific phrasal verbs used in different cultural contexts of academic writing can be particularly useful for student writers.

5.2.4 Reporting verbs

The findings revealed, that with only a few exceptions, there is a similarity in the use of reporting verbs across both corpora. Drawing upon Hyland's (2002) framework, the study suggested that reporting verbs across the two corpora are generally employed as discourse acts, followed by research acts, and then cognitive acts. However, and also following Hyland (2002), the study showed that the master's level US academic writing at times uses reporting verbs to express the authors' views more directly, and with more certainty than in master's level NZ academic writing.

5.3 Implications

5.3.1 Implications for academic writing lecturers and their students

Given that the lexical-grammatical features of writing are often influenced by cultural values (Blum-Kulka & Levenston, 1987; Kaplan, 1966, 1990;), it is

important that English for Academic Purposes educators make explicit to their students the differences between L1 and L2 writing patterns in relation to the cultural values that inform them. This includes academic writing in the New Zealand context, where New Zealand writers, like those of other cultures, carry with them a variety of cultural beliefs, values and experiences which can impact upon their writing. As a result, students should be made aware of the cultural constraints associated with a particular lexico-grammatical form and the consequences of selecting that form, particularly when it has to do with the expression of authorial certainty, as found with most of the lexico-grammatical forms examined in this study. Additionally, acknowledging those contrastive aspects of two cultures may constitute the fundamental step for students learning to write academically in another language in order for them to develop sensitivity to common errors which could be traceable to their first language and culture (McLean & Ransom, 2007). Approaches such as contrastive rhetoric provide a mechanism through which teachers and students may gain an understanding of the problems they face when trying to learn how to produce a coherent and cohesive text in L2 (Xing et al., 2008). As Loi and Lim (2019) suggest, exposing L2 learners to information about the differences between academic English and their own cultures can help L2 student writers more appropriately present their claims and arguments. For example, exposing New Zealand scholars to information about the subtle differences in hedging, or phrasal verb use in relation to the US and their own cultures, particularly with regard to academic caution, may help student writers appropriately present their propositional claims and arguments.

However, it was also found that while certain cultural beliefs and values may impact on New Zealand academic writing, in many instances the lexico-grammatical characteristics of master's level academic writing in New Zealand and the United States are generally very similar, suggesting that the two countries share certain social values that influence their writing. As indicated, New Zealand teachers of graduate academic writing can therefore feel largely confident that the academic writing course books they employ, most of which are written by authors from the United States, are suitable for their students studying at master's level in a New Zealand university.

However, they should also be aware that, as also indicated throughout this study, there are a few minor areas of difference that could be addressed. These are specifically discussed in Chapter 4, and summarised above in Section 5.3

5.3.2 Implications for supervisors of master's level academic writing

This study also suggests that thesis supervisors should be aware of cultural differences and their impact on student writing. The supervisors might provide the clarification of lexico-grammatical characteristics at the master's level with regard to the specific culture in which the writing is taking place. This might involve recommending to their supervisees post-graduate level course books, such as Swales and Feak (2004, 2012), which provide especially useful information about the use of certain lexico-grammatical features in master's level academic writing, but also identifying the subtle differences, for example, the tendency to use first person pronouns, or the more cautious expression of academic claims. To achieve this, supervisors might also download theses for their students from relevant university websites to provide evidence of lexico-grammatical expectations, so as to exemplify these particular lexico-grammatical characteristics in context.

5.3.3 Implications for general academic writing course book writers

The findings of this study that certain features of master's level academic writing in the US are similar to those in New Zealand, implies that, for the most part at least, writers of course books at this level can continue to offer general information about academic writing conventions that are broadly useful for students in those countries where English is the first language. However, at the same time, course book writers might consider providing a greater discussion of cultural values and the impact these might have on lexico-grammatical choice. Furthermore, where possible, a discussion of the more subtle differences found in the academic writing between certain countries, such as the US and New Zealand, might be of interest to students, who, particularly at the master's level, should perhaps be aware of these subtleties. Overall, this study suggests that in some instances, language/intercultural linguistic awareness can be important and should be mentioned in academic writing course books.

5.4 Limitations of the research

There are some limitations to this study. Firstly, at approximately 800,000 words each, the size of the two corpora might be considered small given the ever-increasing size of corpora in contemporary corpus research. Nevertheless, as Hocking (2022) points out, small corpora are often regarded as appropriate for the examination of specialised language. He refers to the work of Bowker and Pearson (2002), who have suggested that “anywhere from a few thousand to a few hundred words have proved useful for LSP studies” (p. 54); to Walsh (2013), who recommends the use of smaller context-specific corpora when analysing of specific language forms; and to Vaughan and Clancy (2013), who have shown that small corpora within the 50,000-word range can be useful for analysing the features of a specialised language.

Secondly, while this study focuses on certain important lexico-grammatical areas that are seen as central to academic writing (Flowerdew, 1994; Flowerdew & Forest, 2009; Thompson, 2001), there are other language features not discussed in this study which may provide further insights into the differences and similarities between master’s level academic writing in New Zealand and the United States. For example, Li (2016) compared the use of lexical bundles in Chinese L2 and New Zealand postgraduate academic writing. Other areas might focus on metadiscourse in master’s level academic writing across different cultures, including transitions (Gardner & Han, 2018), evidential markers (Rahimivand & Kuhi, 2014), epistemic markers (Vold, 2006), and engagement markers (Khatibi & Esfandiari, 2021; Khoutyz, 2013).

Thirdly, in keeping with many academic writing coursebooks and student courses in New Zealand and the United States, this study focused on the more general academic writing conventions across the two cultures, rather than the particular writing conventions of specific disciplines. Further studies might compare the difference in NZ and US master’s level writing of certain specific disciplines. For instance, using a corpus-based study Alonso-Almeida and Cruz-Garcí (2011) carried out a study on evidential and epistemic markers in

English medical abstracts, while He and Rahim, (2019) investigated engagement markers in economic research articles.

5.5 Possibilities for further research

There are a number of possibilities for future research. First of all, the size of the corpus might be expanded to include a much greater number of theses in order to provide even more robust results. Secondly, a future study could include an increased variety of disciplines and investigate a wider range of lexico-grammatical features. Finally, master's level academic writing between other cultures other than NZ and the US might be compared in future studies.

5.6 Conclusion

In conclusion, this study investigated cross-cultural lexical and grammatical differences between master's level academic writing in New Zealand and the United States, focusing primarily on the areas of pronominal choice, phrasal verbs, reporting verbs, and hedging and boosting. It found that, despite a small number of differences, in particular the expression of confidence and certainty, the characteristics of master's level academic writing in New Zealand and the United States are generally very similar. The outcomes of the study may provide information that can help second-language writers of English more successfully meet the lexical and grammatical expectations of New Zealand academic writing.

References

- Abdollahzadeh, E. (2019). A cross-cultural study of hedging in discussion sections by junior and senior academic writers. *Iberica*, 38, 177-202. <https://doi.org/10.1016/j.jeap.2018.11.002>
- Adolphs, S., Brown, B., Carter, R., Crawford, P., & Sahota, O. (2004). Applying corpus linguistics in a health care context. *Journal of Applied Linguistics*, 1(1), 9-28. <https://doi.org/10.1558/japl.1.1.9.55871>
- Ahmad, Z. (2022). Textual variation in L2 academic writing: A study of cultural visibility in lexico-grammatical choices and semantic relations. *International Journal of Multidisciplinary Research and Publications*, 5(1), 13-21. <http://ijmrapp.com/wp-content/uploads/2022/06/IJMRAP-V4N12P181Y22.pdf>
- Akbas, E. (2022). A corpus-driven cross-disciplinary study of inclusive and exclusive we in research article abstracts. *LEARN Journal: Language Education and Acquisition Research Network*, 15(1), 180-204. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4014994
- Alangari, M., Jaworska, S., & Laws, J. (2020). Who's afraid of phrasal verbs? The use of phrasal verbs in expert academic writing in the discipline of linguistics. *Journal of English for Academic Purposes*, 43, 100814. <https://doi.org/10.1016/j.jeap.2019.100814>
- Aliakbari, M. (2004, August). *The place of culture in the Iranian ELT textbooks in high school level* [Paper presentation]. In 9th Conference of Pan-Pacific Association of Applied Linguistics, Seoul, Korea.
- Almuhailib, B. (2019). Analyzing cross-cultural writing differences using contrastive rhetoric: A critical review. *Advances in Language and Literary Studies*, 10(2), 102-106.

- Alonso-Almeida, F., & Cruz-García, L. (2011). The value of *May* as an evidential and epistemic marker in English medical abstracts. *Studia Anglica Posnaniensia*, 46(3), 59-73.
- Ang, L. H., Tan, K. H., & He, M. (2017). A corpus-based collocational analysis of noun premodification types in academic writing. *3L, Language, Linguistics, Literature*, 23(1), 115-135.
<https://doi.org/10.17576/31-2017-2301-09>
- Anthony, L. (2006). Concordancing with AntConc: An introduction to tools and techniques in corpus linguistics. *JACET Newsletter*, 155, 2085.
- Ashouri, S., Arjmandi, M., & Rahimi, R. (2014). The impact of corpus-based collocation instruction on Iranian EFL learners' collocation learning. *Universal Journal of Educational Research*, 2(6), 470-479.
- Bailey, S. (2003). *Academic writing: A practical guide for students*. Psychology Press.
- Baker, P. (2006). *Using corpora in discourse analysis*. Continuum.
- Baker, P. (2010). Corpus methods in linguistics. *Research methods in linguistics*, 93-113.
- Baker, P. (2010). *Sociolinguistics and corpus linguistics*. Edinburgh University Press.
- Baker, P. (2017). *American and British English: Divided by a common language?* Cambridge University Press.
- Baker, S. (2018). Shifts in the treatment of knowledge in academic reading and writing: Adding complexity to students' transitions between A-

levels and university in the UK. *Arts and Humanities in Higher Education*, 17(4), 388-409.

Baron, A., Rayson, P., & Archer, D. (2009). Word frequency and key word statistics in corpus linguistics. *Anglistik*, 20(1), 41-67.

Bayyurt, Y. (2006). Non-native English language teachers' perspective on culture in English as a foreign language classroom. *Teacher Development*, 10(2), 233-247.

Belli, S. A. (2019). Frame markers in master thesis abstracts written in English and Turkish. *Cukurova University Faculty of Education Journal*, 48(2), 994-1011.

Berry, R. (2015). *From words to grammar: Discovering English usage*. Routledge.

Biber, D. (1987). A textual comparison of British and American writing. *American Speech*, 62(2), 99-119. <https://doi.org/10.2307/455273>

Biber, D., & Gray, B. (2010). Challenging stereotypes about academic writing: Complexity, elaboration, explicitness. *Journal of English for Academic Purposes*, 9(1), 2-20. <https://doi.org/10.1016/j.jeap.2010.01.001>

Bloch, J. (2010). A concordance-based study of the use of reporting verbs as rhetorical devices in academic papers. *Journal of Writing Research*, 2(2), 219-244. <https://doi.org/10.17239/jowr-2010.02.02.7>

Blum-Kulka, S., & Levenston, E. A. (1987). Lexical-grammatical pragmatic indicators. *Studies in Second Language Acquisition*, 9(2), 155-170.

Bori, P. (2021). Neoliberalism and global textbooks: A critical ethnography of English language classrooms in Serbia. *Language, Culture and Curriculum*, 34(2), 183-198.

- Bowker, L., & Pearson, J. (2002). *Working with specialized language: A practical guide to using corpora*. Routledge.
- Buckledee, S. (2010). Global English and ELT coursebooks. In C. Gagliardi & A. Maley (Eds.), *EIL, ELF, Global English: Teaching and Learning Issues* (pp. 141-151). Iberica.
- Burneikaitė, N. (2009). Endophoric markers in linguistics master's theses in English L1 & L2. *Žmogus ir žodis, 11(3)*, 11-16.
- Bybee, J., & Fleischman, S. (1995). Modality in grammar and discourse: An introductory essay. In J. L. Bybee & S. Fleischman (Eds.), *Modality in Grammar and Discourse* (pp. 503- 517). John Benjamins Publishing. <https://doi.org/10.1075/tsl.32>
- Çakır, H. (2016). Native and non-native writers' use of stance adverbs in English research article abstracts. *Open Journal of Modern Linguistics, 6(2)*, 85.
- Callies, M., Díez-Bedmar, M. B., & Zaytseva, E. (2014). Using learner corpora for testing and assessing L2 proficiency. *Measuring L2 Proficiency: Perspectives from SLA*, 71–80.
- Can, S., Karabacak, E., & Qin, J. (2016). Structure of moves in research article abstracts in applied linguistics. *Publications, 4(3)*, 23.
- Can, T., & Cangır, H. (2019). A corpus-assisted comparative analysis of self-mention markers in doctoral dissertations of literary studies written in Turkey and the UK. *Journal of English for Academic Purposes, 42*, 100796.
- Çandarlı, D., Bayyurt, Y., & Marti, L. (2015). Authorial presence in L1 and L2 novice academic writing: Cross-linguistic and cross-cultural perspectives. *Journal of English for Academic Purposes, 20*, 192-202. <https://doi.org/10.1016/j.jeap.2015.10.001>

- Carrió Pastor, M. (2014). Cross-cultural variation in the use of modal verbs in academic English. *SKY Journal of Linguistics*, 27(1), 153-166.
- Casasanto, D. (2015). Linguistic relativity. In N. Riemer (Ed.), *The Routledge handbook of semantics* (pp. 158-174). Routledge.
- Chan, T. H. T. (2015). A corpus-based study of the expression of stance in dissertation acknowledgements. *Journal of English for Academic Purposes*, 20, 176-191.
- Chang, Y. Y., & Swales, J. M. (2014). Informal elements in English academic writing: threats or opportunities for advanced non-native speakers?. In C. N. Candlin & K. Hyland (Eds.), *Writing: Texts, processes and practices* (pp. 145-167). Routledge.
- Charles, M., & Frankenberg-Garcia, A. (2021). *Corpora in ESP/EAP writing instruction: Preparation, exploitation, analysis*. Routledge.
- Chen, M. (2013). Overuse or underuse. *International Journal of Corpus Linguistics*, 18(3), 418-442. <https://doi.org/10.1075/ijcl.18.3.07che>
- Clyne, M. (1987). Cultural differences in the organization of academic texts: English and German. *Journal of Pragmatics*, 11(2), 211-241.
- Coates, J. (1995). The expression of root and epistemic possibility in English. In J. Bybee & S. Fleischman (Eds.), *Modality in grammar and discourse* (pp. 55-66). John Benjamins Publishing.
- Coates, J. (2015). *The semantics of the modal auxiliaries*. Routledge
- Connor, U. (1996). *Contrastive rhetoric: Cross-cultural aspects of second-language writing*. Cambridge University Press.
- Connor, U. (2002). New directions in contrastive rhetoric. *TESOL Quarterly*, 36(4), 493-510. <https://doi.org/10.2307/3588238>

- Connor, U., & Lauer, J. (1988). Cross-cultural variation in persuasive student writing. In A. C. Purves (Ed.) *Writing across languages and cultures: Issues in contrastive rhetoric* (pp. 138-159). Sage.
- Creswell, J. D., & Creswell, J. W. (2017). *Research design: qualitative, quantitative, and mixed methods approaches*. SAGE Publications.
- Dagut, M., & Laufer, B. (1985). Avoidance of phrasal verbs-A case for contrastive analysis. *Studies in Second Language Acquisition*, 7(1), 73-79.
<https://www.jstor.org/stable/44488547>
- Davies, M. (2010). *The corpus of historical American English (COHA): 400 million words, 1810-2009*. <https://www.english-corpora.org/coha/>
- Dehkordi, M. E., & Allami, H. (2012). Evidentiality in academic writing. *Theory and Practice in Language Studies*, 2(9), 1895-1904.
- Dogan-Ucar, A., & Akbas, E. (2022). A corpus-driven cross-disciplinary study of inclusive and exclusive we in research article abstracts. *LEARN Journal: Language Education and Acquisition Research Network*, 15(1), 180-204.
- Donadio, P., & Passariello, M. (2022). Hedges and boosters in English and Italian medical research articles: A cross-cultural comparison. *International Journal of Language Studies*, 16(1), 1-20.
- Doró, K. (2013). The rhetoric structure of research article abstracts in English studies journals. *Prague Journal of English Studies*, 2(1), 119-139.
- Dronova, L. P. (2015). A concept as a diachronic phenomenon: Heuristic comparative historical analysis (based on the “purity” lexical-semantic field in the German and English languages). *Procedia Social and Behavioral Sciences*, 200(1), 423-428. <https://doi.org/10.1016/j.sbspro.2015.08.090>

- Dudly-Evans, T. (1997). Genre: how far can we, should we go? *World Englishes*, 16(3), 351-358.
- Dueñas, P. M. (2009). Citation in business management research articles A contrastive (English-Spanish) corpus-based analysis. *Cross-linguistic and Cross-cultural Perspectives on Academic Discourse*, 193, 49.
- Dueñas, P. M. (2007). 'I/we focus on...': A cross-cultural analysis of self-mentions in business management research articles. *Journal of English for Academic Purposes*, 6(2), 143-162.
- Dueñas, P. M. (2010). Attitude markers in business management research articles: A cross-cultural corpus-driven approach. *International Journal of Applied Linguistics*, 20(1), 50-72.
- Duruk, E. (2017). Analysis of metadiscourse markers in academic written discourse produced by Turkish researchers. *Journal of Language and Linguistic Studies*, 13(1), 1-9.
- Duszak, A. (Ed.). (1997). *Culture and styles of academic discourse*. Mouton de Gruyter.
- Evert, S. (2009, May 27-31). *Rethinking corpus frequencies* [Paper presentation]. The ICAME 30 Conference, Lancaster, UK.
- Flowerdew, J. (1994). Research of relevance to second language lecture comprehension: An overview. *Academic Listening: Research Perspectives*, 7, 29.
- Flowerdew, J. (1999). Problems in writing for scholarly publication in English: The case of Hong Kong. *Journal of Second Language Writing*, 8(3), 243-264.
- Flowerdew, J. (2014). *Academic discourse*. Routledge.

- Flowerdew, L. (1998). Corpus linguistic techniques applied to text linguistics. *System*, 26(4), 541-552.
- Flowerdew, L. (2016). A genre-inspired and lexico-grammatical approach for helping postgraduate students craft research grant proposals. *English for Specific Purposes*, 42, 1-12.
- Flowerdew, J., & Forest, R. (2009). Schematic structure and lexico-grammatical realization in corpus-based genre analysis: The case of research in the PhD literature review. *Academic Writing: At the Interface of Corpus and Discourse*, 15-36.
- Fox, H. (1994). *Listening to the world: Cultural issues in academic writing*. National Council of Teachers of English.
- Gabrielatos, C., & McEnery, T. (2005). *Epistemic modality in MA dissertations*. In P. A. Fuertes Olivera (Ed.), *Lengua y sociedad: Investigaciones recientes en lingüística aplicada* (pp. 311-331). Universidad de Valladolid.
- Gao, X. (2016). A cross-disciplinary corpus-based study on English and Chinese native speakers' use of linking adverbials in academic writing. *Journal of English for Academic Purposes*, 24, 14-28.
- Gao, X. (2020). A comparable-corpus-based study of informal features in academic writing by English and Chinese scholars across disciplines. *Iberica*, 39, 119-140. <http://www.revistaiberica.org/index.php/iberica/article/view/78>
- Gardner, S., & Han, C. (2018). Transitions of contrast in Chinese and English university student writing. *Educational Sciences: Theory & practice*, 18(4), 861-882.
- Garnier, M. (2022, May 9). *Phrasal verbs in academic writing*. Writefull.

<https://blog.writefull.com/phrasal-verbs-in-academic-writing/>

Gotti, M. (2012). Cross-cultural aspects of academic discourse. *Brno Studies in English*, 38(2), 59-78. <https://doi.org/10.5817/bse2012-2-4>

Gries, S. T., & Berez, A. L. (2017). Linguistic annotation in/for corpus linguistics. *Handbook of Linguistic Annotation*, 379-409.

Hardt-Mautner, G. (1995). *'Only connect'*. *Critical discourse analysis and corpus linguistics*. UCREL.

Harwood, N. (2005). 'We do not seem to have a theory... The theory I present here attempts to fill this gap': Inclusive and exclusive pronouns in academic writing. *Applied Linguistics*, 26(3), 343-375.

He, M., & Rahim, H. A. (2019). Comparing engagement markers in economics research articles and opinion pieces: A corpus-based study. *GEMA Online Journal of Language Studies*, 19(2), 1-14.

Hinds, J. (1983). Contrastive rhetoric: Japanese and English. *Text*, 3, 183-195.

Hocking, D. (2021). Artist's statements, 'how to guides' and the conceptualisation of creative practice. *English for Special Purposes*, 62, 103–116. <https://doi.org/10.1016/j.esp.2020.12.006>

Hocking, D. (2022). *The impact of everyday language change on the practices of visual artists*. Cambridge University Press. <https://doi.org/10.1017/9781108909693>

Hocking, D., & Toh, G. (2010). EAP writing: Reflections on divergent perceptions and expectations among tutors and students. *Asian Journal of English Language Teaching*, 12, 161-184.

Hu, G., & Cao, F. (2011). Hedging and boosting in abstracts of applied

linguistics articles: A comparative study of English- and Chinese-medium journals. *Journal of Pragmatics*, 43(11), 2795-2809. <https://doi.org/10.1016/j.pragma.2011.04.007>

Hu, G., & Wang, G. (2014). Disciplinary and ethnolinguistic influences on citation in research articles. *Journal of English for Academic Purposes*, 14, 14-28. <https://doi.org/10.1016/j.jeap.2013.11.001>

Huh, S. (2005). How people write differently: A comparative study of Korean and North American graduate students' writing styles. *Korea TESOL*, 8(1), 27-47.

Hunston, S. (2002). *Corpora in applied linguistics*. Cambridge University Press.

Hunston, S., & Thompson, G. (2000). *Evaluation in text: Authorial stance and the construction of discourse*. Oxford University Press.

Hyland, K. (1998). Boosting, hedging and the negotiation of academic knowledge. *TEXT*, 18(3), 349-382. <https://doi.org/10.1515/text.1.1998.18.3.349>

Hyland, K. (1998). *Hedging in scientific research articles*. John Benjamins Publishing.

Hyland, K. (2002a). Authority and invisibility: authorial identity in academic writing. *Journal of Pragmatics*, 34(8), 1091-1112. [https://doi.org/10.1016/S0378-2166\(02\)00035-8](https://doi.org/10.1016/S0378-2166(02)00035-8)

Hyland, K. (2002b). Directives: Argument and engagement in academic writing. *Applied Linguistics*, 23(2), 215-239.

Hyland, K. (2002c). Specificity revisited: How far should we go now? *English for Specific Purposes*, 21(4), 385-395.

- Hyland, K. (2006). *English for academic purposes: An advanced resource book*. Routledge.
- Hyland, K. (2012). *Disciplinary identities: Individuality and community in academic discourse*. Cambridge University Press.
- Hyland, K., & Jiang, F. (2016). Change of attitude? A diachronic study of stance. *Written Communication*, 33(3), 251-274.
- Hyland, K., & Milton, J. (1997). Qualification and certainty in L1 and L2 students' writing. *Journal of Second Language Writing*, 6(2), 183-205.
- Hyland, K., & Tse, P. (2005). Hooking the reader: A corpus study of evaluative that in abstracts. *English for Specific Purposes*, 24(2), 123-139. <https://doi.org/10.1016/j.esp.2004.02.002>
- Işık-Taş, E. E. (2018). Authorial identity in Turkish language and English language research articles in Sociology: The role of publication context in academic writers' discourse choices. *English for Specific Purposes*, 49, 26–38. <https://doi.org/10.1016/j.esp.2017.10.003>
- Ivanič, R. (1998). *Writing and identity: the discorsal construction of identity in academic writing*. John Benjamins.
- Jafarpour, A. A., Hashemian, M., & Alipour, S. (2013). A corpus-based approach toward teaching collocation of synonyms. *Theory & Practice in Language Studies*, 3(1), 51-60.
- Jarvella, R. J., Bang, E., Jakobsen, A. L., & Mees, I. M. (2001). Of mouths and men: non-native listeners' identification and evaluation of varieties of English. *International Journal of Applied Linguistics*, 11(1), 37-56.

- Jiang, F. K., & Hyland, K. (2020). Prescription and reality in advanced academic writing. *Iberica*, 39, 15-41.
- Jogthong, C. (2001). *Research article introductions in Thai: Genre analysis of academic writing*. West Virginia University.
- Johnson, A. P. (2016). *Academic writing: Process and product*. Rowman & Littlefield.
- Kaplan, R. B. (1966a). Cultural thought patterns in intercultural education. In C. Kenneth (Ed.), *Readings on English as a Second Language* (pp. 399-418). Winthrop.
- Kaplan, R. B. (1966b). Cultural thought patterns in intercultural education. *Language Learning*, 16(1-2), 1-20.
- Kaplan, R. B. (1987). Cultural thought patterns revisited. In R. Kaplan & U. Connor (Eds.), *Writing across languages: Analysis of L2 text* (pp.9-22). AddisonWesley.
- Kaplan, R. B. (1990). Writing in a multilingual/multicultural context: What's contrastive about contrastive rhetoric? *Writing Instructor*, 10(1), 7-18.
- Kashima, E. S., & Kashima, Y. (1998). Culture and language: The case of cultural dimensions and personal pronoun use. *Journal of Cross-cultural Psychology*, 29(3), 461-486.
- Kennedy, G. (2014). *An introduction to corpus linguistics*. Routledge.
- Khatibi, Z., & Esfandiari, R. (2021). Comparative analysis of engagement markers in research article introductions and conclusions. *Journal of Modern Research in English Language Studies*, 8(3), 1-24.

- Khedri, M. (2018). Evidentials in research articles: A marker of discipline. *Pertanika Journal of Social Sciences and Humanities*, 26(T), 145-158.
- Khoutyz, I. (2013). Engagement features in Russian & English: A cross-cultural analysis of academic written discourse. *Working Papers in TESOL & Applied Linguistics*, 13(1), 1–20.
- Kilgarriff, A., & Tugwell, D. (2002). Sketching words. *Lexicography and natural language processing: A festschrift in honour of BTS Atkins*, (pp. 125-137). Routledge.
- Kilgarriff, A., Baisa, V., Bušta, J., Jakubíček, M., Kovář, V., Michelfeit, J., Rychlý, P., & Suchomel, V. (2014). The Sketch Engine: Ten years on. *Lexicography*, 1(1), 7–36.
- Kilgarriff, A., Rychly, P., Smrz, P., & Tugwell, D. (2004). Itri-04-08 the sketch engine. *Information Technology*, 105, 116.
- Kim, C. K. (2009). Personal pronouns in English and Korean texts: A corpus-based study in terms of textual interaction. *Journal of Pragmatics*, 41(10), 2086-2099.
- Krieger, D. (2003). Corpus linguistics: What it is and how it can be applied to teaching. *The Internet TESL Journal*, 9(3), 123-141.
- Kruger, H., Van Rooy, B., & Smith, A. (2019). Register change in the British and Australian Hansard (1901-2015). *Journal of English Linguistics*, 47(3), 183-220. <https://doi.org/10.1177/0075424219857114>
- Kubota, R. (2010). Cross-cultural perspectives on writing: Contrastive rhetoric. *Sociolinguistics and Language Education*, 18, 265-289.

- Kuo, C. H. (1999). The use of personal pronouns: Role relationships in scientific journal articles. *English for Specific Purposes*, 18(2), 121- 138.
- Lakić, I., Vuković, M., & Živković, B. (Eds.). (2015). *Academic discourse across cultures*. Cambridge Scholars Publishing.
- Lam, P. Y. (2007). A corpus-driven lexico-grammatical analysis of English tourism industry texts and the study of its pedagogic implications in English for Specific Purposes. In E. Hidalgo, L. Quereda & J Santana (Eds.), *Corpora in the foreign language classroom* (pp. 71-89). Brill Rodopi.
- Larsson, T., & Kaatari, H. (2020). Syntactic complexity across registers: Investigating (in) formality in second-language writing. *Journal of English for Academic Purposes*, 45, 100850. <https://doi.org/10.1016/j.jeap.2020.100850>
- Le Ha, P. (2011). The writing and culture nexus: Writers' comparisons of Vietnamese and English academic writing. In *Voices, identities, negotiations, and conflicts: Writing academic English across cultures* (pp. 23-40). Brill.
- Leech, G. (1992). Corpora and theories of linguistic performance. *Directions in Corpus Linguistics*, 1992, 105-122.
- Lei, L. (2012). Linking adverbials in academic writing on applied linguistics by Chinese doctoral students. *Journal of English for Academic Purposes*, 11(3), 267-275.
- Lei, L., & Liu, D. (2018). The academic English collocation list: A corpus-driven study. *International Journal of Corpus Linguistics*, 23(2), 216-243. <https://doi.org/10.1075/ijcl.16135.lei>
- Leki, I. (1997). Cross-talk: ESL issues and contrastive rhetoric. *Writing in*

Leki, I. (1998). *Academic writing: Exploring processes and strategies*. Cambridge University Press.

Li, L. (2016). *Sentence initial bundles in L2 thesis writing: A comparative study of Chinese L2 and New Zealand L1 postgraduates' writing* [Doctoral thesis, University of Waikato]. The University of Waikato Research Commons. <https://hdl.handle.net/10289/10862>

Liao, Y., & Fukuya, Y. J. (2004). Avoidance of phrasal verbs: The case of Chinese learners of English. *Language Learning*, 54(2), 193-226. <https://doi.org/10.1111/j.1467-9922.2004.00254>

Liu, D. (2011). The most frequently used English phrasal verbs in American and British English: A multicorpus examination. *TESOL Quarterly*, 45(4), 661-688. <https://doi.org/10.5054/tq.2011.247707>

Liu, D., & Myers, D. (2020). The most-common phrasal verbs with their key meanings for spoken and academic written English: A corpus analysis. *Language Teaching Research*, 24(3), 403-424.

Liu, R., & Wang, S. (2019). How citation is signaled: A Corpus-based study on reporting verbs in Chinese academic papers. *Chinese Language Learning Sciences*, 53-71. https://doi.org/10.1007/978-981-13-9505-5_3

Loan, N. T. T., & Pramoolsook, I. (2015). Reporting verbs in literature review chapters of TESOL master's theses written by Vietnamese postgraduates. *ESP Today-Journal of English for Specific Purposes at Tertiary Level*, 3(2), 196-215.

Loi, C. K., & Lim, J. M. H. (2019). Hedging in the discussion sections of English and Malay educational research articles. *GEMA Online Journal of Language Studies*, 19(1), 36-61. <https://doi.org/10.17576/>

- Long, S. O. (2004). Cultural scripts for a good death in Japan and the United States: Similarities and differences. *Social Science & Medicine*, 58(5), 913-928. <https://doi.org/10.1016/j.socscimed.2003.10.037>
- Lyons, J. (1977). *Semantics*. Cambridge University Press.
- Manan, N. A., & Noor, N. M. (2014). Analysis of reporting verbs in master's theses. *Procedia-Social and Behavioral Sciences*, 134, 140-145.
- Martín-Martín, P. (2005). *The rhetoric of the abstract in English and Spanish scientific discourse: A cross-cultural genre-analytic approach* (Vol. 279). Peter Lang.
- Matalene, C. (1985). Contrastive rhetoric: An American writing teacher in China. *College English*, 47(8), 789-808. <https://doi.org/10.2307/376613>
- Mauranen, A. (1993). Contrastive ESP rhetoric: Metatext in Finnish-English economics texts. *English for Specific Purposes*, 12(1), 3-22.
- McEnery, T. (2019). *Corpus linguistics*. Edinburgh University Press.
- McEnery, T., & Hardie, A. (2011). *Corpus linguistics: Method, theory and practice*. Cambridge University Press.
- McEnery, T., & Wilson, A. (1996). *Corpus linguistics* Edinburgh University Press.
- McEnery, T., & Wilson, A. (2003). Corpus linguistics. *The Oxford handbook of computational linguistics*, 448-463.
- McEnery, T., Tono, Y., & Xiao, R. (2006). *Corpus-based language studies: An advanced resource book*. Routledge.

- McLean, P., & Ransom, L. (2007). Building intercultural competencies: Implications for academic skills development. In J. Carroll & J. Ryan (Eds.), *Teaching international students* (pp. 57-74). Routledge.
- Mendis, D. (2010). Formality in academic writing: The use/non-use of phrasal verbs in two varieties of English. In M. F. Ruiz-Garrido, J. C. Palmer-Silveira & I. Fortanent-Gómez (Eds.), *English for professional and academic purposes* (pp. 9-23). Brill.
- Mohan, B. A., & Lo, W. A. Y. (1985). Academic writing and Chinese students: Transfer and developmental factors. *TESOL Quarterly*, 19(3), 515–534. <https://doi.org/10.2307/3586276>
- Mur-Duenas, P. (2021). There may be differences: Analysing the use of hedges in English and Spanish research articles. *Lingua*, 260, 103131. <https://doi.org/10.1016/j.lingua.2021.103131>
- Nádvořníková, O. (2020). Differences in the lexical variation of reporting verbs in French, English and Czech fiction and their impact on translation. *Languages in Contrast*, 20(2), 209-234.
- Nasiri, S. (2012). Academic writing: The role of culture, language and identity in writing for community. *International Journal of Learning & Development*, 2(3), 21-40.
- Nattinger, J. (1988). Some current trends in vocabulary teaching. *Vocabulary and Language Teaching*, 1(1), 62-82.
- Oh, S. Y. (2007). A corpus-based study of epistemic modality in Korean college students' writings in English. *English Teaching*, 62(2), 147-175.
- Orta, I. V. (2010). A contrastive analysis of the use of modal verbs in the expression of epistemic stance in Business Management research

articles in English and Spanish. *Ibérica*, 19, 77-95.

Oshima, A., & Hogue, A. (2000). *Writing academic English*. Longman.

Oshima, A., & Hogue, A. (2007). *Introduction to academic writing*.
Pearson/Longman.

Paltridge, B. (2004). Academic writing. *Language Teaching*, 37(2), 87-105.

Paltridge, B. (2012). *Discourse analysis: An introduction*. Bloomsbury.

Parsaiyan, S. F., & Garshasbi, K. (2021). Global coursebooks in the course
of time: The case of Interchange Level 2. *Issues in Language
Teaching*, 10(1), 269-300.
<https://doi.org/10.22054/ilt.2021.59896.584>

Patel, S. (2015, July 5). *The research paradigm – methodology, epistemology
and ontology – explained in simple language*.
[https://salmapatel.co.uk/academia/the-research-paradigm-
methodology-epistemology-and-ontology-explained-in-simple-
language/](https://salmapatel.co.uk/academia/the-research-paradigm-methodology-epistemology-and-ontology-explained-in-simple-language/)

Pearce, M. (2008). Investigating the collocational behaviour of MAN and
WOMAN in the BNC using Sketch Engine. *Corpora*, 3(1), 1-29.

Pérez-Llantada, C. (2010). The discourse functions of metadiscourse in
published academic writing: Issues of culture and language. *Nordic
Journal of English Studies*, 9(2), 41-68.

Pinto, P. T., Rees, G. P., & Frankenberg-Garcia, A. (2021). Identifying
collocation issues in English L2 research article writing. *Corpora in
ESP/EAP Writing Instruction*, 147-170. [https://doi.org/10.4324/
9781003001966-7-11](https://doi.org/10.4324/9781003001966-7-11)

Rahimivand, M., & Kuhl, D. (2014). An exploration of discursial

construction of identity in academic writing. *Procedia-Social and Behavioral Sciences*, 98, 1492-1501.

Ramanathan, V., & Atkinson, D. (1999). Ethnographic approaches and methods in L2 writing research: A critical guide and review. *Applied Linguistics*, 20(1), 44-70. <https://doi.org/10.1093/applin/20.1.44>

Rayson, P. E. (2015). *Computational tools and methods for corpus compilation and analysis*. Cambridge University Press. <https://doi.org/10.1007/9781139764377.003>

Reppen, R., & Simpson-Vlach, R. (2019). Corpus linguistics. In N. Schmitt & M. P.H. Rodgers (Eds.), *An introduction to applied linguistics* (pp. 91-108). Routledge. <https://doi.org/10.4324/9780429424465>

Rezaei Keramati, S., Kuhl, D., & Saeidi, M. (2019). Cross-sectional diachronic corpus analysis of stance and engagement markers in three leading journals of applied linguistics. *Journal of Modern Research in English Language Studies*, 6(2), 1-25.

Römer, U., & Wulff, S. (2010). Applying corpus methods to written academic texts: Explorations of MICUSP. *Journal of Writing Research*, 2(2), 99-127. <https://doi.org/10.17239/jowr-2010.02.02.2>

Rustipa, K. (2015). The use of demonstrative pronoun and demonstrative determiner “this” in upper-level student writing: A case study. *English Language Teaching*, 8(5), 158-167.

Schwartz, M., & Palviainen, Å. (2016). Twenty-first-century preschool bilingual education: facing advantages and challenges in cross-cultural contexts. *International Journal of Bilingual Education and Bilingualism*, 19(6), 603-613.

Scott, M. (2022). *WordSmith Tools version 8* (64 bit version). Stroud:

Lexical Analysis Software.

- Scott, M., & Tribble, C. (2006). *Textual patterns: Key words and corpus analysis in language education*. John Benjamins.
- Serholt, S. (2012). Hedges and boosters in academic writing - a study of gender differences in essays written by Swedish advanced learners of English. [Student essay, Göteborgs universitet]. Institutionen för språk och litteraturer. <http://hdl.handle.net/2077/29526>
- Siepmann, D. (2006). Academic writing and culture: An overview of differences between English, French and German. *Meta: journal des traducteurs/Meta: Translators' Journal*, 51(1), 131-150.
- Silva, T. (1993). Toward an understanding of the distinct nature of L2 writing: The ESL research and its implications. *TESOL Quarterly*, 27(4), 657- 677. <https://doi.org/10.2307/3587400>
- Sinclair, J. (1991). *Corpus, concordance, collocation*. Oxford University Press.
- Singh, A. A., & Lukkarila, L. (2017). *Successful academic writing: a complete guide for social and behavioral scientists*. The Guilford Press.
- Spack, R. (1988). Initiating ESL students into the academic discourse community: how far should we go? *TESOL Quarterly*, 22(1), 29-52.
- Stubbs, M. (1996). *Text and corpus analysis*. Blackwell.
- Sung, C. C. M. (2014). An exploratory study of Hong Kong students' perceptions of native and non-native English-speaking teachers in ELT. *Asian Englishes*, 16(1), 32-46.

- Swales, J. M., & Feak, C. B. (1994). *Academic writing for graduate students: A course for non-native speakers of English*. Ann Arbor: University of Michigan Press.
- Swales, J. M., & Feak, C. B. (2004). *Academic writing for graduate students: Essential tasks and skills* (2nd ed.). University of Michigan Press.
- Swales, J. M., & Feak, C. B. (2012). *Academic writing for graduate students: Essential tasks and skills* (3rd ed.). University of Michigan Press.
- Takahashi, R. (2014). An analysis of ELF-oriented features in ELT coursebooks: Are attitudes towards non-native varieties changing in English language teaching policy and practice in Japan? *English Today*, 30(1), 28-34.
- Taki, S., & Jafarpour, F. (2012). Engagement and stance in academic writing: A study of English and Persian research articles. *Mediterranean Journal of Social Sciences*, 3(1), 157-157.
- Takimoto, M. (2015). A corpus-based analysis of hedges and boosters in English academic articles. *Indonesian Journal of Applied Linguistics*, 5(1), 95-105.
- Tang, R., & John, S. (1999). The 'I' in identity: Exploring writer identity in student academic writing through the first person pronoun. *English for specific purposes*, 18, S23-S39.
- Thompson, G. (2001). Interaction in academic writing: Learning to argue with the reader. *Applied Linguistics*, 22(1), 58-78.
- Thompson, G., & Ye, Y. (1991). Evaluation in the reporting verbs used in academic papers. *Applied Linguistics*, 12(4), 365-382.
- Trebits, A. (2009). The most frequent phrasal verbs in English language EU

documents-A corpus-based analysis and its implications. *System*, 37(3), 470-481.

Tribble, C. (2014). Corpora and corpus analysis: New windows on academic writing. In J. Flowerdew (Ed.), *Academic discourse* (pp. 141-159). Routledge. <https://doi.org/10.4324/9781315838069>

Tribble, C., & Jones, G. (1997). *Concordances in the classroom: A resource guide for teachers*. Athelstan.

Tseng, F. P. (2011). Analyses of move structure and verb tense of research article abstracts in applied linguistics journals. *International Journal of English Linguistics*, 1(2), 27-39.

Un-udom, S., & Un-udom, N. (2020). A corpus-based study on the use of reporting verbs in applied linguistics articles. *English Language Teaching*, 13(4), 162-169.

Valero-Garcés, C. (1996). Contrastive ESP rhetoric: Metatext in Spanish-English economics texts. *English for Specific Purposes*, 15(4), 279-294.

Vassileva, I. (2001). Commitment and detachment in English and Bulgarian academic writing. *English for Specific Purposes*, 20(1), 83-102. [https://doi.org/10.1016/s0889-4906\(99\)00029-0](https://doi.org/10.1016/s0889-4906(99)00029-0)

Vaughan, E., & Clancy, B. (2013). Small corpora and pragmatics. In J. Romero-Trillo (Ed.), *Yearbook of corpus linguistics and pragmatics 2013* (pp. 53-73). Springer.

Virtanen, T., & Lindgrén, S. A. (1998). British or American English? Investigating what EFL students say and what they do. *The Major Varieties of English. Papers from MAVEN*, 97, 273-282.

- Vold, E. T. (2006). Epistemic modality markers in research articles: a cross-linguistic and cross-disciplinary study. *International Journal of Applied Linguistics*, 16(1), 61-87.
- Walsh, S. (2013). Corpus linguistics and conversation analysis at the interface: Theoretical perspectives, practical outcomes. In J. Romero-Trillo (Ed.), *Yearbook of corpus linguistics and pragmatics 2013* (pp. 37-51). Springer, Dordrecht.
- Wang, T., & Li, L. Y. (2008). Understanding international postgraduate research students' challenges and pedagogical needs in thesis writing. *International Journal of Pedagogies and Learning*, 4(3), 88–96. <https://doi.org/10.5172/ijpl.4.3.88>
- Wen, S., & Pramoolsook, I. (2021). A comparative analysis of reporting verbs used in literature review chapters of bachelor's and master's theses of Chinese English majors. *International Journal of English Language and Literature Studies*, 10(4), 320-332.
- Whiteside, K., & Wharton, S. (2019). Semantic patterning of grammatical keywords in undergraduate academic writing from two close disciplines. *Journal of English for Academic Purposes*, 39, 1–20.
- Xing, M., Wang, J., & Spencer, K. (2008). Raising students' awareness of cross-cultural contrastive rhetoric via an e-learning course. *Language Learning & Technology*, 12(2), 71-93.
- Xu, X., & Nesi, H. (2019). Differences in engagement: A comparison of the strategies used by British and Chinese research article writers. *Journal of English for Academic Purposes*, 38, 121-134.

- Yang, A., Zheng, S. Y., & Ge, G. C. (2015). Epistemic modality in English-medium medical research articles: A systemic functional perspective. *English for Specific Purposes*, 38, 1-10.
- Yang, Y. (2013). Exploring linguistic and cultural variations in the use of hedges in English and Chinese scientific discourse. *Journal of Pragmatics*, 50(1), 23-36. <https://doi.org/10.1016/j.pragma.2013.01.008>
- Yasmin, T., Butt, I. H., & Sarwar, M. N. (2020). A comparative analysis of reporting verbs in research papers authored by Pakistani and native writers. *Global Language Review*, 5(1), 57-66.
- Yeganeh, M. T., & Boghayeri, M. (2015). The frequency and function of reporting verbs in research articles written by native Persian and English speakers. *Procedia-Social and Behavioral Sciences*, 192, 582-586. <https://doi.org/10.1016/j.sbspro.2015.06.097>
- Zhang, M. (2021). Understanding L1 and L2 interaction in collaborative writing: A lexico-grammatical analysis. *Language Teaching Research*, 25(3), 338-359.
- Zhang, Z. (2018). Academic writing difficulty of Chinese students: The cultural issue behind Chinese and British academic writing styles. *Studies in Literature and Language*, 17(2), 118-124.
- Zhang, W., & Hu, G. (2008). Second language learners' attitudes towards English varieties. *Language Awareness*, 17(4), 342-347.