

A LONGITUDINAL CORPUS INVESTIGATION OF
GRAMMATICAL STANCE MARKERS IN THE ENGLISH
ARGUMENTATIVE WRITING OF CHINESE STUDENTS

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FACULTY OF LANGUAGES AND LINGUISTICS
UNIVERSITY OF MALAYA
KUALA LUMPUR

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Field of Study: Corpus Linguistics

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**A LONGITUDINAL CORPUS INVESTIGATION OF GRAMMATICAL
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WRITING OF CHINESE STUDENTS**

ABSTRACT

Evaluation is considered crucial for successful academic writing (Hunston, 1989, 1994; Hyland & Jiang, 2016; G. Thompson, 2001). It conveys the values and judgement of the writer, maintains the relations between the writer and reader and organizes the discourse (G. Thompson & Hunston, 2000). Despite the importance of evaluation, the use of evaluative language in academic writing has shown to be difficult for both L1 and L2 users of English. One active strand of research in English for academic purposes gives considerable attention to the use of linguistic markers of stance. While there has been growing research interest in stance expression in L2 writing, little is known about how L2 users might go about learning to evaluate over time. Even less empirical research has investigated the development of evaluative language from a non-essentialist approach despite repeated calls for researching second language development from a bilingual perspective (Brown, 2013; Cook, 1999; Ortega, 2013, 2018a, 2018c).

The general aim of the present thesis is to shed light on the developmental trajectories of evaluative language. In doing so, it examined the use of a set of grammatical stance markers (i.e., evaluative *that*-clauses, modals and semi-modals, and stance adverbials) in a longitudinal learner corpus, which consists of 632 argumentative essays produced by 158 Chinese undergraduates at four points in time. Frequency of the grammatical stance markers under examination were compared across the four points in time and qualitative analyses of the concordance lines were carried out.

The results show that patterns of changes in the use of grammatical stance markers are complex: (1) patterns of changes vary with the linguistic structures under investigation: whereas the frequency of evaluative *that*-clauses has increased over time, the frequency of modals and semi-modals has decreased; (2) the trajectory for longitudinal changes is

not linear: the frequency of grammatical stance markers changes in an organic, dynamic manner; (3) instances of innovative language use were observed in the corpus, which offer valuable insights into language development from a longitudinal perspective. This thesis shows the value of using longitudinal learner corpora for the study of L2 evaluative language development. Implications for language teaching in tertiary education are discussed.

Keywords: grammatical stance marker, longitudinal learner corpus, academic writing development, evaluation and language learning, Chinese undergraduate students

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SIASATAN LONGITUDINAL PENANDA TATABAHASA PENDIRIAN DALAM PENULISAN ARGUMENTATIF PELAJAR BAHASA INGGERIS IJAZAH DASAR DARI NEGARA CINA

ABSTRAK

Proses penilaian dianggap sesuatu elemen yang penting dalam penulisan akademik yang efektif (Hunston, 1989, 1994; Hyland & Jiang, 2016; G. Thompson, 2001). Ia menyampaikan nilai dan penilaian penulis, mengekalkan hubungan antara penulis dengan pembaca dan mengorganisasikan wacana (Hunston, 1989, 1994; Hyland & Jiang, 2016; G. Thompson, 2001). Walaupun penilaian penting, namun penggunaan bahasa evaluatif dalam penulisan akademik telah dibuktikan adalah sukar dikuasai oleh kedua-dua pengguna Bahasa Inggeris sebagai bahasa pertama (L1) dan kedua (L2). Satu jurusan penyelidikan aktif dalam bidang bahasa Inggeris untuk Tujuan Akademik memfokus kepada penggunaan penanda linguistik pendirian. Walaupun minat terhadap penyelidikan dalam ungkapan pendirian secara bertulis bagi L2 semakin meningkat, hanya sedikit yang diketahui tentang cara pengguna L2 belajar menguasai ungkapan penilaian dalam satu jangkawaktu tertentu. Namun begitu, penyelidikan mengenai perkembangan bahasa evaluatif yang bebas daripada norma penutur asli masih kurang. Terdapat perminataan berulang untuk menyelidik perkembangan bahasa kedua dari perspektif bilingual/berbilang bahasa (Brown, 2013; Cook, 1999; Ortega, 2013, 2018a, 2018c).

Tujuan umum kajian ini adalah untuk memberi penerangan tentang trajektori perkembangan bahasa evaluatif. Dengan itu, kajian ini meninjau penggunaan satu set penanda tatabahasa pendirian (iaitu klausa-that, modals dan adverbial) dalam korpus longitudinal pelajar, yang merangkumi 632 esei argumentatif yang dihasilkan oleh 158 mahasiswa Cina pada empat titik berlainan sepanjang tempoh kajian. Kekekapan relatif penanda tatabahasa pendirian yang dikumpul pada empat tempoh waktu tersebut, juga dibandingkan berserta dengan analisa garis konkordans.

Keputusan menunjukkan bahawa pola perubahan dalam penggunaan penanda tatabahasa pendirian yang kompleks, merangkumi: (1) corak perubahan berbeza dari

struktur linguistik yang disiasat: manakala kekerapan keseluruhan klausa-that yang telah meningkat dalam tempoh kajian, kekerapan modals dan semimodals telah menurun; (2) trajektori perubahan longitudinal tidak linear: penggunaan penanda tatabahasa pendirian berubah secara organik dan dinamik; (3) penggunaan bahasa inovatif juga telah diperhatikan dalam korpus dan ini menawarkan maklumat yang berharga tentang perkembangan bahasa longitudinal. Kajian ini membuktikan kepentingan menggunakan korpora pelajar longitudinal dalam mengkaji perkembangan bahasa. Implikasi untuk pengajaran penulisan pada peringkat pendidikan tinggi juga dibincang.

Kata kunci: penanda tatabahasa, korpora pelajar longitudinal, pembangunan penulisan ilmiah, penilaian dan pemerolehan bahasa, pelajar Cina Ijazah pertama

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CHAPTER 1: INTRODUCTION

1.1 Background

The broad field of SLA research has been undergoing changes in the 21st century (Ortega, 2013, 2018a). Approaches from neighbouring research fields such as World Englishes (WEs) are making inroads into mainstream SLA research (Jenkins, 2006; Ortega, 2016). The consequence of this transdisciplinary influence is that some key ideas in SLA research have been reconceptualized. Most notably, from a multi-competence perspective, second language (L2) users are thought of as independent people in their own right rather than the shadows of monolingual native speakers (Cook, 2016a). Language users even at the very beginning of their experience with the target language can use language resources in a creative manner (Cenoz, 2017; N. C. Ellis, 2002). Language learning, knowledge and production are closely related (N. C. Ellis & Larsen-Freeman, 2009a). Language use is a primary driver for language learning (Tyler, 2010). Such reconceptualizations offer an alternative perspective to look at language development. While these reconceptualized ideas are more in line with the rapidly changing world of the 21st century, many of them have not been well integrated into language learning and teaching research. Few studies have really treated L2 use in its own right or have investigated L2 development without using a monolingual native-speaker model as the benchmark for assessing L2 success. Against this background, this thesis aims to study L2 development in the use of evaluative language under non-essentialist lenses (Ortega, 2018a). The purpose of this thesis is to shed light on the developmental path for the learning of evaluative language by focusing on the changing use of grammatical stance markers in a longitudinal learner corpus of English argumentative essays written by a group of Chinese undergraduates. In the sections below, I will first present the problem statement and the research questions to be addressed, and then discuss the key terms to

be used in this thesis. The structure and content of the thesis are outlined towards the end of this chapter.

1.2 Problem Statement

The SLA field has long been dominated by essentialist ontologies of language that lock SLA research into a monolingual worldview (Ortega, 2018a). L2 use has been mainly studied against a monolingual native-speaker model (Lakshmanan & Selinker, 2001). In mainstream SLA research, researching single language use is still a standard practice, which does not reflect the reality that bi/multilingualism is the norm in many speech communities (Cenoz, 2017; Vaid & Meuter, 2016; Wei, 2018). While not everyone is actively multilingual in daily life, “a true monolingual with no or very limited capacity to acquire and use more than one language is a rarity” (Wei, 2016b, p. 538). In this sense, viewing an idealized monolingual native speaker model as the ultimate target for L2 learning renders L2 users to be imperfect imitations of their monolingual native-speaker counterparts. On the contrary, L2 users have advantages over monolinguals because they display ‘the knowledge and use of two or more languages’ in the same mind (Cook, 2016a, p. 2). In this sense, comparing L1 and L2 is not only irrelevant in many cases, but also is depriving them of their ownership of the language(s) they speak. Another problem with mainstream SLA research is a ‘teleological’ view of language acquisition (Ortega, 2009). In SLA research, it has often been assumed that L2 success is determined against a fixed homogenous target L2. However, there is no fixed endpoint for L2 development or L2 learning (Larsen-Freeman, 1997). There is a need in SLA research to embrace non-essentialist ontologies and treat L2 users in their own right (Chau, 2015; Ortega, 2018a).

However, implementing non-essentialist ontologies of language in research practice could be faced with many challenges. The first challenge is to collect longitudinal data of L2 use from a relatively large sample of L2 users for the study of L2 development. Without real longitudinal data, it is not possible to know how language develops as a function of time. Another challenge is whether the field is able to find alternative standards or criteria to assess L2 use (Ortega, 2016). While applied linguists have attempted to base assessment standards for L2 development on L2 varieties (Monteiro, Crossley, & Kyle, 2018), this approach may encounter formidable difficulties considering the wide diversity of L2 varieties. Ideally, as it has been argued, L2 use should be assessed based on their own performance rather than according to an external assessment criterion (Ortega, 2009). This does not mean that when attempting to adopt a learner-internal assessment criterion, the native-speakerism is naturally avoided; SLA researchers would still use nativespeakerism-oriented constructs, for example, complexity and accuracy. The question arises as to whether non-essentialist ontologies of language can be implemented in practice and how researchers can analyze L2 use without using the monolingual native-speaker model as the benchmark for measuring L2 success. The thesis takes on this challenge by studying L2 development under non-essentialist lenses.

One important area of L2 use is the expression of evaluation in argumentative writing. Evaluation has three major functions: to express the opinion of the writer, to construct and maintain relations between the writer and the reader, and to help organize the discourse (G. Thompson & Hunston, 2000). The expression of evaluation is delicate and varies with register and genre (Biber, 2006a; Dong & Jiang, 2019; Hyland, 1999; Hyland & Guinda, 2012). Due to the importance and complexity of evaluation, a number of studies have investigated how Chinese students express evaluation in their argumentative writing (Geng & Wharton, 2016; Hinkel, 1995; Hyland & Tse, 2005b; Jiang, 2015; J. J. Lee & Deakin, 2016). For example, Hyland and Tse (2005b) compared the use of

evaluative *that*-clauses in two corpora of Chinese postgraduate students' dissertations and published research articles. Jiang (2015) compared the use of nominal stance construction in two corpora of argumentative essays written by Chinese and American university students. Both studies find that Chinese students tend to express personal feelings in their argumentative writing and display more certainty in their statements than native speakers of English. In contrast, a more recent corpus study of doctoral theses did not observe any significant difference in the use of evaluative language between Chinese and native-speaker doctoral students (Geng & Wharton, 2016). Generally, studies of evaluative language in L2 argumentative writing suggest that Chinese students have difficulty in expressing evaluation in their English argumentative writing (Hinkel, 2003). This may create an impression that Chinese speakers were deficient users of English. It has also been suggested that the way they express evaluation considerably differs from that of native-speakers or professional academic writers (Hyland & Milton, 1997; Staples & Reppen, 2016). While these studies have shed some light on the use of evaluative language such as evaluative *that*-clauses and modals in the argumentative writing of Chinese students, the focus of the relevant studies has been placed on L1-L2 differences. Relatively overlooked is how Chinese users of English learn to evaluate in their argumentative writing over time. To answer this question, this thesis aims to study the changing use of grammatical stance markers, one of the most common linguistic realizations of evaluation.

In concluding this section, I argue that L2 use should be treated in its own right (Chau, 2015; Selinker, 1972). In the era where multilinguals far outnumber monolinguals, SLA researchers must consider the ethical issues in the study of L2 development. While there is a growing body of research on non-essentialist ontologies of language and a multi-competence view of L2 users, these ideologies have rarely been carried out in empirical research. It is time to implement these ideologies in research practice. The overall aim of

the thesis is to study the changing use of grammatical stance markers in a longitudinal learner corpus of argumentative essays written by Chinese students. The investigation will be conducted under non-essentialist lenses.

1.3 Research Questions

This thesis aims to answer the following questions:

1. How does the use of grammatical stance markers in the argumentative essays produced by a group of Chinese undergraduate students change over time?
2. How does the stance expressed by the grammatical stance markers change over time?

The two research questions are concerned with the longitudinal changes in the frequency of grammatical stance makers, the patterns of language use and the stances expressed. These two research questions are essentially to explore how a group of Chinese students learnt to evaluate in their argumentative writing over time. The findings of this thesis will contribute to a better understanding of the use of evaluative language in L2 writing as well as its developmental path. Knowledge of the path for L2 evaluative language development would be useful for language instructors and learners of English to have realistic expectations about the learning of evaluative language in academic writing.

1.4 Key Terms in the Thesis

1.4.1 The Notion of L2 User vs. L2 Learner

I have to decide on the label used to describe the status of English in the present study and the participating students because labelling of languages can be ‘politically and ideologically charged’ (Wei, 2016b, p. 535). There are a few candidate terms that can be used to describe the status of English in China, for example, EFL (English as a foreign language), ESL (English as a second language) and L2. EFL refers to a second language that is being studied outside a context in which it is spoken as the native language whereas ESL refers to a second language that is being acquired in a context in which the language is spoken natively (Larsen-Freeman & Long, 1991, p. 43). One problem with this distinction is the conflation of function and location (Cook, 2016a, p. 4). In the SLA literature, the term L2 is often used to mean either a second or a foreign language and often both (Ortega, 2009, p. 6). Either way, it indicates that the use of more than one language rather than the chronological order of language acquisition (Cook, 2016a).

The participants for the study were a group of Chinese first-year students studying at a university in Mainland China. Taking a multi-competence perspective (Cook, 2008), I refer to the participants of the present study as L2 users of language. Here L2 user refers to “people who know and use a second language at any level” (Cook, 2007, p. 240). I decide not to describe the participants as L2 learners because the term L2 learner gives them a subordinate status as learners (Cook, 1999, 2007; Ortega, 2016; Wei, 2016b). It is more meaningful to describe language learners as language users whose linguistic knowledge continues to develop and change throughout the life-span (Wei, 2016b, p. 536). Another term that is close in connotation to L2 user is multilingual, which does not exclude the use of more than two languages and not hint that language ‘proficiency’ has to be high (Cook, 2016a, p. 5). Notions such as EFL learners and L2 learners are only

used when referring to the participants of previous studies in the literature. The term ‘learners of English’ is used when talking about L2 users in the context of teaching.

1.4.2 Language Development

This thesis prefers the use of ‘language development’ (Larsen-Freeman, 2017) because this construct signals the dynamic and nonlinear nature of learning an additional language and affirms the open-endedness of the system of meaning-making that we call language and our ways of using it (Byrnes, 2018). However, the construct of ‘development’ is relatively less discussed in the SLA literature and is often based on underlying assumptions that need to be tested. For example, in discussing the assessment of progress in language development, Larsen-Freeman (2014) states that:

Looking at what learners are doing over time, expanding their repertoire of language resources, for instance, and defining progress in terms of where a learner wants to go, not looking at what the learner is not doing in light of some idealized ‘target’. (Larsen-Freeman, 2014, p. 217)

This statement has a few assumptions:

1. language development is a function of time,
2. language development entails expansion of the repertoire of language resources,
3. language development should not be assessed against an idealized target, and
4. language assessment should take into consideration the intention of learners.

These four assumptions need to be further discussed in the present study. In the first place, time is at the heart of language learning and an inherent property of language development (Byrnes, 2018). As Ortega and Ibarra-Shea (2005) write, the “fundamental problems about L2 learning that SLA researchers investigate are in part problems about

‘time’” (p. 26). The second assumption is concerned with ‘change over time’. It seems to be assumed in the SLA literature that development is closely associated with noticeable changes in the use of particular linguistic features towards an idealized target. This view partly reflects a bias in published research that desires significant changes over time. In reality, L2 learning generally takes time. Development can take place over different time frames, varying from one month to two years (Ortega, 2015). It may take 2-3 years to capture minimal progress towards intermediate levels of proficiency in the absence of instruction (Ortega & Byrnes, 2008b). However, it should be noted that language development takes place even though no considerable changes are observed. On a further note, “language learning is a multidirectional and multidimensional adaptation process” (Wei, 2016, p. 537). In other words, language development does not only entail an expansion of language resources. Languages are not only acquired but also forgotten; language growth is often accompanied by a process of gradual loss or attrition (Herdina & Jessner, 2013).

The idea that language development should not be assessed against an idealized target is not something new in the SLA literature (Cook, 1999, 2016a; Ortega, 2009). There will never be full convergence between the language of the L2 user and any idealized target (Larsen-Freeman, 2014). This assumption is related to learner agency (Larsen-Freeman, 2019; van Compernelle & Williams, 2012). L2 users of language can create novel structures in the service of meaning-making (Wei, 2016b). In light of this fact, unconventional linguistic structures that do not conform to the idealized model (e.g., grammar in monolingual native-speaker English) can also be considered as signs of language development. The findings of the thesis are to be understood regarding these characterizations of language development.

1.5 Organization of the Thesis

Chapter 1 of this thesis introduces the background of the study, the gap in the literature and the research questions to be answered. This chapter defines two key terms (i.e., L2 user and language development) that reflect the position of this thesis. Chapter 2 reviews the literature related to learner corpus research, evaluative language, and language development. This chapter contextualizes the study and raises a series of issues to be addressed in the study of L2 development and particularly the learning of evaluative language. Chapter 3 presents information on the research design, data collection method, and analytical procedures. This chapter gives priority to the principles of longitudinal corpus design and a corpus approach to the study of L2 development. The ensuing three chapters, Chapter 4-6, report on a corpus study of evaluative *that*-clauses, modals and semi-modals, and stance adverbials respectively. These three chapters present the major findings to be reported in this thesis. Chapter 7 is a general discussion of the major findings. Chapter 8 concludes the thesis with a summary of the major findings, the contribution of the thesis, and recommendations for future research.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This thesis reports on a longitudinal investigation of the use of evaluative language (i.e., grammatical stance markers) based on a longitudinal learner corpus of argumentative essays written by a group of Chinese undergraduate students. In this thesis, the object of inquiry is the use of evaluative language, the method employed is a corpus approach, and the theoretical underpinning is the non-essentialist ontologies of language in SLA research. This thesis lies at the interface between the study of evaluative language, learner corpus research, and SLA. The previous chapter introduced the background of the thesis. This chapter contextualizes the thesis by critically reviewing the literature on evaluative language in L2 writing, learner corpus research, and second language acquisition.

This chapter contains three sections. Section 2.2 reviews the literature on the concept of evaluative language and its use in L2 writing. In the following section, it reviews learner corpus research related to the use of evaluative language. Section 2.4 explores the value of bringing insights from SLA research to English for Academic Purposes (henceforth EAP) studies whereas Section 2.5 reviews the trends in SLA research, attempting to shed light on the focus of SLA research, the goals of L2 learning, patterns of language development and causes for such development.

2.2 Evaluative Language and Learner Writing

2.2.1 The Concept of Evaluative Language

Over the past decades, there is a growing body of research into the linguistic phenomenon of evaluation. These investigations of evaluation have been carried out under several different labels, including *modality* (Halliday, 1970; Holmes, 1988; Palmer, 1979; Westney, 1986), *evidentiality* (Chafe & Nichols, 1986; Mushin, 2001; Precht, 2003), *stance* (Biber, Johansson, Leech, Conrad, & Finegan, 1999; Charles, 2003; Hunston, 2007; Hyland, 2005), *evaluation* (Hunston, 1994, 2000; Hunston & Thompson, 2000; G. Thompson & Alba-Juez, 2014) and *attitude* (Biber & Finegan, 1989; Hyland & Jiang, 2016; Martin & White, 2005). All these terms are used to refer to more or less the same linguistic phenomenon (G. Thompson & Hunston, 2000). Biber et al. (1999), for example, use the term *stance* to refer to the ‘personal feelings, attitudes, value judgments, or assessments’ that speakers and writers express (p. 966). Hunston and Thompson (2000) use *evaluation* as a broad cover term for “the expression of the speaker or writer’s attitude or stance towards, viewpoint on, or feelings about entities or propositions that he or she is talking about” (p. 5).

Nonetheless, these terms may differ from one to another in connotation. Alba-Juez and Thompson (2014) differentiated between the terms of *stance* and *evaluation*: “*stance* would be a more abstract concept, and *evaluation* would be the actual verbal realization or manifestation of the stance” (p. 10). That is, an interlocutor may opt for not making an explicit *evaluation*, but still has a *stance*. The definition of *stance* also differs from one study to another. Biber and Finegan (1989) study the expression of *stance* under two main topics: *evidentiality* and *affect*. *Evidentiality* refers to the speaker’s expressed attitudes towards knowledge, its reliability, the mode of knowing, and the adequacy of its linguistic expression (Chafe & Nichols, 1986) while *affect* involves the expression of a range of personal attitudes, including emotions, feelings, moods, and general dispositions (Ochs

& Schieffelin, 1989). In contrast, Hyland (2005) defines *stance* as a textual voice or a community recognized personality. It includes linguistic features that refer to “the ways writers present themselves and convey their judgements, opinions, and commitments” (p.176). These linguistic features include hedges, boosters, attitude and self-mention markers. Similarly, the connotation of *attitude* in Hyland’s metadiscourse model seems to differ from that in Martin and White (2005). In APPRAISAL theory, the term *attitude* is concerned with personal feelings, including emotional reactions, judgements of behaviour and evaluation of things. The terms *hedges* and *boosters* used in Hyland (2005) roughly correspond to the term *graduation* used in Martin and White (2005), which attends to grading phenomena whereby feelings are amplified and categories are blurred. In light of the differing connotations, researchers of the linguistic phenomenon of evaluation may refer to different things when they are using the same term.

Thus, it is of great importance to clearly define the term before any meaningful discussion of evaluative language can be carried out. An alternative way to minimize ambiguity is to focus on specific linguistic realizations of evaluation rather than to use an ambiguous term. Linguistic studies have shown that *evaluation* can be expressed by a variety of linguistic devices: evaluative adjectives (De Cock, 2011; Millar & Hunston, 2015), stance nouns (Charles, 2003; Jiang & Hyland, 2015), stance adverbials (Conrad & Biber, 2000), modals and semi-modals (Hinkel, 1995; Kranich, 2011), and stance complement clauses (Charles, 2006b; Parkinson, 2013). Linguistic realizations can be selected as the object of inquiry in studies of evaluative language.

This thesis focuses on the use of grammatical stance markers as its object of inquiry. A grammatical stance marker includes two distinct components, one presenting a proposition and the other presenting the stance towards that proposition (Biber et al., 1999, p. 969). Three major grammatical devices used to express evaluation are stance

complement *that*-clauses, modals and semi-modals, and stance adverbials. These grammatical stance markers are found to be prevalent in natural language use and to vary across registers of discourse (Biber, 2006a; Conrad & Biber, 2000; Dong & Jiang, 2019). Corpus-based studies have shown that: (1) noun complement *that*-clauses and adjective complement *that*-clauses are more common in academic writing and less common in conversations, (2) modals and semi-modals are more common in conversations and less common in academic writing, (3) adverbial stance markers are most common in conversations, but also relatively common in academic prose (Biber, 2006b; Biber et al., 1999). However, the register variation in the use of grammatical stance markers is not a formal-informal dichotomy, but a continuum from the more formal registers to the less formal registers (Larsson, 2019). While grammatical stance markers are prevalent, the register variation suggests that the use of grammatical stance markers may be complex.

2.2.2 Evaluative Language in Learner Writing

The study of evaluative language is often conducted in the field of EAP, a field devoted to language research and instruction that aims to meet the specific communicative needs and practices of particular groups of people in academic contexts (Hyland & Hamp-Lyons, 2002, p. 2). Much of the literature on evaluative language has concentrated on the expression of evaluation in argumentative essays. An argumentative essay is a written text, with the purpose to evaluate an entity and develop a position in the text and to persuade others to accept that position (Wingate, 2012). Aiming to inform EAP instruction, the growing body of research compares the use of evaluative language in the written texts of an argumentative nature produced by academic writers with various levels of expertise and language proficiency (see e.g., Hewings & Hewings, 2002; Hyland & Tse, 2005b; Parkinson, 2013). For example, Parkinson (2013) compared the research

reports produced by ESL students with published research articles. Similarly, Crosthwaite, Cheung, and Jiang (2017) compared the research reports by dentistry students against published research articles. These comparative studies generally reveal differences between L2 student writing and expert academic writing and discuss implications for EAP instruction (e.g., exposing student writers to expert academic texts) (Crosthwaite et al., 2017; Hyland & Tse, 2005b; Parkinson, 2013). These studies, however, did not control influencing factors such as genre or external support for the writing process. There is little doubt that students' experimental reports and dissertations differ from published research articles in communicative purposes. Postgraduate students' research writing functions to display their knowledge and grasp of the subject matter to their superiors (e.g., instructor, supervisor and examiner) while in published research articles scholars report their research and findings to peer academics (Kawase, 2015; Shaw, 1992). Additionally, published research articles go through rigorous review, revision and proofreading (Hyland & Milton, 1997) while students' academic texts are often produced as an independent piece of work and often within a relatively short period of time. It would be unrealistic to compare student academic writing with those published materials.

To ensure comparability, an alternative approach is to control variables related to users of language (e.g., proficiency and L1 background) and characteristics of the texts (e.g., topic, task and production condition). Typically, this is done by comparing L2 student writing against L1 student writing (see e.g., del, 2006; Çandarlı, Bayyurt, & Martı, 2015; De Cock, 2011; Jiang, 2015; J. J. Lee & Deakin, 2016). For example, del (2006) contrasted the use of metadiscourse in the written texts written by L1 Swedish university students and American and British university students. While control over such variables as learner factors and text characteristics appears to ensure comparability, the result of the comparison is subject to the reference dataset, or the choice of reference corpus with which learner language is contrasted (M. Chen, 2013; Werner, 2017). The comparability

between L1 and L2 texts can be further challenged from a bilingual perspective (Cook, 2008; Fuller, 2018; Ortega, 2016) (for more discussion of this issue, see Section 2.5).

Alternatively, comparison can be made within the population of L2 users (Granger, 2015). Following this approach, researchers have compared the use of evaluative language by L2 users of different proficiency levels (see e.g., Ho & Li, 2018; Kuzborska & Soden, 2018; Werner, 2017). For example, Kuzborska and Soden (2018) compared the form and function of opposition relations in low-, middle-, and high-scored argumentative essays written by 44 Chinese postgraduate students studying at a British university. The study shows that higher-scored essays used considerably more concessive and contrast expressions than the lower-scored ones. Similarly, Ho and Li (2018) investigated the use of metadiscourse in 181 English argumentative essays produced by Chinese university students. This study shows that the holistic scores of these argumentative essays were positively correlated with the frequency of use of hedges and attitude markers, but negatively associated with the frequency of use of engagement markers. No significant relationship was observed between holistic scores and the use of other types of metadiscourse (e.g., boosters and self-mentions). Işık-Taş (2018) compared 300 argumentative essays retrieved from the Cambridge Learner Corpus across three proficiency levels as defined by the IELTS band scores. It was shown that higher-proficiency L2 learners used more and a wider variety of stance nouns than lower-proficiency L2 learners and higher-proficiency L2 learners used noun-complement structure, cognition nouns, and premodifiers more frequently than their lower-proficiency counterparts. It can be said that the use of evaluative language is associated with the quality of L2 writing (Zhao, 2017), though the extent to which the use of evaluative language contributes to the holistic scores of L2 writing varies with the type of linguistic stance markers (Ho & Li, 2018). Crossley and McNamara (2014) have noted that not all linguistic features that develop in L2 learners will lead to higher writing quality. That is,

language development does not equal language proficiency (N. C. Ellis & Larsen-Freeman, 2006). In this sense, the development of evaluative language in L2 writing may not be captured by comparisons between groups of learners from different proficiency levels.

2.3 Learner Corpus Research and SLA

Learner corpora, an electronic collection of authentic texts produced by learners of a second language, form a solid empirical foundation for SLA research (Chau, 2012; Granger, 1998a; Meunier, 2015; Myles, 2015; Ortega, 2009). For example, learner corpora have been widely used to investigate central issues in SLA research such as L1 transfer (Jarvis, 2000; Murakami & Alexopoulou, 2016; Osborne, 2015; Paquot, 2013) and stages of language development (Biber, Gray, & Poonpon, 2011; Chau, 2012; Horst & Collins, 2006).

One important strand of learner corpus research is to identify the differences between L1 and L2 users of English. The linguistic structures that come under scrutiny range from single words (Altenberg, 2001), phrasal verbs (M. Chen, 2013), discourse markers (Granger & Tyson, 1996; Hyland & Milton, 1997; Larsson, 2017) to formulaic sequences (Ädel & Erman, 2012; Pan, Reppen, & Biber, 2016; Zheng, 2016). Most of these studies point to the underuse or overuse of particular linguistic features. For example, the study by Hyland and Milton (1997) showed that Chinese secondary school students used certainty markers more frequently than their monolingual native-speaker counterparts. Altenberg and Tapper (1998) noted that Swedish learners of English displayed underuse of more formal conjuncts but overuse of more informal ones. Similarly, Granger and Rayson (1998) showed that the underuse of more formal and overuse of more informal words is a phenomenon prevalent in almost all word classes. The results of these studies

are generally consistent. The use of linguistic features by L2 users differs greatly from that of their monolingual native-speaker counterparts; and L2 users are suggested to have great difficulty in making use of particular linguistic structures (Altenberg, 2001; Hinkel, 2003; Larsson, 2017). Even highly successful and assimilated L2 students have gaps in their knowledge and ability to apply what they know to their own writing (Altenberg & Tapper, 1998; Eckstein & Ferris, 2018).

While the L1-L2 contrastive approach has relevance for second language acquisition, it has been criticized for its ‘comparative fallacy’ and its monolithic reference norm (Hunston, 2002). While Granger (2015) insists that the terms ‘overuse’ and ‘underuse’ are used in a descriptive manner, the discourse about overuse and underuse *de facto* reflects a deficit view of L2 users when differences between native and non-native language usage serve as the empirical foundation for pedagogical implications (e.g., Altenberg, 2001; Bestgen & Granger, 2014). Apart from explicit or implicit nativespeakerism, the L1-L2 contrastive approach may suffer from serious methodological shortcomings. Central to L1-L2 comparison is the choice of native-speaker data as the reference corpus. However, previous research has shown marked differences in language usage across varieties of English (Ädel, 2008b; M. Chen, 2013; Precht, 2003). As discussed before, the choice of varieties of native English has been found to affect the overall findings with regards to overuse and underuse (M. Chen, 2013; Werner, 2017). Additionally, the notion of overreliance merits careful consideration as it often results in a deficit view of L2 language. Corpus linguistics research has shown that a small number of high-frequency words and sequences of words account for a large proportion of the language used by monolingual native speakers (Biber et al., 1999; N. C. Ellis & Ferreira-Junior, 2009; Gardner & Davies, 2007; Trebits, 2009). This skewed dispersion of linguistic items is explained by the Zipf law and the dependence on a narrow range of linguistic resources is referred to as the ‘teddy bear’ tendency (N. C. Ellis, 2012;

Hasselgren, 1994). Whereas the ‘teddy bear’ tendency among monolingual native speakers goes largely unnoticed, the ‘teddy bear’ tendency among L2 learners is often interpreted as deficiency and there have been repeated calls for deliberate intervention (Hasselgren, 1994).

Another strand of research is to compare the language used by L2 users from different first language backgrounds (e.g., Crossley & McNamara, 2011; Murakami & Alexopoulou, 2016; van Vuuren & Berns, 2018). The primary objective of this research strand is to investigate L1 transfer by identifying linguistic features that are L1-dependent (Granger, 2003). The findings from these studies are mixed. Some studies provide strong evidence of L1 influence on language acquisition (Murakami & Alexopoulou, 2016; Paquot, 2013; van Vuuren & Berns, 2018) whereas others show that specific linguistic features are not L1 or culture-specific, but a result of language experience or learner proficiency level (Crossley & McNamara, 2011; Lenko-Szymanska, 2014).

The third line of research is to shed light on the trajectories for second language development. For practical reasons, cross-sectional designs are still popular in learner corpus research (Abrams & Rott, 2017; Meunier, 2015). Many studies employ age, institutional status or holistic ratings of essays (Bestgen & Granger, 2014; Chau, 2012; Ho & Li, 2018). Cross-sectional designs may not reflect language development (Ortega & Iberri-Shea, 2005). For example, human ratings can be used to represent proficiency levels, but not necessarily stages of language development, because writing development does not always equal writing quality (Crossley & McNamara, 2014). Development is ideally investigated by tracking the language use of the same group of learners as they develop over time (Ortega & Byrnes, 2008a). Given the feasibility of following longitudinal designs, data that were collected at least twice from a relatively small sample of participants or over a relatively short period of time were employed to complement

cross-sectional designs (e.g., Abrams & Rott, 2017; Oppenheimer, Zaromb, Pomerantz, Williams, & Park, 2017; H. J. Yoon, 2016). Overall, longitudinal learner corpora are not numerous in learner corpus research (Meunier, 2015).

Unquestionably, learner corpora offer a solid empirical foundation for SLA research (Granger, 2009; Myles, 2005, 2015). Apart from the repeated calls for the building of well-designed learner corpora, special attention should be given to the way that learner corpus is analyzed. Huebner (1979) has demonstrated that different analytical methods could lead to different or even opposing conclusions about L2 development. For example, tracking grammatical morphemes based on Standard English may lead to the conclusion of fossilization whereas including ungrammatical morphemes could give more insights into the path of L2 development (Huebner, 1979). SLA research can benefit from trusting the text. It has been shown that authentic learner data create the opportunity to identify patterns of language usage that were not documented before. Paquot (2010), for example, found a large proportion of ‘unidiomatic’ use of *as a conclusion*. Chau (2015) identified a number of unconventional usage patterns of function words (e.g., *to* as an adverb in “the river was *to* deep”). While these unconventional language usages offer valuable insights into language development, such opportunities can be fully seized only when researchers trust the text (Sinclair, 2004). At least, the first step is to retrieve the relevant instances of language use from the learner corpora without being distorted by native-speaker norms. This point is best illustrated by the corpus-driven approach to the investigation of collocations and lexical bundles (Bardovi-Harlig & Stringer, 2017; Lenko-Szymanska, 2014). This is not adequate, however. To fully trust the text, researchers should treat L2 users as independent persons in their own right (Cook, 2007; Selinker, 1972; Wei, 2016b). In other words, comparing L2 against L1 norms is not justified practice.

2.4 English for Academic Purposes and SLA

As noted earlier, the longitudinal investigation of grammatical stance markers in argumentative essays is at the interface between academic writing and second language acquisition. EAP covers language research and language teaching that concentrates on the communicative needs and practices of individuals working in academic contexts (Hyland & Shaw, 2016, p. 1) whereas SLA is the study of what is learned of a second language and what is not learned (Gass & Selinker, 2008). An overview of the literature suggests that the interface between EAP and SLA constitutes a worthwhile yet rarely researched area, namely the development of the academic language of L2 users.

While the academic writing of L2 users has been extensively investigated in EAP studies, its development has not been adequately addressed. At most, the study of L2 academic writing has exclusively focused on the differences between L2 writing and published research articles (e.g., Parkinson, 2013), between L1 and L2 student writing (e.g., Hinkel, 2003; Jiang, 2015), or the differences across L1s, genres and educational levels (e.g., Aull & Lancaster, 2014; Hyland, 2004; Parkinson & Musgrave, 2014; Staples, Egbert, Biber, & Gray, 2016). Many studies assume the language used by NS and experienced academic writers to be the idealized target of EAP learning and teaching but have generated little knowledge about how the academic language develops over time.

Ortega (2013), in a reflection on transdisciplinary relevance, argues that researchers in the field of SLA research should consider how findings from this research field can influence neighbouring research fields. One field that could potentially benefit from SLA research is EAP studies. What is of particular relevance for EAP research and teaching is a good understanding of the trajectory for language development and the influencing factors. The body of SLA research has shown that language development undergoes a complex dynamic process (Ortega & Iberri-Shea, 2005; Vercellotti, 2017; Verspoor,

Lowie, & van Dijk, 2008) and that the factors that contribute to language development are instances of complex dynamic processes that develop over time (Lowie, van Dijk, Chan, & Verspoor, 2017). In other words, the process of language development is not all that straightforward (Verspoor & van Dijk, 2013). Language development is not caused by a single factor or a combination of factors but influenced by the interplay of multiple factors (Ortega, Han, & Larsen-Freeman, 2017). Also, L2 users of English have the sociolinguistic agency to adapt to the context of language use (van Compernelle & Williams, 2012), thus displaying variation as a result of alternation between linguistic structures to express the same language function (Gass & Selinker, 2008). Such insights from SLA research can bring new perspectives on EAP studies. A more in-depth discussion of SLA research is presented in the next section.

2.5 SLA and Second Language Development

2.5.1 Focus of SLA Research

To date, efforts to study second language development have been most persistent and most fruitful in morphology (Goldschneider & DeKeyser, 2001; Luk & Shirai, 2009). For instance, *Language Learning* and *Journal of Second Language Writing* each published a special issue devoted to L2 acquisition of morphosyntax, edited by Hulstijn, Ellis, and Eskildsen (2015) and Vyatkina (2015) respectively. Considerable attention has also been given to the acquisition of L2 grammar, especially complexity, accuracy and fluency (Bulté & Housen, 2018; Kuiken, Vedder, Housen, & de Clercq, 2019; Norris & Ortega, 2009; Ortega, 2003; Vercellotti, 2017, 2019). These morphological and syntactic features are investigated at the formal and structural level, with reference to the monolingual native-speaker model. A good case in point is accuracy, which is operationalized as error-free production units per total production units (e.g., T-unit in Casanave, 1994 and

Larsen-Freeman, 2006). In some studies, an error is explicitly defined as the linguistic forms, which, under similar conditions, would not be produced by L2 users' monolingual native-speaker counterparts (Polio & Shea, 2014).

With the development of corpus linguistics, a growing body of research started to investigate L2 development through the lens of lexis (Meunier, 2015). Research in this direction typically focused on lexical richness (Horst & Collins, 2006; Laufer & Nation, 1995; Lu, 2012), collocations (Bestgen & Granger, 2014; Nesselhauf, 2003; Siyanova-Chanturia, 2015), and lexical bundles (Crossley & Salsbury, 2011; Garner & Crossley, 2018; O'Donnell, Römer, & Ellis, 2013).

Apart from the study of linguistic forms (e.g., syntax, grammar or lexis), researchers are also paying attention to the functions of language. The usage-based approaches have gained momentum in the field of SLA research. Viewing form and function as inseparable, SLA scholars are going beyond the structural and formal analysis of L2 by working on the form-meaning/function mappings (Behrens, 2009; N. C. Ellis & Ferreira-Junior, 2009; N. C. Ellis, O'Donnell, & Römer, 2014). The functional approaches focus on form-meaning mappings and how these mappings change over time in the L2 (Bardovi-Harlig, 2014). A basic tenet of the functional approaches is that adult L2 users have access to "the full range of semantic concepts from their previous linguistic and cognitive experience" (Bardovi-Harlig, 2014, p. 128). Unlike a child learning his or her first language, adult L2 users do not have to acquire the semantic concepts. What they do is to acquire specific means of expressing them (von Stutterheim & Klein, 1987). So far, one of the most influential functional approaches is the concept-oriented approach (Bardovi-Harlig, 2015; von Stutterheim & Klein, 1987). Studies following the concept-oriented approach have investigated the development of temporality (Bardovi-Harlig, 2014), speech act (Bardovi-Harlig & Hartford, 2008; Code & Anderson, 2001) and conventional

expressions (Bardovi-Harlig, 2009; Bardovi-Harlig & Stringer, 2017). The concept-oriented approach, to some extent, breaks away from judging grammatical accuracy against a monolingual native-speaker model.

Overall, SLA research has witnessed a shift from grammar to lexis and from linguistic forms to form-meaning associations (N. C. Ellis, R. Mearns, & O'Donnell, 2016; Tyler, 2010; Tyler & Ortega, 2016). One phenomenon central to SLA research is the acquisition of the linguistic realizations of evaluation in argumentative writing. While the expression of evaluation in L2 writing has been well addressed in the field of corpus linguistics and EAP (Cheng, 2006; Jiang, 2015; Zhao, 2017), only a few studies have investigated how the use of evaluative language changes in L2 writing (for exceptions see Kibler & Hardigree, 2017; Man & Chau, 2019; Morton & Llinares, 2018).

2.5.2 Goals of L2 Learning

For a long time, SLA has been viewed as a process of conforming to a target language and success is measured as the extent to which learner language conforms to that target language (Klein, 1998; Larsen-Freeman, 2006). In the past few decades, the target-centric perspective in SLA research has received growing criticism (Bley-Vroman, 1983; Cook, 1999, 2016b; Ortega, 2013, 2018a, 2018b). The critique voiced in the existing literature is primarily based on two grounds: (1) motivation for L2 learners to emulate target language norms; (2) possibility for L2 learners to approximate target language norms.

The objective of L2 learning is not to imitate its sounds or forms, but to satisfy individual needs (Swan, 2017; Tarone, 2015). Typically, people learn a second language to (1) pass a standardized proficiency test, (2) exchange basic information, (3) be assimilated into a cultural community that uses the L2, and (4) earn an academic degree

in an institution where the L2 is the medium of instruction (Tarone, 2015, p. 448). L2 users do not need near native-speaker competence to achieve any of these purposes. Even in the context of higher education, varieties of 'standard English' or native-speaker English are not necessarily relevant (Jenkins & Leung, 2018). In this sense, the motivation to use English like a native speaker is only a matter of personal interest rather than a linguistic necessity (Swan, 2017). It indeed brings certain benefits to use English like a native speaker, but few people can afford such luxurious efforts. Such motivation is even more irrelevant in the era when functioning in more than one language is the norm in many communities and English has been widely used as a lingua franca among a large population of bilinguals and multilinguals.

Even if an L2 user aims to achieve native-speaker competence, the possibility of success is very low because there will never be complete convergence between L2 use and the target language (Ortega, 2009). The reasons are as follows. First, L2 is systematically different from the target language (Selinker, 1972). L2 is a unique linguistic system independent of both native language (NL) and target language (TL) and that L2 users would create linguistic forms that do not exist in either their NL or TL (Selinker, 1972; see also Wei, 2016b). Beyond linguistic forms, to adapt to the needs of communication, L2 users can create their own patterns of language use and expand the meaning potential of the target language (N. C. Ellis, 2002; Larsen-Freeman & Cameron, 2008a). Second, multilinguals are cognitively different from monolinguals (Brown & Gullberg, 2012; Cook, 2008). Multilinguals are shown to have more clarity of thinking and more language resources (Blair, 2016). Third, language is a complex adaptive system (N. C. Ellis & Larsen-Freeman, 2009b; Larsen-Freeman, 1997). As language users communicate, they adapt their language use on particular occasions. Consequently, there is no such thing as a fixed, homogenous target language (Larsen-Freeman, 2014). To

conclude, full convergence between L2 use and the target language is theoretically impossible.

To address the ‘comparative fallacy’ (Bley-Vroman, 1983), some SLA scholars have begun to develop assessment benchmarks based on L2 data. Indices derived from L2 output are shown to be more predictive of L2 writing than L1 benchmarks (Monteiro et al., 2018). While studies of this kind have immediate relevance for the study of language development, fixed benchmarks reflect a teleological view of language development (Ortega, 2009; Ortega & Byrnes, 2008c), assuming that there is a single fixed target for all language learners. In the classroom context, language learners may also be interested in their progress against their initial states rather than external assessment criteria. This is especially true for language learners who do not perform well in standardized tests. While failing to reach the established standards, these language learners may still have learning gains over time. Downplaying such progress may cause emotional hurt to the learners. On a further note, the use of a fixed benchmark as an external norm for studying L2 development can be called into question when students are learning an additional language for the benefits in cognitive ability and language awareness.

To conclude, the goals of L2 learning should not be simply equated with conforming to monolingual native-speaker norms. Rather, L2 learners should have the right to enjoy the benefits that language education brings and choose the capacities in which they function as multilinguals in the diverse situations of L2 use (Cook, 1999). To redefine the goals of L2 learning is essential to the study of L2 development under non-essentialist lenses.

2.5.3 Patterns and Trajectories for Second Language Development

One of the central issues in SLA research is to “shed light on how interlanguage development proceeds over time” (Ortega, 2012, p. 133). As for the linguistic repertoire of language learners, the general trend for language development revealed in the literature is toward an increasing frequency and wider range of the target linguistic features (Vyatkina, 2013) or growing conformity towards target-language norms (Crossley & Salsbury, 2011; Vercellotti, 2017). Nonetheless, the absence of certain linguistic items can also manifest L2 development (Gablasova, Brezina, & McEnery, 2017; Liao & Fukuya, 2004). Going a step further, language development may also entail decreased use of certain linguistic items when language learning is viewed from a dynamic perspective (Chau, 2015; Herdina & Jessner, 2013). This aspect of L2 development has often been interpreted as regression or attrition in L2 learning. There is a need to redefine what is language development concerning the absence of target linguistic features under examination.

As for the path of L2 development, longitudinal SLA studies show that the trajectory for L2 development is often non-linear (Fogal, 2019a; Larsen-Freeman, 2006; Spoelman & Verspoor, 2010; Vyatkina, 2013). Larsen-Freeman (2006), for example, analyzed complexity, fluency and accuracy in the narrative stories of five Chinese adult learners of English as a second language. In the case of accuracy, it was found that some individual performances progressed, some regressed, whereas others remained largely unchanged. It was also found that the rate of change fluctuates for different participants at different times. Similarly, in a longitudinal study of Spanish secondary school students, Morton and Llinares (2018) find that the frequency of appraisal resources first experienced a considerable increase and then suffered a sharp drop and displayed inter-individual variation in the path for L2 development of evaluative language.

Variation is shown to be inherent in the process of L2 development (Verspoor & van Dijk, 2013). Students who receive the same instruction may display different routes of language development (Vyatkina, 2013). Consequently, the developmental path for individual learners may considerably differ from that based on averaged group data (Larsen-Freeman, 2006; Lowie & Verspoor, 2015; Lowie & Verspoor, 2019). Variability, or variation in performance within one individual, is also an inherent property of language development (Lowie & Verspoor, 2015; Lowie & Verspoor, 2019). L2 language is a self-organizing developing system (de Bot, 2008; Verspoor et al., 2008). L2 users have the agency to select linguistic resources and adapt to the context of language use (Kohn & Hoffstaedter, 2017; Larsen-Freeman, 2019). Qualitative analysis reveals how L2 users employ linguistic resources to make meanings over time. In a longitudinal case study of a Spanish-English bilingual, Kibler and Hardigree (2017) observed that the use of evidential resources by their participant became increasingly sophisticated and the use of evidence developed from being unincorporated to being incorporated and paraphrased. The next section reviews the literature on the causes of L2 development.

2.5.4 Causes of L2 Development

In SLA research, causes for changes are crucial for understanding how language develops as well as informing language teaching. SLA scholars have favoured the linearity thinking, with the assumption that SLA theories can be constructed by aggregating simple univariate cause-effect links (Larsen-Freeman, 1997; Ortega et al., 2017). Some external factors that are shown to affect L2 development are L1 influence (Jarvis, 2000; Murakami & Alexopoulou, 2016; Paquot, 2013), input frequency (Crossley, Salsbury, Titak, & McNamara, 2014; Denhovska, Serratrice, & Payne, 2016; Wolter & Yamashita, 2017) and corrective feedback (Bonilla López, van Steendam, & Buyse, 2017;

Ferris, Liu, Sinha, & Senna, 2013; García Mayo & Labandibar, 2017). Language development, however, can be best accounted for by the interplay among a combination of factors (N. C. Ellis & Larsen-Freeman, 2006). Ortega (2015) argues that any changes in syntactic complexity must be explained by considering the influence of instruction, L1, modality, genre and task. This entails viewing the phenomenon to be explained (e.g., language learning) as a system composed of many interconnected parts that self-organize on the basis of multiple influences outside the system; these influences impose constraints on self-organization, but no single cause has priority over others (Ortega, 2009, p. 104).

Another factor that influences language acquisition is the frequency of the linguistic forms to acquire and the strength of association between the linguistic forms and their meaning/function (N. C. Ellis, 2012). SLA research from usage-based approaches has demonstrated that language learning is “driven by the frequency and frequency distribution of exemplars within constructions and by the match of their meaning to the construction prototype” (N. C. Ellis & Ferreira-Junior, 2009, p. 384). Formulaic phrases with routine functional purposes are more easily acquired than other linguistic items (N. C. Ellis, 2012). The frequency effect can help explain the ‘teddy bear’ tendency in language learning, i.e., why L2 users cling to a small range of linguistic resources.

2.5.5 Research Designs for Studying L2 Development

To date, SLA and learner corpus research have been dominated by cross-sectional studies and longitudinal case studies (Ortega & Iberri-Shea, 2005; Polio, 2017). When cross-sectional designs are adopted, the common research practice is to compare the linguistic performance of L2 users with that of their native-speaker counterparts (Granger, 2012, 2015), or to compare the linguistic performance of lower-proficiency learners to that of higher-proficiency learners (Meunier, 2015). For example, Ansarifard, Shahriari,

and Pishghadam (2018) compared phrasal complexity in the academic writing produced by graduate students and expert writers in applied linguistics.

In cases where longitudinal data were used, the studies are often case studies, aiming to track the linguistic performance of a small sample of learners over a period of time (see e.g., Casanave, 1994; Jia & Aaronson, 2003; Kibler & Hardigree, 2017; Spoelman & Verspoor, 2010; Verspoor et al., 2008). Jia and Fuse (2007), for example, carried out a longitudinal study of the acquisition of English grammatical morphemes by ten L1 Mandarin immigrants in America. It is generally believed that longitudinal learner data are of great value and that cross-sectional data and longitudinal case studies are complementarily useful (Larsen-Freeman & Cameron, 2008b; Lowie & Verspoor, 2019; Ortega & Byrnes, 2008c).

Nonetheless, there has been a reconsideration of what constitutes relevant data for studying L2 development (Larsen-Freeman, 2014; Ortega, 2009; Ortega & Iberri-Shea, 2005). Although cross-sectional data are generally considered useful, using such data to chart the trajectory of language development assumes that there are discrete stages of language development, that language development is a static and linear process, and that there is a homogenous target end state. It is thus argued that any claims about language development “can be most meaningfully interpreted only within a full longitudinal perspective” (Ortega & Iberri-Shea, 2005, p. 26). However, it is often difficult to track a large number of learners for any period longer than one semester. Consequently, most studies of L2 development resort to longitudinal data produced by a relatively small sample of L2 users. Even fewer longitudinal studies have used a controlled task or topic to ensure comparability of learner data produced across time. Without control for the task or topic, it is difficult to differentiate between task-induced variability or topic-induced variability and time-induced variability (Ortega & Iberri-Shea, 2005). Therefore, for the

study of L2 development, a longitudinal learner corpus that comprises texts produced by a relatively large number of participants in response to a controlled task is most desirable.

2.6 SLA, Ideologies and Ontologies of Language

There is an ongoing interplay between practices of SLA research and ideologies and ontologies of language. Not only do ideologies and ontologies of language shape the approaches to language learning and language acquisition, how key evidence (e.g., evidence for linguistic success and developmental progress) is sought and interpreted also contribute to the ongoing debate between language ideologies and ontologies (The Douglas Fir Group, 2016). Language ideologies are “ideas about language structure and use that index political and economic interests of individuals and the social groups and nations to which they belong” (Fuller, 2018, p. 119). Fuller (2018) identified three broad categories of language ideologies: monoglossic ideologies, standard language ideologies, and pluralist ideologies. Monoglossic ideologies value monolingualism more than multilingualism. Standard language ideologies hold that a particular variety of a given language is superior to other varieties and that in given contexts this particular variety is the most or even only legitimate way to use. Pluralist ideologies, on one hand, support multilingualism, and on the other hand, hold an essentialist view of languages and their relationships to each other and to their speakers. These language ideologies all assume an essentialist view of language. The essentialist ontologies hold that language is a thing and that the mapping between form and meaning is arbitrary. In contrast, non-essentialist ontologies hold the view that language is a process rather than a thing and language is inseparable from use.

In studying L2 development, SLA researchers have to make a choice between essentialist and non-essentialist ontologies of language (Ortega, 2018a). And the choice

and the ensuing research practices, as noted earlier, would reinforce the position of the chosen ideologies and ontologies of language. In the discourse about language, bi/multilingualism is often projected by the print media to be a problem rather than a right of everyday citizens (Mason & Hajek, 2018). Representations of L2 languages can potentially influence L2 users' perception of and attitude towards the target languages and their use of the target languages (de Houwer, 2013; Fang & Ren, 2018; Mason & Hajek, 2018). In the context of China, the discourse about language is dominated by monoglossic ideologies and standard language ideologies (Haidar & Fang, 2019). Standard English is often considered as the natural goal of L2 learning and those who can speak with a native-like accent are viewed as legitimate users of English. Even those who are disadvantaged by these language ideologies accept them as facts, not social realities that can be alternated or discontinued. Arguably, the status quo is closely associated with SLA research practices and their underlying ideologies and ontologies. In this sense, the choice between essentialist and non-essentialist ontologies of language has far-reaching implications beyond the research carried out.

Apart from ontologies and epistemologies, Ortega (2017) argues that another cornerstone of a scientific paradigm is axiology: what and who our research is good for. It is often assumed among SLA scholars that research is value-free at the stage of knowledge generation and any inappropriate interpretation of research evidence or infiltration of ideological agenda is beyond the control of SLA scholars (Ortega, 2005a). This assumption is not entirely true, as can be shown by the excerpt from a paper reporting on language acquisition research, which gives a sense of disappointment:

Although there is a clear development in the direction of native writing, transfer of information structural features of Dutch can still be observed even after three years of extended academic exposure. (van Vuuren, 2013, p. 173)

This deficit view of L2 language that is being reflected by a substantial body of SLA and learner corpus research represents bi/multilingualism as a liability rather than capital for marginalized bilinguals and multilinguals, for instance, English language learners and low-educated L2 adults (Ortega, 2017; Peirce, 1995). In other words, the deficit view of L2 language favours only the elite community of bilinguals and multilinguals and reduces L2 users' self-efficacy and forms a native-speaker-dependent identity (Kohn & Hoffstaedter, 2017). Thus, ethical issues arise when monolingual native-speaker norms are forced upon L2 users.

While there has been a long call for teaching L2 based on L2 users' goals, situations, roles and language (Brown, 2013; Cook, 1999), little has changed concerning syllabus, feedback, and examination (Cenoz, 2017; Cook, 2016b). One reason for this long-overdue change is that language education practitioners are faced with major barriers to innovation in teaching practice (Galloway & Numajiri, 2019). However, practical difficulties are no excuses for abandoning genuine beliefs. If we truly acknowledge that "L2 users differ from monolingual native speakers in their knowledge of their L2s and L1s" (Cook, 1999, p. 185), then L2 should be treated in its own right, independently of the monolingual native-speaker model. Efforts to develop L2 models for assessing L2 development have started to emerge on the horizon. Monteiro et al. (2018), for example, developed measurement indices based on L2 output. The study provides evidence that L2 models are more predictive of L2 writing development than L1 models. However, this approach may encounter great difficulties due to the diversity of L2 users (Elder & Davies, 2006). More importantly, the practice to have a fixed legitimate L2 variety as an external assessment benchmark is still associated with essentialist ontologies of language.

The challenge that SLA researchers face is how to apply the non-essentialist ontologies to the analysis of learner language. Treating L2 users in their own right, the thesis is

committed to the non-essentialist ontologies and reports on the study of learner language under the non-essentialist lenses. With this theoretical underpinning in mind, I would like to quote from Cook to conclude this section:

[D]o not see yourselves as failures always trying to be like native speakers; see yourselves as successes, achieving things as L2 users that are out of the reach of monolinguals. (Cook, 2016b, pp. 187-188)

2.7 Conclusion

This chapter reviews the relevant literature on evaluative language, learner corpus research and L2 development. It has been revealed that the use of evaluative language constitutes a worthwhile topic for the study of L2 development. The review has noted several trends in SLA research. SLA researchers are going beyond investigating the linguistic forms of the language of the L2 users by addressing the form-meaning mappings from the usage-based approaches (N. C. Ellis, O'Donnell, & R..., 2015; Tyler, 2010; van Compernelle, 2019). There is a growing consensus about the non-linearity of the trajectory for L2 development (Vercellotti, 2017; Verspoor et al., 2008; Zheng, 2016). Leading scholars in the SLA field are re-considering the ideology, ontology and axiology of SLA research (Larsen-Freeman & Cameron, 2008b; Ortega, 2017, 2018a, 2018c) and advocate a transdisciplinary framework for understanding the nature of language and language development (The Douglas Fir Group, 2016; Ortega, 2016). Constructing longitudinal learner corpora is no longer what Ortega and Ibarra-Shea (2005) called 'lip service'. Researchers are making the best use of longitudinal learner corpora for SLA research, regardless of data collection time, sample size and control over the learner variables (Meunier, 2015; Polio, 2017).

Despite the progress made so far, the belief that people speaking an L2 are imperfect imitations of native speakers still persists in today's research practice (Wei, 2016a), as is

evidenced by the wide use of native speaker data as the reference point for comparison with L2 data (Brezina & Pallotti, 2016; de Clercq & Housen, 2017; Staples et al., 2016). As Polio (2017) has noted, L2 development mostly includes movement towards some target and that target is often set towards native norms. There are many reasons for the slow change in research practice. The most relevant one might be the normativity of language teaching (Jenkins & Leung, 2018), as many researchers are concurrently language teachers and they often find it difficult not to describe L2 use without evaluating accuracy based on what is expected in the target language (Bardovi-Harlig, 2015; Larsen-Freeman, 2014). Therefore, there is a need to find an alternative way of studying language development without referring to native-speaker norms. The present thesis attempts to do so by investigating the use of grammatical stance markers in a longitudinal learner corpus.

The theoretical underpinning of the thesis is the non-essentialist ideologies that empower learners of an additional language to be legitimate language users, viewing them as bilinguals in the making (Cook, 2007; Ortega, 2018a, 2018b; see also Wei, 2016a). The non-essentialist ontologies view language as a process, rather than a thing; meaning is not carried out by language, but constructed out of recurrent communicative events (Ortega, 2018c). The non-essentialist ontologies provide a different perspective on language development, allowing for language use that is different from that of monolingual native speakers. The thesis is devoted to what Ortega (2018a) has called “the project of reconceptualizing linguistic development under non-essentialist lenses” (p. 75). The next chapter illustrates the methods that are used for this purpose.

CHAPTER 3: METHODOLOGY

3.1 Introduction

The general aim of the thesis is to study the use of grammatical stance markers over time and to contribute to a better understanding of L2 evaluative language development. This chapter presents information on data collection methods and analytical procedures. The present study adopts a longitudinal design in response to the repeated calls for longitudinal learner data for studying L2 development (Larsen-Freeman & Cameron, 2008b; Meunier, 2015; Ortega & Iberri-Shea, 2005).

The participating students studying at a Chinese university in Guangzhou were invited to produce a series of four argumentative essays on the same topic at 3-week intervals within a semester of 13 weeks. The span of time matches the length of a short semester in the focal university. While this may be considered by many SLA researchers to be a short period for a longitudinal study, some research has observed noticeable changes in language use within a duration as short as four weeks (see e.g., Mazgutova & Kormos, 2015). For practical reasons, a sizeable sample of participants could be maintained with strict control for only a relatively short period. Overall, the longitudinal learner corpus collected, as a result of a trade-off between the conditions of task, the density of the data and the number of participants (Meunier, 2015), is considered in the present study to be suitable for the research purpose of the thesis.

3.2 Participants

A total of 164 first-year undergraduate students initially participated in the project. The participants were selected through convenience sampling. The researcher had access to these students at the time of the study, with their consent for participation. As previous research has noted, attrition is one of the challenges of collecting longitudinal data

(Meunier, 2015; Meunier & Littre, 2013). Six participants did not submit their essays at one time or another. These participants were thus excluded from the sample. The final number of participants included in the project is 158. On average, the participating students were 18.3 years old ($SD = 0.7$). Half of them were male and the other half female.

All the participants reported speaking Chinese in everyday life and having learnt English as a compulsory subject in secondary school for at least six years. During the period of the study, all the participants took the same English course taught by the same instructor. This English course focused on English for general purposes, giving priority to reading and writing skills. The textbook used for the English course features essays and academic proeses. During the course, the participants completed a variety of learning tasks, such as extensive reading, gap-filling exercises and making sentences with the words and phrases that had appeared in the textbook. During a typical teaching session, the students were guided to first comprehend a text from the textbook and then to answer questions about the text, use words and expressions from the text to fill in blanks or make sentences, and summarize the main ideas of the text. As for writing, the students were asked to first read to learn the structure of a paragraph with a topic sentence supported by details and then to write a paragraph on a given topic, for example, write a paragraph on the topic “How to succeed in college”. No focused instruction or feedback was given to the students on the use of grammatical stance markers. None of the participants reported taking other English courses. Courses other than English were taught in Chinese.

Table 3.1: Participant profile

<i>N</i>			<i>Age</i>	
Total	Male	Female	<i>M</i>	<i>SD</i>
158	79	79	18.3	0.7

3.3 Materials

3.3.1 Task

To investigate the effect of time on language development, there is the need to control for several variables that can affect language performance (Ortega & Iberri-Shea, 2005). These include genre (H. J. Yoon & Polio, 2017), topic (Hinkel, 2009; W. W. Yang, Lu, & Weigle, 2015) and task/prompt (Alexopoulou, Michel, Murakami, & Meurers, 2017; Miller, Mitchell, & Pessoa, 2016; Vasylets, Gilabert, & Manchón, 2017). To ensure comparability between the essays produced at different points in time, this research project exercises control over the task, topic, genre and production condition. The research project adopted a repeated-task design. The students completed the exact same task at four points in time, with a three-week interval in between.

While a repeated-task design is essential to differentiate between time-induced and task-induced variability, there are potential limitations of a repeated-task design. On the one hand, repeating the same task or topic may result in diminished interest and boredom as well as practice effects among the participants (Ortega & Iberri-Shea, 2005). On the other hand, it is possible that as participants of the study become more familiar with the task, they need less preparation time, which could influence their language performance on the timed task. However, there has been abundant research documenting the effect of task and topic on learner performance (see e.g., W. W. Yang et al., 2015; H. J. Yoon, 2017a). The strict control over the task and production condition is necessary to ensure the comparability between the data collected at different points in time (Larsen-Freeman, 2006; Ortega & Iberri-Shea, 2005). The controlled writing task is as follows:

Write an essay of more than 300 words based on the topic given below:

The Internet brings more harm than good to students. To what extent do you agree or disagree with this statement?

The time at which each task was completed are described in Table 3.2:

Table 3.2: Data collection time

	Time 1	Time 2	Time 3	Time 4
Group 1	October 8, 2016	November 2, 2016	December 1, 2016	December 22, 2016
Group 2	October 9, 2016	November 3, 2016	December 2, 2016	December 23, 2016
Group 3	October 9, 2016	November 3, 2016	December 2, 2016	December 23, 2016

These essays were completed within sixty minutes under examination conditions. The rationale for the examination condition is to prevent the participating students from copying from reference materials or completing the writing task with the assistance of machine translation. Additionally, students were given the same amount of time for completing the task. Feedback was not given to the students to ensure comparability between data collected across time.

3.3.2 Corpus

The learner corpus contains 632 texts, with a total of 137,519 words. This corpus may be considered relatively small with respect to the total number of words, but as Granger (2012) points out when assessing the size of a learner corpus, the number of learners that produced the data should also be considered.

The details of the learner corpus are described in Table 3.3. The mean text length of the essays produced by the learners increased over time. One-way repeated measures ANOVA indicates that there is a significant increase in text length, $F(2.73, 428.69) = 19.149, p < .001$. An increase in text length can be considered as indicators of language development (Chau, 2015; Lenko-Szymanska, 2014).

Table 3.3: Corpus profile

	Time 1	Time 2	Time 3	Time 4
Total words	33,016	33,365	34,201	36,937
Mean text length	208.96	211.17	216.46	233.78
Standard deviation	60.99	57.58	55.71	59.50
Minimum	71	58	69	51
Maximum	393	431	346	483

Each text was given a number and a letter for reference. The number range is 001-164, reflecting the number of students (164) who originally participated in the study. Four students did not submit all their essays and two students withdrew from the study. Four letters (i.e., a, b, c and d) were used to indicate the four different points in time (i.e., Time 1, Time 2, Time 3 and Time 4) when the text was produced. Thus, 001a and 001b, for example, refer to the texts written by the same student (001) at Time 1 and Time 2, and 023c and 095d refer to the texts written by different students (023 and 095, respectively) at Time 3 and Time 4. A sample text from the collected learner corpus is illustrated as follows:

I don't think the following topic is right. I use computer when I was young. The Internet brings me a lot. If you are a student. You can use computer to explore new things and study. If you are a worker, you can know what happened in the world. Without internet, our seeing are small. Internet include a lot, such as music, book, film, news and so on. Everyone can put your writing on internet and communicate with others. Our penfriend is all over the world. We can't go out to the house and talking with your friend.

Although internet has harm to people. It's bad to our eyes and make people lazy. Maybe we will crazy about surf the internet and forget your parents. I think internet is one of the most important things. It change our life, our interpersonal even our world. But undeniably, internet make the world well.

3.4 Analytical Procedures

The thesis aims to study L2 evaluative language development based on a longitudinal learner corpus. L2 evaluative language development was studied by recording the changes in the use of a set of grammatical stance markers over the study period: evaluative *that*-clauses, modals and semi-modals, and stance adverbials. The specifics of analytical procedures of these three grammatical structures will be discussed in Chapters 4-6 where the respective corpus studies are reported. This section will only discuss the general approach to the three studies.

The analysis of the longitudinal learner corpus draws on a combination of corpus analysis and qualitative analysis. The grammatical stance markers under examination were retrieved from the learner corpus using a combination of corpus analysis and manual inspection with the assistance of WordSmith Tools 7 (Scott, 2016). Concordance lines for the grammatical structures were generated by searching for the respective linguistic features as the node word in the learner corpus. These concordance lines were automatically sorted by a corpus tool and manually inspected to reveal patterns of language use. Evaluative meanings were categorized based on qualitative analysis of the learner corpus. The co-text of the linguistic structures under examination was analyzed to probe into the evaluative meanings they express (Hunston, 2002; Sinclair, 2003). The frequency of grammatical stance markers was put to descriptive and inferential analysis using IBM SPSS Statistics 22.

Frequency distributions and recurrent patterns of language use provide evidence for language learning (Durrant, 2014; Gablasova, Brezina, & McEnery, 2017; Tognini-Bonelli, 2001). The key challenge, as noted earlier in the Literature Review, is how to treat L2 use in its own right. The study of L2 development is not simply documenting changes in the use of language over time, but also entails interpretation of such longitudinal changes. There are two factors to consider in the present thesis: (1) novel use

of grammatical stance markers, (2) individual idiosyncratic use of grammatical stance markers. L2 users are independent persons in their own right and they can create novel linguistic structures for effective communication (Pallotti, 2017; Wei, 2016b; Weinert, 1995). But only those systematic productive uses of novel linguistic structures are worthy of attention for the study of language development (Pallotti, 2007). This is shown by the emergence criterion that Pallotti defines as an acquisition criterion: “Emergence refers to a point in time corresponding to the first systematic and productive use of a structure” (Pallotti, 2007, p. 366). Systematicity is reflected by the appearance of a certain number of tokens displaying the association between a linguistic form and its related functions. Productive use of a linguistic structure is demonstrated by a variety of linguistic items that are novel and non-existent. First systematic use indicates a point in time when there are signs of patterned use of the structure, but these are the first such signs. Here ‘first’ thus only applies to longitudinal data. By concentrating on the first uses of a novel structure, one can identify any regular distributional patterns that do not conform to the L2 rules (Pallotti, 2007).

The criterion for the emergence of patterns is also addressed by corpus linguists working on language description. Tognini-Bonelli (2001) has established that for a pattern of language use to be worthy of investigation, it must occur at least twice, and the occurrences must be independent of each other. The emergence criterion is necessary to avoid recording personal idiosyncrasies. Drawing on the work of SLA research and corpus linguistics, the present thesis establishes an emergence criterion of a minimum of two occurrences of one linguistic item in more than one text.

3.5 Ethical Considerations

Informed consent was obtained before the study. It was made clear that they could choose not to participate in the study and that they had the right to withdraw from the study at any time before the data collection was completed. While task repetition is recommended as one of the activities for language learning (Nation, 2014), the repeated-task design in the study reflects the need to have control over the writing task.

3.6 Conclusion

To treat L2 use in its own right is a real challenge. Researchers taking up this challenge have to be alert to the native-speakerism and resist the temptation to assess L2 use against the monolingual native-speaker model (Fuller, 2018). To show respect for the independent status of L2 users, attention has been given to the methods of data collection and analysis. The present research project is based on a longitudinal corpus that comprises multi-waves of written texts produced by the same group of L2 users, which allows the researcher to track changes in the patterns of language use. Additionally, the thesis establishes an emergence criterion to retrieve salient unconventional patterns of language use. Written text analysis of concordance lines was performed to understand how L2 users employ grammatical stance markers for meaning making.

CHAPTER 4: CORPUS STUDY OF *THAT*-CLAUSES

4.1 Introduction

As discussed in Chapter 1 and Chapter 2, evaluation plays a crucial role in successful academic writing (Charles, 2003; Hunston, 1994; Hunston & Sinclair, 2000; G. Thompson & Alba-Juez, 2014; G. Thompson & Hunston, 2000). One of the most important grammatical structures used to express evaluation is complement *that*-clause (Biber et al., 1999), or what Hyland and Tse (2005b) called evaluative *that*-clause. Despite its importance, the use of this grammatical structure for evaluation constitutes a challenge for novice academic writers in general and L2 users of English in particular. In this chapter, I report on a study to shed light on the developmental path for the use of evaluative *that*-clauses in a learner corpus of student essays. The chapter first starts with a brief literature review of *that*-clauses in L2 writing and then presents the analytical procedures adopted. The frequency of evaluative *that*-clauses was compared across four points in time and qualitative analyses of concordance lines containing evaluative *that*-clauses were performed.

4.2 Background

To date, research related to evaluative *that*-clauses has mainly concentrated on constructing stance towards the research work reported in academic writing (Charles, 2006a, 2006b; Hunston, 1995; Hyland & Tse, 2005a; J. J. Lee, Hitchcock, & Elliott Casal, 2018). One of the earliest research is G. Thompson and Ye (1991), which attempted to identify the kinds of reporting verbs used for citations based on a small corpus of published research articles. Charles (2006a, 2006b, 2007) investigated disciplinary variation in the use of reporting *that*-clauses for constructing stance by comparing postgraduate theses from two disciplines (i.e., politics and materials science). It was

shown that politics theses display greater authorial visibility than materials science theses (Charles, 2006a) and that in noun *that*-clause patterns politics theses primarily use ARGUMENT nouns whereas materials science theses tend to use EVIDENCE nouns (Charles, 2007). These studies show that reporting *that*-clauses are prevalent in academic texts (Charles, 2006a, 2006b; Hewings & Hewings, 2002; Hyland & Tse, 2005a, 2005b; Parkinson, 2013).

While reporting *that*-clauses create space for academic writers to construct a clear and persuasive stance, the subtle interplay between the structural forms and rhetorical functions constitute difficulties for novice academic writers, especially for L2 users of English (Charles, 2006a; Hewings & Hewings, 2002). To inform EAP instruction, researchers have attempted to identify differences between L2 students' academic writing with professional academic writing. Hewings and Hewings (2002) compared a corpus of master's theses written by NNSs and a corpus of research articles from the field of Business Studies in their investigation of the use of clauses with an anticipatory *it* and extraposed subject (e.g., "*It must be emphasized that these results are provisional*"). This study reveals a tendency to overstate claims in student academic writing. Hyland and Tse (2005b) compared two corpora of abstracts from L1 Chinese students' postgraduate dissertations and published research articles in their study of the use of evaluative *that*-clauses. This study further supports the finding of Hewings and Hewings (2002), showing that student writers offered greater certainty in their statements and displayed greater reluctance to use personal voices than expert writers. Nonetheless, L2 postgraduate academic writing shows a sophisticated use of evaluative *that*-clauses. Parkinson (2013) compared a corpus of ESL students' reports and a corpus of published journal articles in her investigation of the use of *that*-clauses for the expression of academic values. It is shown that first pronouns were used as the grammatical subjects of *that*-clauses in student reports to project their feelings and beliefs whereas first pronouns were used in the

published articles to explicitly claim the writers' own research findings. The differences observed could be attributed to the different contexts where the texts are produced. As previous research suggests, the practice of comparing L2 users' writing and published journal articles seems hardly relevant (Hyland & Milton, 1997; McEnery & Kifle, 2002).

An alternative approach is to compare L2 student writing against L1 student writing. Jiang (2015), for example, compared two corpora of argumentative essays written by Chinese NNS and American NS university students in their use of noun *that*-clauses. It is concluded that L2 students used significantly fewer noun *that*-clauses than NS students. These differences, however, may be challenged from a bilingual perspective. It has been argued that bi/multilinguals are different from monolinguals (Cook, 2008).

Studies of these kinds implicitly assume that L2 student writers should approximate expert academic writers or NS student writers, as shown by the implications given for EAP instruction. Consequently, L2 student writing is projected to be imperfect and problematic. One criticism that has been repeated across many studies is that L2 users largely depend on a small set of linguistic items (Aijmer, 2002; Hyland & Milton, 1997; Parkinson, 2013). This criticism of L2 users persists in the literature. J. J. Lee et al. (2018), for example, noted that the L2 undergraduate students in their study depended heavily on a limited number of reporting verbs in their citation practices. Additionally, compared with NSs, NNSs were considered to overuse high-frequency linguistic items (Biber & Reppen, 1998; Larsson, 2016). Another problem that has been noted is that L2 student academic writing contains particular linguistic features reflecting conversational norms (Gilquin & Paquot, 2008; Parkinson, 2013). L2 users are construed to be deficit learners of English as a result of the unrealistic or irrelevant comparison with expert writers or native speakers.

To address the issue of comparability in the investigation of evaluative *that*-clauses, this study draws upon a longitudinal learner corpus and adopts a learner-internal reference point, without referring to expert writing or native-speaker norms.

4.3 Analysis of Evaluative *that*-clauses

4.3.1 Analytical Framework

Among the most structurally complex grammatical devices used to express evaluation in English is the complement *that*-clause, a grammatical structure comprising two components: one presenting a proposition and the other presenting a stance towards that proposition (Biber et al., 1999, p. 969). There is only a relatively small set of controlling words that accompany this grammatical structure, making the definition of evaluative *that*-clause relatively straightforward (Biber, Egbert, & Zhang, 2018). This grammatical structure has great evaluative potential in that the evaluated entity, evaluative stance and evaluative source embedded in the clause can be controlled to construct evaluative meanings (Charles, 2006a; Hyland & Tse, 2005a, 2005b), as illustrated by the following sentences taken from the longitudinal learner corpus:

(1) *I* [Evaluative source] hold *the belief* [Evaluative stance] that the Internet brings more harm than good to students [Evaluated entity]. (027b)

It [Evaluative source] is *clear* [Evaluative stance] that the Internet can help us solve this problem [Evaluated entity]. (120c)

I [Evaluative source] *believe* [Evaluative stance] that Internet will have a good develop in the future [Evaluated entity]. (106d)

This grammatical structure creates space for writers to overtly mark their stance by offering them a range of predicates, including verbs (2), nouns (3) and adjectives (4) (Biber et al., 1999):

(2) I *think* that Internet brings more good than harm to students. (013a)

I *believe* that many students get more good than harm from the Internet.

(084b)

I *agree* that the Internet brings more harm than good to students. (159d)

(3) There is *no doubt* that the Internet can bring us harm if we don't use the Internet to do some meaningful things to myself. (112a)

We can reach *the conclusion* that the Internet brings more good than harm to student. (143c)

I completely disagree with *the view* that the Internet brings us more harm than good to students. (138d)

(4) It is *well-known* that the Internet will be use widely. (032b)

It is *amazing* that the internet cause more and more students don't like to go to school. (081c)

In other words, it is *clear* that the Internet brings more good than harm to students. (079d)

The distribution of predicate forms in *that*-clauses varies with registers and genres. Specifically, verb predicates are extremely common in conversation and relatively rare in academic prose whereas noun predicates are extremely rare in conversation and moderately common in academic prose (Biber, 2006a; Biber et al., 1999).

The grammatical subject of the predicates indicates or hides the source of evaluation. The expressed stance can be attributed to self or other source and the attribution can be done in an explicit, implicit or ambiguous manner (Hunston, 2000). Writers can choose to attribute the stance to themselves to show a high level of authorial visibility, attribute the stance to other sources to construct credibility, or hide the source of stance to create a sense of objectivity (Baratta, 2009; Charles, 2007).

4.3.2 Analytical Procedures

Instances of *that*-clauses were all retrieved from the learner corpus with the assistance of WordSmith Tools 7 (Scott, 2016). Several challenges were addressed in the process of retrieving *that*-clauses. In the first step, a manual analysis was carried out to exclude instances that are not verb, adjective or noun *that*-clauses from the computer-generated concordance lines containing *that*.

(5) *That* make them give up study. (005a)

Because my friend was locked her room but her parents were traveling at *that* time. (092a)

In fact, internet is not *that* horrible. (031b)

(6) Here are some reasons *that* I think these can evident my opinion. (148a)

First, students can search something *that* is good for their study from the Internet. (114b)

The Internet is so attractive *that* many people forget learn, work eat and so on. (017b)

Some instances of language use can be converted to adjective and noun *that*-clauses, but are not included for the present study:

(7) *The most important is that it often makes us can't get along well with our parents.* (027a)

So, my *opinion* is that we must make the rule about how to use the Internet.
(101b)

But what my *view* is that the internet brings more good than harm to students.
(110c)

While some empirical studies of academic writing (e.g., Charles, 2006b; Hyland & Tse, 2005a; Hyland & Tse, 2005b) did not include zero *that*-clauses because of their rarity in academic texts produced by postgraduate students or expert writers, this study takes into consideration the case of zero *that*-clauses, as follows:

(8) Some people *say* Internet do harm to student. (099a)

I *think* this is good for our study when we don't have enough energy to study.
(075b)

Some people *feel* the Internet brings more harm to students. (062c)

Zero *that*-clauses were taken into consideration for two reasons. First, an initial analysis of 1,389 verb *that*-clauses shows that about 46% of the verb *that*-clauses in the learner corpus omitted the complementizer *that*. Because zero *that*-clauses are frequently used in conversations (Biber et al., 1999, p. 351) and student writing is expected to become more formal over time, exclusion of zero *that*-clauses from the analyses can produce a biased view of the developmental trajectory. Second, learner writing is shown to be characteristic of conversations (Gilquin & Paquot, 2008), in which there is a strong reliance on *that*-complement clauses to mark stance, typically with *that* omitted (Biber et al., 1999).

The second step was to retrieve *that*-clauses whose complementizer was omitted. For all the zero *that*-clauses to be retrieved, the learner corpus was searched for all the controlling words that appeared in the retrieved *that*-clauses retaining complementizer *that*. A random sample of the texts was examined to further confirm all zero *that*-clause instances were included.

The final step is to decide whether to include *that*-clauses whose controlling words were not spelt exactly the same as in the dictionary. For example, when *understand* was spelt as *understant*, *conclusion* spelt as *conlution*, and *find* spelt as *fine*:

(9) Thirdly, as a student, I *understant* that the Internet have bad side which will influcance us. (143b)

We naturally come to the *conlution* that although Internet can harm us, but if we can use it rightly. (098c)

But some people *fine* that the Internet bring more bad things to our life. (108c)

These instances were retained for the study because excluding instances of language use that does not conform to standard English could lead to different conclusions concerning language development (Huebner, 1979). When all *that*-clauses were retrieved from the learner corpus, a manual analysis was performed to exclude instances that are not used as stance markers. It should be noted that only those evaluative *that*-clauses that occur at least in two texts in the respective sub-corpus were included for analysis. For example, there were three instances of *suggest that* in the sub-corpus at Time 3 (see Figure 4.1). One *suggest that* was used to give a recommendation (129c). While the other two instances were used to mark stance, these two occurred in the same text (016c). Therefore, no *suggest that* was included for frequency analysis at Time 3. The purpose of this principle is to minimize potential idiosyncrasy. The remaining clauses were further

categorized and coded according to the degree of explicitness of attribution (i.e., explicit, implicit or ambiguous).

N	Concordance	Set	Tag	Word	#Sent.	Sent.	Para	Para	H...	H...	Sect.	Sect.	File	
														# Pos.
1	brings us more good than harm, if it still has harm. So I suggest that everybody should moderately use the				135	11	4	0	134			0	134	129c.bt
2	gaining its popularity at an amazing rate. Some people suggest that the Internet brings us a lot of benefits. But				17	1	4	0	16			0	16	135c.bt
3	gaining its popularity at an amazing rate. Some people suggest that the Internet bring students a lot of benefits.				17	1	4	0	16			0	16	3c.bt

Figure 4.1: Concordance lines for *suggest that* at Time 3

However, categorizing L2 use was not straightforward. Grouping the words controlling *that*-clauses into grammatical categories sometimes needs deliberation. For example, I had to consider whether *well-known*, *well known* and *well know* in example (10) should be put into the verb group or adjective group:

(10) It is *well-known* that our life is closely associate with my life. (126c)

It is *well known* that the Internet is more and more important in our life. (041c)

It is *well know* that some students get addicted in play the computer game in the Internet. (06c)

Whereas *well-known* is included as an adjective in dictionaries (e.g., Collins COBUILD Dictionary and Oxford Advanced Learner's Dictionaries), it is not clear whether these L2 users really knew the part of speech of *well-known* or whether they differentiated between *well-known* and *well known*. Nonetheless, the present study decided to categorize *well-known* and *well known* as adjectives and *well know* as adverb + verb patterns. There are 33 occurrences of *well-known* and 13 *well know* in the entire longitudinal learner corpus.

Assigning *that*-clauses to meaning groups experienced similar difficulties. For example, whereas noun *that*-clauses are usually used to implicitly mark stance, L2 users may use this structure to explicitly express evaluation:

(11) There is *my view* that the Internet is good for our human. (091c)

I can't hold the same opinion that the Internet brings more harm than good to students. (148d)

I completely disagree with the view that the Internet brings us more harm than good to students. (138d)

After a combination of computer-assisted and manual analyses, the resulting frequency of *that*-clauses at different points in time was then put to the log-likelihood test (accessible at <http://ucrel.lancs.ac.uk/llwizard.html>). For the present study, Bayes Factor (BIC) was used as effect size. The scores of BIC and the respective interpretations are illustrated in Table 4.1.

Table 4.1: Scores of BIC and interpretations

Scores of BIC	Interpretation
< 0	the scale is read as 'in favour of' instead of 'against'
0-2	not worth more than a bare mention
2-6	positive evidence against H0
6-10	strong evidence against H0
> 10	very strong evidence against H0

4.4 Results

The results indicate a slight decrease in the relative frequency of evaluative *that*-clauses (see Table 4.2) from Time 1 to Time 4. But the decrease is not statistically significant ($p > .05$). Whereas there is a statistically significant decrease in the relative frequency of verb *that*-clauses ($p < .05$), there is a statistically significant increase in the frequency of noun *that*-clauses ($p < .001$) and adjective *that*-clauses ($p < .001$).

Table 4.2: The frequency of evaluative *that*-clauses

	Time 1		Time 4		<i>LL</i>	<i>p</i>	<i>BIC</i>
	Frequency	Per 1000 words	Frequency	Per 1000 words			
Verb- <i>that</i>	353	10.69	338	9.15	4.18	< 0.05	-6.97
Noun- <i>that</i>	20	0.61	56	1.52	13.95	< 0.001	2.80
Adjective- <i>that</i>	0	0	19	0.51	24.27	< 0.001	13.11
Total	373	11.30	413	11.18	0.02	> 0.05	-11.13

Note: $LL > 3.84, p < 0.05$; $LL > 6.63, p < 0.01$; $LL > 10.83, p < 0.001$.

4.4.1 Controlling Words for Evaluative *that*-clauses

The relative frequency of evaluative *that*-clauses decreased from 11.30 to 11.18 per 1,000 words (see Figure 4.2). The trajectory for all the three structural variants of evaluative *that*-clauses displayed fluctuations. The frequency of verb *that*-clauses first slightly increased at Time 2, then decreased at Time 3 and decreased again at Time 4. The relative frequency of noun *that*-clauses also displayed some fluctuation but forms a different trajectory: it first had a very small drop at Time 2 and then increased consistently until Time 4. As for adjective *that*-clauses, the relative frequency increased at Time 2 and Time 3 but dropped at Time 4.

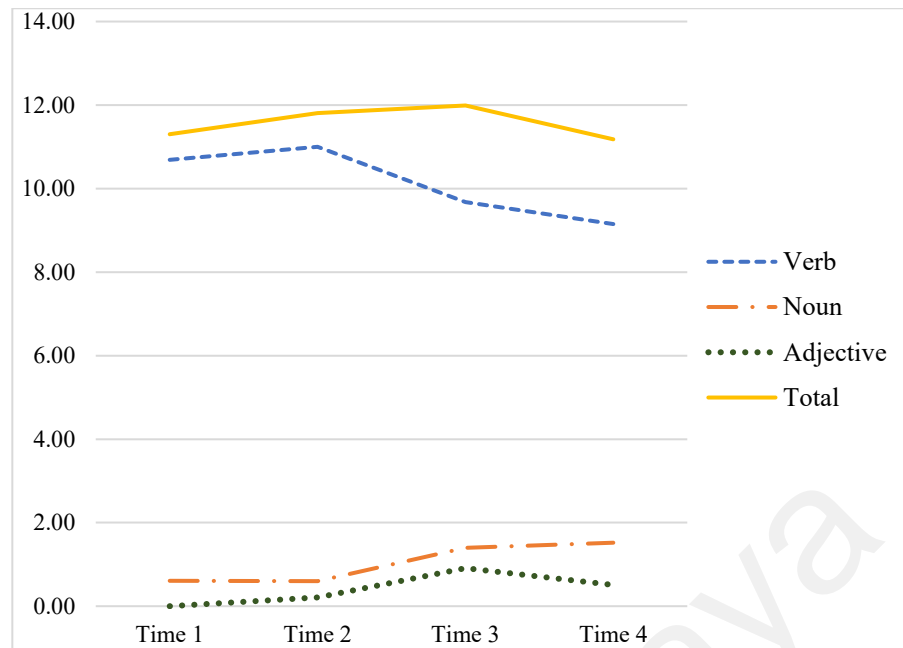


Figure 4.2: Relative frequency of evaluative *that*-clauses

The proportion of the structural variants of evaluative *that*-clauses was calculated to further illustrate the longitudinal changes over time. As can be seen from Figure 4.3, the proportion of different types of *that*-clauses underwent changes over time. Overall, the proportion of verb *that*-clauses, for example, decreased (from 94.6% to 81.8%) whereas the proportions of noun *that*-clauses and adjective *that*-clauses increased (from 5.4% to 13.6% and from none to 4.6%, respectively). The trajectory for verb *that*-clauses whereas the trajectories for noun *that*-clauses and adjective *that*-clauses were not. The percentage of noun *that*-clauses first dropped to 5.4% at Time 2 and then increased at Time 3 until it reached 13.6% at Time 4. The percentage of adjective *that*-clauses, however, slightly decreased after it reached its peak at 7.6% at Time 3.

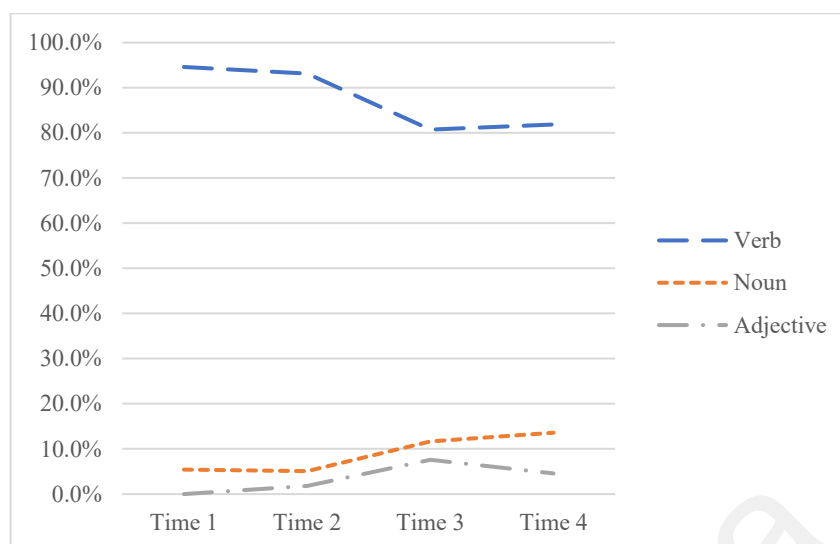


Figure 4.3: Percentage of different *that*-clauses

The findings based on Figures 4.2 and Figure 4.3 show that the development of linguistic resources associated with the use of *that*-clauses in academic writing is dynamic and complex (cf., Larsen-Freeman, 2006). It is dynamic because the overall trajectory is not straightforward and complex because the interaction between and among types of *that*-clauses changes across different points in time.

A closer look at the data reveals more interesting findings about students' development in academic writing. As can be seen from Tables 4.3, 4.4 and 4.5 which present findings concerning lexis co-occurring with *that*-clauses at the four points in time, the L2 users first relied heavily on a small set of verbs (e.g., *think, believe, say*) and nouns (e.g., *opinion, no doubt*) as the controlling words to express evaluation at Time 1. Over time, the range of controlling words that they use as part of their linguistic resources in academic writing has expanded. This is evidenced in the longer list of both verbs and nouns used at Time 4, where a greater number of different types of verbs and nouns were observed as compared with Time 1. At this later point in time, too, adjectives were seen to form part of the users' linguistic repertoires to express stance with *that*-clauses:

(12) It is very *important* that students can study in the Internet. (006d)

It's *undeniable* that the Internet play an important role in our life. (058d)

It is *obvious* that the Internet bring more good to our. (121d)

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Table 4.3: Verbs controlling *that*-clauses

Rank	Time 1		Time 2		Time 3		Time 4	
	Verb	Freq.	Verb	Freq.	Verb	Freq.	Verb	Freq.
1	think	238 (7.21)	think	197 (5.90)	think	169 (4.94)	think	205 (5.55)
2	believe	18 (0.55)	say	20 (0.60)	believe	20 (0.58)	believe	24 (0.65)
3	say	18 (0.55)	believe	19 (0.57)	know	17 (0.50)	say	18 (0.49)
4	agree	13 (0.39)	know	15 (0.45)	say	14 (0.41)	said	12 (0.32)
5	hope	11 (0.33)	realize	12 (0.36)	agree	11 (0.32)	know	11 (0.30)
6	said	9 (0.27)	agree	11 (0.33)	said	10 (0.29)	agree	7 (0.19)
7	see	9 (0.27)	said	11 (0.33)	estimated	9 (0.26)	consider	7 (0.19)
8	know	7 (0.21)	estimated	9 (0.27)	thinks	9 (0.26)	found	6 (0.16)
9	disagree	6 (0.18)	feel	8 (0.24)	consider	8 (0.23)	saying	6 (0.16)
10	find	5 (0.15)	known	7 (0.21)	realize	8 (0.23)	known	5 (0.14)
11	feel	4 (0.12)	believed	6 (0.18)	known	7 (0.20)	feel	5 (0.14)
12	remember	3 (0.09)	consider	6 (0.18)	believed	6 (0.18)	insist	5 (0.14)
13	says	3 (0.09)	found	5 (0.15)	feel	6 (0.18)	realize	4 (0.11)
14	tell	3 (0.09)	seems	5 (0.15)	found	5 (0.15)	see	4 (0.11)
15	admit	2 (0.06)	thinks	5 (0.15)	seems	5 (0.15)	thinks	3 (0.08)
16	pledge	2 (0.06)	disagree	3 (0.09)	deny	3 (0.09)	deny	3 (0.08)
17	thinks	2 (0.06)	says	3 (0.09)	disagree	3 (0.09)	denying	3 (0.08)
18			see	3 (0.09)	see	3 (0.09)	estimated	2 (0.05)
19			argued	2 (0.06)	argued	2 (0.06)	means	2 (0.05)
20			deny	2 (0.06)	denying	2 (0.06)	reported	2 (0.05)
21			denying	2 (0.06)	find	2 (0.06)	says	2 (0.05)
22			find	2 (0.06)	means	2 (0.06)	suggest	2 (0.05)
23			means	2 (0.06)	realized	2 (0.06)		
24			realized	2 (0.06)	recognize	2 (0.06)		
25			recognize	2 (0.06)	regard	2 (0.06)		
26			regard	2 (0.06)	reported	2 (0.06)		
27			reported	2 (0.06)	suggest	2 (0.06)		
28			saying	2 (0.06)	tell	2 (0.06)		
29			tell	2 (0.06)				

Note: Number in parentheses indicates frequency per 1,000 words

Table 4.4: Nouns controlling *that*-clauses

Rank	Time 1		Time 2		Time 3		Time 4	
	Noun	Freq.	Noun	Freq.	Noun	Freq.	Noun	Freq.
1	opinion	12 (0.36)	no doubt	11 (0.33)	no doubt	25 (0.73)	no doubt	16 (0.43)
2	no doubt	8 (0.24)	opinion	9 (0.27)	opinion	17 (0.50)	opinion	14 (0.38)
3					conclusion	4 (0.12)	fact	12 (0.32)
4					fact	2 (0.06)	conclusion	6 (0.16)
5							reason	3 (0.08)
6							view	3 (0.08)
7							idea	2 (0.05)

Note: Number in parentheses indicates frequency per 1,000 words

Table 4.5: Adjectives controlling *that*-clauses

Rank	Time 2		Time 3		Time 4	
	Adjective	Freq.	Adjective	Freq.	Adjective	Freq.
1	well known/well-known	7 (0.21)	well known/well-known	20 (0.58)	important	6 (0.16)
2			important	4 (0.12)	well known/well-known	5 (0.14)
3			clear	3 (0.09)	undeniable	4 (0.11)
4			undeniable	2 (0.06)	obvious	2 (0.05)
5			amazing	2 (0.06)	harmful	2 (0.05)

Note: Number in parentheses indicates frequency per 1,000 words. No adjective *that*-clause appeared at Time 1.

In addition, the choice of lexis was becoming more academic-like. Words like *tell* and *remember*, for example, were observed in the writing at Time 1, but they were no longer used with *that*-clauses at Time 4 (13). At Time 4, new words such as *realize* and *suggest* became the preferred controlling words for *that*-clauses (14):

(13) She *tell me* that Internet let she know much knowledge about world that is the book can't give she. (040a)

So in *order* to change his mind, we always *tell him* that he shoud stop to doing this, don't playing the computer game so crazy. (065a)

I still *remember* that I had been lost in many mate problems. (051a)

(14) Today, a growing number of people *realize* that internet is indispensable to their life. (046d)

More and more people *realize* that the Internet can bring the chances to make money. (051d)

Some people *suggest* that the Internet brings us a lot of benefits. (009d)

The longitudinal changes in the range of controlling words and their respective relative frequency, however, are not all linear. Whereas the range of controlling nouns and adjectives expanded consistently, the range of controlling verbs first expanded and then decreased. The most noticeable change is in the relative frequency of *think*, which topped the list of controlling verbs throughout the four times. The relative frequency of *think* accompanying *that*-clauses decreased consistently between Time 1 and Time 3 and then increased at Time 4.

4.4.2 Stance Source in Evaluative *that*-clauses

In argumentative writing, the source of stance plays a crucial role in persuading readers. The source of stance can be concealed to create a sense of objectivity or be highlighted to construct credibility. Usually, the grammatical subject of the main clause holds responsibility for the stance towards the proposition made in a *that*-complement clause.

(15) I still *believe* that Internet is good for my study and my life. (153a)

But I *think* that the harm or the good is depend to the users. (007c)

Some people *argues* that many students are addicted to the computer games.

(104d)

The subject can also be extraposed to the position following the original predicate or be removed from the main clause.

(16) It is *acknowledged* that more and more people rely the Internet to get involved in campas activily and social life. (002b)

Secondly, it is *reported* that students suffer from study stress every day. (079c)

It is *said* that the Internet brings many harm things to students. (107d)

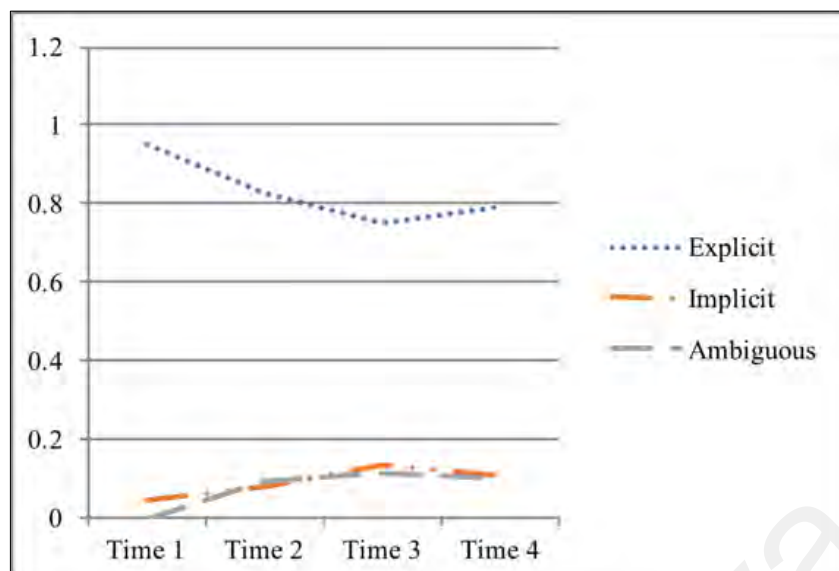


Figure 4.4: Explicitness of stance attribution

In the study, the proportion of *that*-clauses with explicit stance sources decreased over time, from 95.4% at Time 1 to 79.1% at Time 4 (see Figure 4.4). In contrast, the proportion of *that*-clauses with implicit and ambiguous stance sources increased. The trajectories for implicit and ambiguous *that*-clauses are not straightforward.

One surprising observation is that while the frequency of noun *that*-clauses and adjective *that*-clauses increased, some of these syntactic structures overtly attribute stance by using the personal pronoun as the subject of the superordinate clause:

(17) *I hold the view that the Internet brings more benefits to us.* (102b)

I have the opinion that the Internet also has its good hands. (104b)

But some people have a *idea that the Internet brings more harm than good to students.* (152b)

This is a feature that emerged at a later point of development (i.e., Time 2, Time 3 and Time 4). At Time 1, all the twenty noun *that*-clauses conceal the source of stance. But at

Time 2, four noun *that*-clauses attribute stance to personal pronouns, accounting for 19.2% of all the twenty-six noun *that*-clauses. The percentage dropped to 8.2% at Time 3, where four out of forty-nine noun *that*-clauses made use of the personal pronoun as the subject of the superordinate clause. This percentage, however, increased at Time 4, where nine out of fifty-six noun *that*-clauses attribute stance to personal pronouns, amounting to 16.1% of the total number of noun *that*-clauses. This suggests how the users are diversifying their linguistic means to make similar meanings.

4.4.3 Evaluative Meaning Making with *that*-clauses

In written communication, writers acknowledge alternative views so that they can create space for the negotiation of their stance with the reader (G. Thompson, 2001). In this study, students were found to acknowledge conflicting views by manipulating the grammatical subject of the superordinate clauses. At Time 1, for example, students used the third person pronoun to bring in alternative voices:

(18) *More and more people think that the Internet brings more harm than good to student.* (007a)

Now *some people think that the Internet brings more harm than good to students.* (060a)

Someone say that the internet brings more harm than good to students. (104a)

In these examples, included in the text is a voice that could be attributed to the reader. What the writers are doing is to bring in alternative views and then contradict them. There are also examples that writers used a third-party source to support their own stance:

(19) I remember *Hawkim* says that human depend on the AI. I agree him opinion, because human difficult to give up Internet. (003a)

In my opinion, the internet brings more good than harm to students ... *Experts said* internet have all kinds of informations. (052b)

A study found that some students play computer games day and night, as a result, they fail to their exam. So we must use Internet in a true way. (079c)

These examples show that the students choose different grammatical subjects to express their stance. To acknowledge alternative views, they use grammatical subjects such as *someone* and *some people*, whereas to support their own stance, they use grammatical subjects such as *Hawkim*, *expert* and *a study* that could give credit to the source of stance. This sophisticated use of evaluative language also appears at Time 4:

(20) *Someone think* Internet makes us corrupt. But I think Internet is a bridge. (001d)

A great number of people think that the Internet will harm their children, but the Internet must be more and more important that no one can leave it. (016d)

But *other people think* that the Internet brings more harm than good to students. A growing number of student feel that the computer online games indispensable to them. It is estimated that more and more students are addicted to online games. (126d)

At Time 1 and Time 2, the nouns controlling *that*-clauses were mostly those that represent ideas and beliefs. At Time 1, 60% of noun *that*-clauses were controlled by *opinion* and at Time 2, 45% of noun *that*-clauses were controlled by *opinion*:

(21) But I disagree *the opinion that Internet brings more harm than good to students*. (033a)

I agree with *the opinion that Internet brings more good to students*. (097a)

I'd like to agree *this opinion that the Internet brings more harm than good to students*. (154a)

(22) I agree with *the opinion that the Internet brings more harm than good to students*. (032b)

I have *the opinion that the Internet also has its good hands*. (104b)

There is the reasons why I agree *this opinion that the Internet brings more good than harm to students*. (164b)

In contrast, at Time 4, there were more nouns that represent objectivity and evidence to control *that*-clauses:

(23) And we can't ignore *the fact that internet has been brought our a lot of convenient*. (033d)

It is hard to deny *the fact that the Internet brings more good than harm to student*. (118d)

It is hard to deny *the fact that students have a most important things to studying well*. (129d)

Overall, the argumentative writing produced by the participating students is found to be increasingly conforming to conventions of academic writing over time. The way that evaluation is expressed has become less explicit, though the process of change is not straightforward. While the percentage of explicit stance expression decreased from Time 1 to Time 4, the development underwent some fluctuation in between. More interestingly, the use of noun *that*-clauses has increased over time, suggesting that the students now place greater emphasis on constructing objectivity and evidence in persuading their readers.

The results suggest that the changes in both the frequency and proportion of evaluative *that*-clause and its structural variants are complex and dynamic. The fluctuations observed in the trajectories indicate that development in the expression of evaluation is not only about an increase in the use of specific linguistic features over time. As users gain more experience with language throughout their studies, the development is also about making choices in the selection of linguistic resources for communication. Similarly, the degree of explicitness to which evaluative meanings are made has been seen to change across different points in time in a rather non-linear manner, suggesting users' fluid use of their developing linguistic resources that are constantly adjusted and reorganized to meet the demands of written communication.

As far as co-occurring lexis is concerned, a 'lexical teddy bear' tendency was observed in this study (Hasselgren, 1994, p. 237): The users initially depended on a small set of verbs and nouns as the controlling words to express evaluation. This finding seems to be in line with previous research which suggests that users tend to depend heavily on a small set of linguistic items (Parkinson, 2013; Staples & Reppen, 2016). This tendency persists over time, though a wider range of verbs and nouns was observed, and adjectives were also seen to co-occur with *that*-clauses as a new category of linguistic resources in their writing.

Also, while Parkinson (2013) finds that controlling verbs for evaluative *that*-clauses in learner writing are more reflective of vocabulary used in conversation, this study observed an increase in the use of controlling verbs over time that are more characteristic of academic writing. The choice of lexis among the L2 users in this study, as noted above, was becoming more academic-like. These findings further confirm the value of longitudinal research: while previous cross-sectional research such as Hyland (2005b) and Parkinson (2013) is helpful in identifying ‘problematic’ use of evaluative *that*-clauses in L2 learner writing, the present study sheds light on how the use of this stance marker changes over time and reveals signs of agency in academic writing development.

It must be pointed out that although the overall frequency of evaluative *that*-clauses increased over time, the frequency of some structural variants fluctuated across different points in time. This is particularly noticeable in the case of verb *that*-clauses. The frequency of noun and adjective *that*-clauses also went through some fluctuation, but to a lesser extent.

These findings provide further evidence for a complex dynamic view of language development (de Bot et al., 2013; Larsen-Freeman, 2006). Further, verb *that*-clauses are arguably acquired in earlier points of development as a linguistic feature of conversation (see also Biber & Gray, 2010). Over time, L2 users develop alternative language resources (other than verb *that*-clause) for stance expression. Meanwhile, in noun *that*-clauses, placing personal pronouns as the grammatical subject of the superordinate clause seems to be an emerging feature of Chinese student writing in this study.

This is, to some extent, consistent with Jiang’s (2015) finding that Chinese EFL learners tend to be personally involved in expressing their stance:

(24) *I have a idea that the Internet brings more good than harm to student.* (104d)

I against with the view that the Internet brings more harm than good to students. (096d)

I have a opinion that we not only make the most of the Internet resours but also reduse students are influented the harmful resours. (126d)

The L2 users were also observed at Time 1 to use the grammatical subject of the superordinate to develop their argument. They acknowledged possible alternative views and contradicted them or supported their own stance by quoting from third-party sources. It is possible that students at an undergraduate level already have these meaning-making resources in their L1. As Bardovi-Harlig (2014) points out, adult ESL/EFL learners have access to “the full range of semantic concepts from their previous linguistic and cognitive experience” (p. 128). Further research on how undergraduate students make use of their previous experience in stance expression is warranted, however.

The explicitness of meaning expressed in the students’ argumentative writing is found to have decreased over time as the range of linguistic resources expanded. At Time 1, for example, all stances were explicitly or implicitly attributed. At Time 4, however, the students used grammatical devices that conceal the source of stance. The instances of implicit attribution also increased in terms of normalized frequency. Such changes suggest that the students started to refrain from making a subjective judgment and began to use language that reflects greater objectivity. As academic writing has been argued to be less explicit than conversation (Biber & Gray, 2010), the reduced explicitness indicates that the students were over time producing texts that are more characteristic of formal writing.

This finding complements the research by Hyland and Tse (2005b) on the use of evaluative *that*-clauses in abstracts from postgraduate dissertations and journal articles. They found that L2 postgraduate students were more reluctant to use personal voice than professional academic writers. Taken together, all this suggests that in learning how to evaluate, student writers appear to progress from being relatively explicit in stance expression to becoming less explicit as they go through their undergraduate years and into the postgraduate-level study. For some of them who go on pursuing an academic career in their later lives, they may start developing or showing a more authorial voice or authorial presence in their writing. This hypothesized developmental progression of course remains to be confirmed in future research.

4.5 Conclusion

This study aims to explore whether and to what extent linguistic resources based on *that*-clauses change over time and how this might influence the expression of evaluation. A number of observations have been made. First, the results show that the frequency of evaluative *that*-clauses increased significantly and that the range of the lexical words co-occurring with *that*-clauses expanded. Second, there is considerable variability in the use of evaluative *that*-clauses. Specifically, the proportion of verb *that*-clauses decreased whereas the proportion of adjective and noun *that*-clauses increased. Additionally, the changing use of *that*-clauses has an influence on the evaluative meanings conveyed by the learners. As discussed above, the explicitness of stance marking decreased as the students used more adjective *that*-clauses and noun *that*-clauses. How students expressed their stance became more characteristic of academic writing. Overall then, it seems clear that the developmental trajectories for evaluative *that*-clause and its structural variants were not straight, suggesting that the development of evaluative language is an organic,

dynamic process, with lexis and grammar interacting with each other to co-construct meanings.

Universiti Malaya

CHAPTER 5: A CORPUS STUDY OF MODALS

5.1 Introduction

The previous chapter reports on a longitudinal investigation of the use of evaluative *that*-clause in a learner corpus of 632 argumentative essays. This chapter reports on a study of the use of modals and semi-modals in the same learner corpus. The range, frequency and semantic meaning of the modals and semi-modals under examination were analyzed to shed light on the development of evaluative language.

In the research field of SLA, there has been a major shift in the way how L2 development is viewed, changing from a top-down approach to a bottom-up approach, from rules to patterns, from a static system to a dynamic one, and from universal to contextually sensitive behaviour (Larsen-Freeman, 2013, p. 73). This major shift in perspective has inspired a growing body of research that attempts to observe emerging patterns of language use based on learner data (Mellow, 2006; Spoelman & Verspoor, 2010). However, most of the existing studies are based on longitudinal case studies and the focus has been largely placed on inter and intra-learner variability (see e.g., Larsen-Freeman, 2006; Verspoor, Lowie, Chan, & Vahtrick, 2017). There has been little research that employs a relatively large set of longitudinal data to identify the emerging patterns of language use of a group of L2 users.

This chapter reports on a corpus study of language development, focusing on the use of modality in the academic texts produced by a group of Chinese undergraduate students. The selection of this study object arises from the growing research interest in the expression of evaluation in academic writing (see e.g., Aull, Bandarage, & Miller, 2017; Baratta, 2009; Charles, 2006a, 2007; Hunston, 2011; Hunston & Thompson, 2000; Hyland, 2002; G. Thompson, 2001; W. Yang, 2016). The idea that academic writing is not merely informational has been well established in the research field of EAP and

discourse studies (Hunston, 1989; Hunston & Thompson, 2000; Hyland, 2005). Successful academic writing requires an effective presentation of arguments, seeking to persuade readers to accept the writer's viewpoint (Charles, 2006a; Hyland, 1998b). To this end, academic writers need to create in the text a space for interaction with the readers and negotiation of ideas (G. Thompson, 2001). Knowledge of modality markers helps the writer to negotiate ideas, acknowledge alternative views, and qualify claims (Halliday & Matthiessen, 2004; McEnery & Kifle, 2002).

While modality is crucial for academic writing, the use of modality markers poses a great challenge for both L1 and L2 users of English (Holmes, 1988; Palmer, 1979). The subtle semantic distinctions between modality markers are difficult to make (Coates, 1983; Verhulst & Heyvaert, 2015) and the way of expressing modality varies with registers, text types and varieties of English (Collins, 2009; Collins, Borlongan, & Yao, 2014; Kennedy, 2002; Vold, 2006). Modality is particularly problematic for L2 users of English (Hyland & Milton, 1997; McEnery & Kifle, 2002). L2 users may encounter even greater difficulties if the instruction they receive on the use of modality markers does not take into consideration the context of language use (Aijmer, 2002; Verhulst & Heyvaert, 2015), or reflect the changes in the use of modals and semi-modals in contemporary English (Biber, Conrad, & Reppen, 1998; Leech, 2003, 2011). When it comes to academic writing, L2 users need proper instruction to conform to the continuously changing style of academic writing (Hyland & Jiang, 2016; Hyland & Jiang, 2017).

However, there has been little research conducted on the use of modality markers in L2 writing (Hinkel, 2009), and even less research concerns the development in its use among L2 users. This aspect of language learning will be addressed in this chapter. The empirical data on the argumentative essays written by the same group of 158 Chinese undergraduate students allow this study to shed light on how the patterns of language use may change over time. The focus is placed on the range and frequency of modals and

semi-modals, the type of modality meanings expressed, and the mapping between grammatical forms and meanings. The findings from the study can offer some insights into language development and have implications for teaching academic writing at the tertiary education level.

5.2 Background

5.2.1 Interaction and Modality

The view that academic texts embody interaction between the writer and reader has been well established (Hunston & Thompson, 2000; Hyland, 2005; G. Thompson, 2001). Academic texts such as research articles and experimental reports do not simply convey objective information, but also argue with readers of the text and persuade them to accept viewpoints intended by the writer (Hunston & Thompson, 2000; Hyland & Jiang, 2016). To fulfil this rhetorical purpose, the writer needs to guide the readers through the text and pre-empt questions and alternative views that the readers may have (Hyland, 2005; G. Thompson, 2001). There are a wide variety of linguistic resources that can be used to enact interaction between writers and readers; these linguistic resources are discussed under labels such as *evaluation* (Hunston, 2000, 2011; Hunston & Su, 2019), *appraisal* (Martin & White, 2005), *metadiscourse* (Lee, 2006; Crismore, Markkanen, & Steffensen, 1993; Hyland, 2005, 2017), and *modality* (Halliday, 1970; Holmes, 1988; Palmer, 1979; Westney, 1986).

Modality may be the most accessible linguistic resource to novice academic writers due to their prevalence in all types of discourse. Modality refers to the factual status of the proposition that describes an event and expresses the writer's judgement about the degree of probability or the degree of obligation for that event (Halliday, 1970; Palmer, 2001). Modality is central to interaction embodied in written texts because a good way of

making something arguable is to give it a point of reference; and modality gives this point by referring to the writer's judgement and evaluation (Halliday & Matthiessen, 2004).

In the existing literature, modality has been classified into different meaning groups. In his study of modal logic, the Finnish philosopher Georg Henrik von Wright (1951) listed four modes: (1) the alethic modes or modes of truth, (2) the epistemic modes or modes of knowing, (3) the deontic modes or modes of obligation, and (4) the existential modes or modes of existence. But the existential modes are not a branch of modal logic (von Wright, 1951) and the alethic modes have little place in ordinary language (Palmer, 1979). In studying the modals in English, Palmer (1979) differentiated between two types of modality: epistemic and deontic. Epistemic modality makes a judgment about the truth of the proposition while deontic modality expressing directives and permissions. Halliday (1985) proposed four types of modality: (1) probability, (2) usuality, (3) obligation, and (4) inclination. (1) probability and (2) usuality correspond to Palmer's epistemic modality and (3) obligation and (4) inclination correspond to Palmer's deontic modality.

The major linguistic realizations of modality are modals and semi-modals, though other grammatical devices (e.g., lexical verbs, adjectives, adverbials and nouns) can also be used to express modality. Biber et al. (1999) categorized modals and semi-modals into three major meaning groups:

- (1) permission/possibility/ability (i.e., *can, could, may* and *might*);
- (2) obligation/necessity (i.e., *must, should, had better, have got to, need to, ought to* and *be supposed to*);
- (3) volition/prediction (i.e., *will, would, shall* and *be going to*) (p. 485).

Research shows that the same modal auxiliary can have multiple meanings and that the distinction between different meanings is often subtle, subject to the context of

language use (Palmer, 1979; Verhulst & Heyvaert, 2015). What further complicates the use of modals is that modals express a wide range of meanings and there is no one-to-one correspondence between the linguistic devices used and particular meanings expressed (Holmes, 1988). Specifically, the same meaning may be expressed by different linguistic devices and the same linguistic devices can be used to express more than one type of modality; different linguistic devices can be combined to express meanings (Halliday, 1970). For example, the modal verb *can* may be used to express possibility, permission and ability; the modal verb *could* is often combined with the adverb *possibly* as in the phrase “A possible explanation for this result *could possibly* rest in the theory of self-efficacy”.

In this section, I have argued that academic writing is essentially persuasive and that modality plays a crucial role in persuading the readers to accept the viewpoints intended by the writer. The categories established in the literature show that the use of modality is delicate. It is of interest to know how L2 student writers would deal with the delicate use of modality. In the next section, I will review the literature on the use of modality in L2 writing.

5.2.2 Modality in L2 Writing

While there has been a great deal of research on modality, the uses of modals and semi-modals have been inadequately studied in L2 writing (Hinkel, 2009), with most of the relevant studies conducted on epistemic modality under the label of hedging devices (see e.g., C. Chen & Zhang, 2017; Vold, 2006). Among the few studies of modality, Hinkel (1995) shows that the use of modality in student writing (both L1 and L2) is culture-dependent. Additionally, the frequency of modal verbs in L2 student writing has been shown to be significantly influenced by the writing topic (Hinkel, 2009). That aside,

the use of modality is subject to language, register and genre (Biber et al., 1999; Gilquin & Paquot, 2008; Leech, Hundt, Mair, & Smith, 2009). Vold (2006), for example, has documented considerable language-specific differences: English and Norwegian research articles feature significantly more epistemic modality markers than French research articles. Another study by Kecskes and Kirner-Ludwig (2017) sheds light on the effect of L1 on the use of modals. This study shows that both native and non-native speakers of English prefer the less face-threatening modal auxiliary *should* over the more direct *must* as deontic markers, but non-native speakers tend to use *must* and *should* more deliberately and more purposefully than native speakers. The use of modality varies with registers and genres. Corpus-based language description has shown substantial differences between academic writing and conversations (see e.g., Biber & Gray, 2016; Biber et al., 2011; Gilquin & Paquot, 2008). Modals and adverbials that express modality are most common in conversation and least common in news (Biber et al., 1999).

It can be seen from the above discussion that the expression of modality is complex and is contingent on multiple parameters of the communicative context (e.g., language, culture, and register). This complexity could possibly cause great difficulties for L2 users in the use of modality of English (Aijmer, 2002; Verhulst & Heyvaert, 2015). As L2 users develop their writing literacy, it is expected that they will become more conscious of the context of language use and become more skilful at using modality to interact with the reader and develop their argument. Such speculations on the development of L2 academic writing are best confirmed using longitudinal data on learner performance, however.

In the Literature Review chapter, I have discussed the potential value of combining EAP studies and SLA research, a joint effort that can offer valuable insights into the development of academic language and inform the development of effective pedagogy for EAP instruction. In line with the complex dynamic view of language development, it is argued in this chapter that the use of academic language probably does not develop

towards a fixed homogenous target in a straightforward manner, contrary to what is expected by many EAP instructors. This point is supported by evidence produced from several longitudinal case studies. Kibler and Hardigree (2017), for example, reported on an eight-year longitudinal case study of a Spanish bilingual, showing that the trajectory for the use of evidential resources (e.g., quotations and reporting verbs) is nonlinear and is contingent on multiple factors. In a four-year-long multiple case study, Morton and Llinares (2018) found that in the first three years the essays produced by three out of their four participants displayed a sharp increase in the use of ‘appraisal’ resources whereas in the fourth year the use of ‘appraisal’ resources underwent a drop.

This chapter reports on a corpus study of the changes in the use of modality as a major language resource for academic writing based on a longitudinal learner corpus of argumentative essays. This study is guided by three questions:

- (1) How does the frequency of modality markers change over time?
- (2) How do the modality meanings expressed in the texts change over time?
- (3) How do the grammatical forms and the meanings expressed interact in the development of modality use?

5.3 Analysis of Modals

This chapter reports on a form-based study of changes in the expression of modality based on longitudinal learner data. The study employs corpus linguistics to shed light on the range and frequency of modality markers and discourse analytical techniques to analyze the types of modality expressed and form-meaning mapping. The selection of modality markers is based on their prevalent use in contemporary English. It has been shown in analyses based on large-scale corpora that modality is mainly expressed by means of modal auxiliaries and semi-modals (Biber et al., 1999; Hoyer, 2005; Leech et al., 2009). The candidate words are listed and discussed in the Results section.

As noted earlier in Methodology, linguistic items that occurred only once or occurred more than once but only in a single text are considered as user idiosyncrasy, which were not included to identify usage patterns. In this study, only modals and semi-modals that occurred at least in two texts produced by different participants were included for analysis. The types of modality were categorized drawing on the semantic distinctions proposed in *Longman Grammar of Spoken and Written English* (see Figure 5.1).

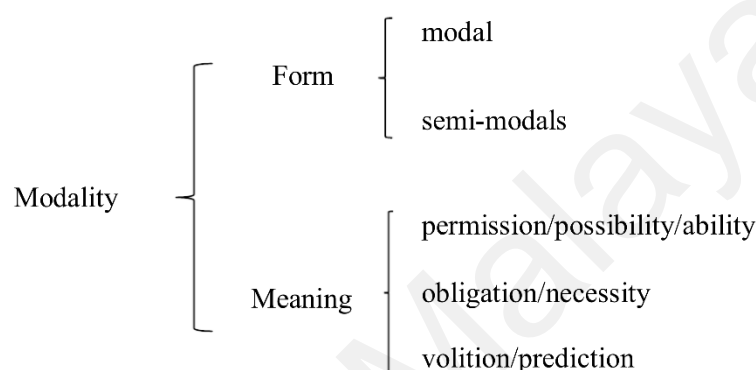


Figure 5.1: Coding scheme

Analyses of the longitudinal learner corpus were conducted following two steps. In the first step, the frequency and concordance lines of the candidate words were retrieved from the corpus using WordSmith Tools 7 (Scott, 2016). A corpus approach was applied for the identification of patterns of language use (Hunston, 2011). In the second step, the retrieved candidate words were categorized following the coding scheme in Figure 5.1. Categorization of linguistic forms is exemplified in example (1) and coding of meanings is exemplified in example (2):

(1) I hope more and more people *can* relcaze this important question. (017a)

(modal)

And our students *have to* build a timetable for themselfe. (159d) (semi-

modal)

- (2) We *can* reap the benefits of Internet, because others knowledge and great resources have major implications and helps for us. (002b) (ability)
- So, I think everybody *should* have a good self-discipline. (006c) (obligation)
- If students didn't have enough time to study they *would* be fire in this curel society. (148c) (prediction)

When a modal can have multiple meanings, close reading was performed to determine the evaluative meaning expressed in the text:

- (3) We *must* use the Internet in a right way. (079a) (obligation)

If we don't use the Internet, study *must* be very boring and hard, if we want to get any information. (162a) (possibility)

In example (3), the grammatical subject *we* and the verb *use* indicate that the writer is expressing obligation whereas the grammatical subject *study*, an inanimate object, and the attributive adjectives *boring* and *hard* indicate that the writer is expressing possibility.

5.4 Results

5.4.1 Changes in Modality Forms

Figure 5.2 shows that the frequency of modals far outnumbered that of semi-modals at each point in time. Both the frequency of modals and semi-modals decreased over time, though the trajectory for modals is not straightforward, which decreased between Time 1 and Time 3 before bouncing back at Time 4.

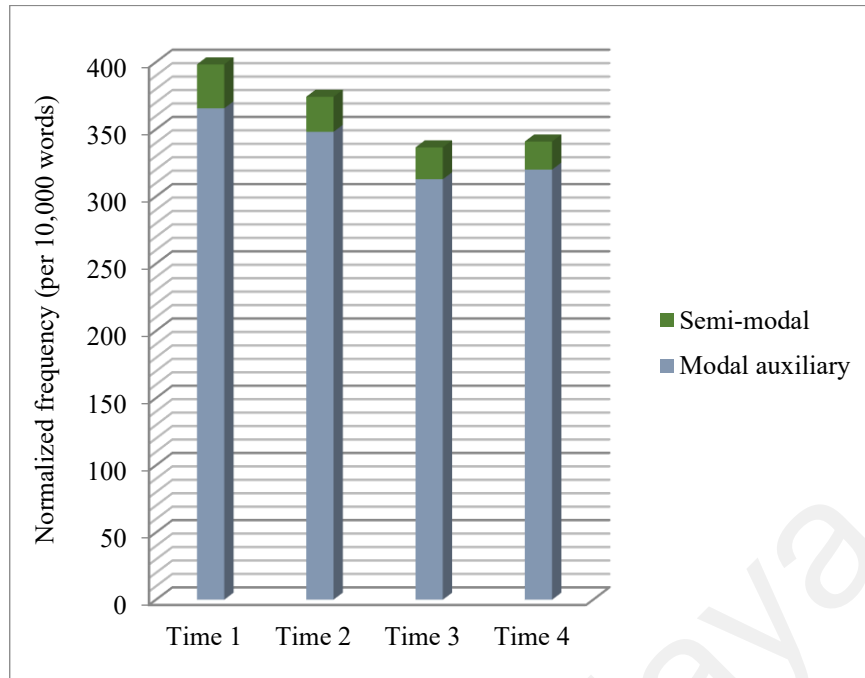


Figure 5.2: Changes in the frequency of modal auxiliaries and semi-modals

Figure 5.3 shows that the most frequently used modal is *can*, seconded by *will* and *should* whereas the least frequently used modal is *might*. The distribution of individual modals in the longitudinal learner corpus is generally consistent with that in large-scale corpora (Biber et al., 1999; Kennedy, 2002). In contrast, the frequency of *should* and *must*, however, is relatively high. Again, variation is observed in the trajectory of individual modals.

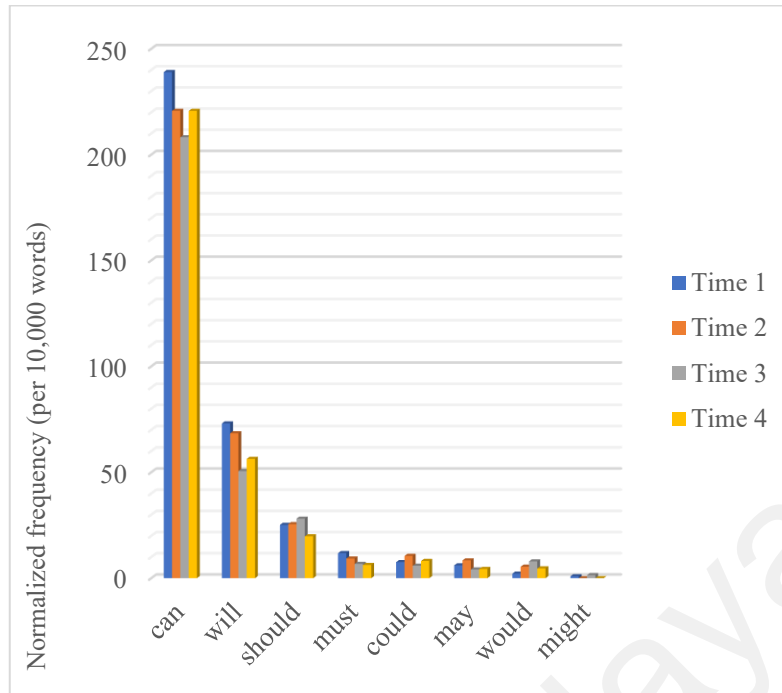


Figure 5.3: Distribution of core modal auxiliaries

Figure 5.4 shows that the most frequently used semi-modal is *want to*, followed by *need to* and *have to* whereas the least used semi-modal is *be able to*. While The trajectories for the four semi-modals underwent some fluctuation, the frequency of all semi-modals but *be able to* ended with a lower frequency compared with Time 1.

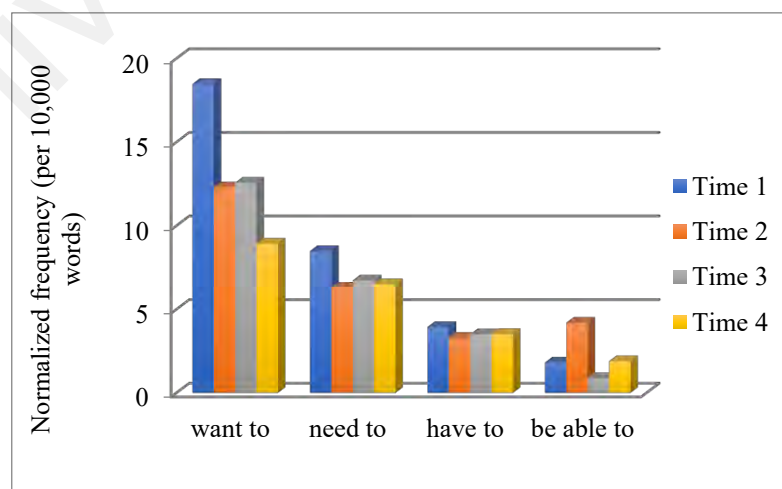


Figure 5.4: Distribution of semi-modals

Overall, the relative frequency of modality markers decreased over time and the relative frequency of its linguistic forms underwent changes over time, with most of the linguistic forms decreasing and some slightly increasing; no trajectory for these changes is straightforward. Additionally, a small number of modals (i.e. *can* and *will*) predominate in the modality markers.

5.4.2 Changes in Modality Meanings

The previous section reports on findings about the linguistic forms of modality. This section presents the results on the relative frequency of different meaning groups. Figure 5.5 shows that over 60% of the modality markers express meanings of permission/possibility/ability while modality markers that express obligation/necessity and volition/prediction account for less than 30% and 20% respectively.

The relative frequency for each meaning group constitutes different developmental trajectories. Overall, the expression of permission/possibility/ability increased whereas the expression of obligation/necessity and volition/prediction decreased over time. Interestingly, the different meanings expressed seem to compete for the limited space against each other within the written text. What is more interesting is the dynamism embedded in this competition. While the frequency for permission/possibility/ability increased consistently and the frequency for volition/prediction continuously decreased, the relative frequency for obligation/necessity dropped between Time 1 and Time 2, increased between Time 2 and Time 3, but dropped again between Time 3 and Time 4.

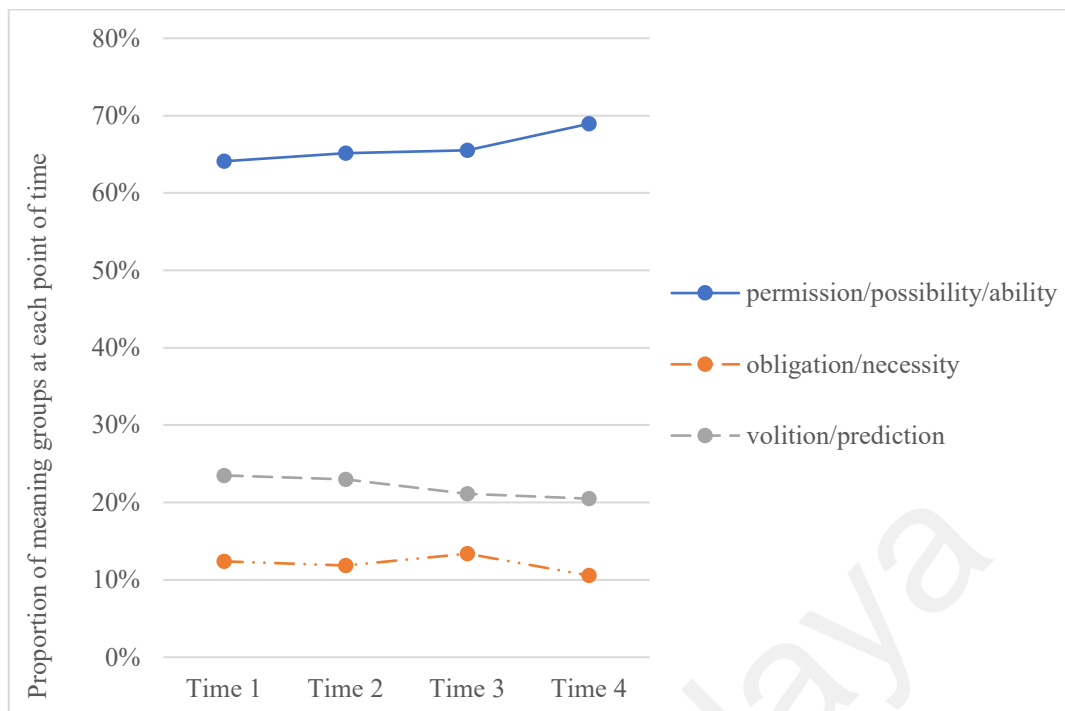


Figure 5.5: Relative frequency of modality meanings

5.4.3 Linking Forms with Meanings: The Case of *Must*

Previous studies have shown that the same modal may express more than one meaning and that the distribution of modality expressed varies with registers (Kennedy, 2002; Leech et al., 2009). To gain deeper insights into the use of modality, there is a need not only to examine the selection of grammatical forms or the type of modality expressed but also to look at how L2 users might go about selecting grammatical forms to express modality in the text. To this end, the use of *must* was examined by reading its concordance lines at different points in time.

Must can be used to express two types of modality: logical necessity and obligation (Palmer, 1979). The former type is part of epistemic modality whereas the latter type is about responsibility. In the present corpus, these two types of modality have appeared at each point in time:

- (4) If you only play game and make some bad friends in the internet, the Internet *must* brings more harm than good to you. (095a) (Necessity)
- As a adult, we *must* become a self-discipline person, we should use we own knowledges and experience to solve the problem. (033a) (Obligation)
- (5) If we use the Internet reasonable, it *must* brings more good than harm to students. (075b) (Necessity)
- As far as I'm concerned, information on the Internet is a double-edged sword, we *must* be careful about it. (027b) (Obligation)
- (6) It *must* takes you a long time to solve a problems. (158c) (Necessity)
- But at the same time, we *must* try to find out new ways to cope with the problems that would arise. (009c) (Obligation)
- (7) A great number of people think that the Internet will harm their children, but The Internet *must* be more and more important that no one can leave it. (016d) (Necessity)
- What's more, everyone *must* learn how to use the Internet today. (132d) (Obligation)

As shown in previous studies, academic writing generally features comparatively less obligation modality (Biber et al., 1999; Leech et al., 2009). The prevalence of obligation modality constitutes a unique feature of the texts in the longitudinal learner corpus. This is strikingly different from the distribution of modality in native data. Such expressions of obligation and necessity, however, do not necessarily indicate the L2 users lack register awareness. As Hinkel (1995) points out, L2 use of *must* reflects the cultural values of

their community. Responsibility is highly valued in Chinese culture. The written texts in the longitudinal learner corpus suggest that the students are action-oriented, prescribing the action to be performed. In example (4), (5) and (6), it is *we* who have the obligation to ‘become a self-discipline person’, ‘be careful’ and ‘try to find out new ways’. In example (7), everyone has the obligation to ‘learn how to use the Internet’.

An analysis of the concordance lines reveals emerging patterns of linguistic realizations of obligation and necessity. One pattern that emerges from the learner corpus is *must + be + verb*:

(8) There are a lot of things in the daily life *must be depend* on Internet. (033a)

The internet gives us good and it *must be bring* the harm. (038a)

Secondly you *must be do* more exercise. (109a)

According to Pallotti (2007), the emergence of linguistic structures under scrutiny involves the systematic use of productive structures. The systematic use of the *must + be + verb* pattern is observed not only in each sub-corpus but also at the individual level. One student (038a) produced two instances of *must + be + verb* pattern at Time 1:

(9) They can't eating but they *must be play* games. (038a)

The internet gives us good and it *must be bring* the harm. (038a)

Another pattern that emerges from the corpus is *must* plus to-infinitive clause:

(10) But at time, he *must to finish* a writing and he tells me: “Please help me, I have forgot a lot of word”. (078a)

I *must to find* the book in all the worth. (108a)

I am a student that will study computer. So I *must to understand* it- the Internet. (130a)

A qualitative analysis of the concordance lines in example (10) suggests that *to* was used by the students to mark future tense. As Hunston (2008) has pointed out, “[W]ord class is not an inherent property of a word but is a classification based on its usage on each occasion” (p. 287). It can be said that the actual use of *must* in example (10) shapes the language of these students (Tyler, 2010). Innovative use of language like this has been documented elsewhere. For example, in a corpus-driven study, Chau (2015) shows that the function word *to* is used as an adverb (e.g., as in “the river was *to* deep” and “there were *to* many water in her body”).

Often, the meaning of obligation is realized through the structure of an animate subject plus *must* (11) whereas the meaning of necessity is expressed using the structure of an inanimate subject plus *must* (12):

(11) Third, **you** *must* to keep the balance from have fun and study. (033a)

We *must* control our time to surfing in the Internet. (082b)

But in doing so, **students** *must* remember to regulate and balance our time.

(039d)

(12) I don't think I can keep away from Internet, there are **a lot of things** in the daily life *must* be depend on Internet. (033a)

If you do that, I think that **the Internet** *must* bring more good than harm to you! (006b)

The Internet *must* be more and more important that no one can leave it. (016d)

Another emerging pattern is the combination of two modal auxiliaries:

(13) In my opinion, a people who have good mind, he *must can* uses the internet make his dream come true. (111a)

If we use internet in right way, it *must could* do more positive to our life. (134a)

I think that you *must will* be get addicted in the Internet. (006c)

It can be seen from example (13) that the first modal verb *must* is used to express necessity and the second modal verb that follows *must* is used to convey another meaning. These expressions, though not conforming to the rules of language use prescribed in L1 grammar, are still comprehensible, at least to L1 Chinese users of English. Following the more common way of language use, these expressions can be paraphrased as follows:

(14) In my opinion, a people who have good mind, he *must be able to* use the internet make his dream come true. (111a)

If we use internet in right way, it *must be able to* do more positive to our life. (134a)

I think that you *must* get addicted in the Internet. (006c)

In the case of *must*, the longitudinal learner corpus contains many instances of innovative language use. Such innovative language uses suggest that L2 users are employing the language resources in a creative manner (Wei, 2016b). In a way, they are trying to connect linguistic forms with the respective modality meanings.

5.5 Discussion

This chapter reports on a study of the use of modality in academic texts produced by a group of Chinese undergraduate students. In the present study, the students use considerably fewer semi-modals than modal auxiliaries, which is consistent with the overall distribution of the use of modality in contemporary English (Biber et al., 1999; Leech, 2003; Leech et al., 2009). Additionally, the use of modality (i.e., modals and semi-modals) decreases over time, though with fluctuation during the period of study. The decrease in the use of modals and semi-modals coincides with the increase in other grammatical devices that may be used to express epistemic stance, for example, evaluative *that*-clause (see Chapter 4) and stance adverbials (see Chapter 6). These findings suggest the existence of an interaction between alternative linguistic structures. It is thus argued that the decrease or increase of specific linguistic features should not be simply attributed to factors such as instruction and the mastery of linguistic resources, an explanation that populates the relevant literature (cf. McEnery & Kifle, 2002). Language users, however, are suggested to be variable in their choice of linguistic forms, which may not be governed by either internal or external rules (R. Ellis, 1999). In other words, language users have the agency to make linguistic choices and select the meanings to express. This meaning-making process depends on a language user's understanding of the meaning potentials in a particular speech community and the linguistic resources that they have to create those meanings (Behrens, 2009; van Compernelle, 2019). Not all

longitudinal changes in learner language are to be interpreted with reference to the effectiveness of language teaching.

Because modal auxiliaries and semi-modals are the most common in conversation and the least common in academic writing (Biber et al., 1999; Leech et al., 2009), the decreased use of modal verbs suggest that the texts in the present corpus have become more characteristic of the style of academic writing with respect to the use of modality. While the style of writing is reflected by a combination of linguistic features (Biber & Gray, 2010; Hyland & Jiang, 2017), analyses of modal auxiliaries, along with evaluative *that*-clauses (see Chapter 4) and stance adverbials (see Chapter 6), suggest that writing development also involves increased register awareness (Gilquin & Paquot, 2008). This point, however, needs to be proved in future research.

A closer look at the use of individual modals and semi-modals also reveal insights into L2 development. In the present corpus, *can*, *will* and *should* are highly frequent whereas *must*, *could*, *may*, *would* and *might* are least frequent. This is largely consistent with the overall distribution of modality in contemporary English (e.g., Biber et al., 1999; Leech et al., 2009). Whereas high-frequency modals have generally decreased, some low-frequency modals (i.e., *could* and *would*) have slightly increased over time. The observed increases and decreases can be attributed to their relatively low frequency at the initial stage, reflecting the dependence on the initial state as suggested by the literature that examines L2 development from a dynamic complexity theory perspective (Larsen-Freeman, 2006; Ortega et al., 2017). The use of semi-modals has displayed a similar change as compared to that of modals.

The findings of the study have also shown that L2 development not only occurs at the surface level of linguistic forms, but also takes place in the meaning made in the text (Chau, 2015). Specifically, the relative frequency of modality associated with the

meanings of permission/possibility/ability has increased over time while the relative frequency of modality associated with the meaning of obligation/necessity and volition/prediction has decreased over time. The opposing trajectories suggest the existence of competition among the different types of meanings expressed within the limited space of the written text. The findings of this study lend further support to the dynamic complexity theory by providing evidence for the interaction among linguistic structures (Larsen-Freeman, 2006; Larsen-Freeman & Cameron, 2008b). It is argued here that the meanings, or semantic concepts (Bardovi-Harlig, 2015) that L2 users have at their disposal constitute sub-systems of language resources that would undergo the process of self-organization.

The findings of the study have important implications. Firstly, the use of modality observed in the present study provides further evidence for the dynamic complexity theory perspective on L2 development. Not only does this study provide support for the non-linearity in the paths for L2 development, but it also suggests that development can necessitate a decrease of certain linguistic features. It is shown that the use of modals and semi-modals decreases over time as L2 users of English have more experience with academic writing. Assessment of the outcome of language learning could generate a different impression if learner performance is examined from a dynamic perspective. In light of this perspective, the so-called overuse of linguistic items or the difference between L1 and L2 speakers seems hardly relevant to understanding language learning (cf. McEnery & Kifle, 2002).

Secondly, the construct of language development is multidimensional. This is because language development not only entails a simultaneous change in the use of multiple language resources (Larsen-Freeman, 2006; Vercellotti, 2017), language development also occurs at different levels of language, for example, syntactic form, semantic meaning, form-meaning matching and register awareness. In other words, learners of English are

dynamic meaning makers and are capable of adapting their use of language to the particular context of use (Chau, 2015).

Finally, this study offers further insights into the relationship between actual language use and language development. Central to the usage-based approaches to language learning is the notion that a user's language emerges as a result of exposure to situated instances of language use by the user to convey particular meaning in a specific communicative situation (Tyler, 2010; Tyler & Ortega, 2016). There is no doubt that an L2 user's exposure to English is not all the language used by monolingual native speakers of English. L2 users also interact with their L2 counterparts in the local context. Such interactions would influence L2 use of language. Some innovative instances of language use can illustrate this point:

(15) In my opinion, a people who have good mind, he *must can* uses the internet make his dream come true. (111a)

If we use internet in right way, it *must could* do more positive to our life.

(134a)

I think that you *must will* be get addicted in the Internet. (006c)

(16) But I will tell you, it *must to* be boring. (130b)

If you want to be learn people, you *must to* read, not to on line every day.

(151b)

Finally, we *must to* plan a timetable, doing every is strict and control our time. (159c)

In example (15), the modal auxiliary *must* is used as an adverb expressing probability and in example (16), the infinitive marker *to* after *must* is used to mark future tense. Such

uses of *must* are to be understood in the local communicative context in which the equivalent of *must* in Chinese is used as an adverb and the function word *to* is often conceived of as a tense marker.

The extent to which an L2 user's language is influenced by the usage events in the local context is jointly determined by the prototypicality and frequency information of the relevant linguistic structures (N. C. Ellis & Ferreira-Junior, 2009; N. C. Ellis & Ogden, 2017). The high frequency of individual modals and the patterns that emerge from actual language use can be understood against the high frequency and prototypicality of these linguistic structures in the user's exposure.

5.6 Conclusion

This chapter reports on a longitudinal study of the use of modality in a learner corpus of argumentative essays. The findings of the study show that the frequency of modality markers decreases over time and there exists a competition between different modality meanings expressed in the texts. However, the trajectories for changes in the use of modality are not straightforward, suggesting dynamism in the path for L2 development. More importantly, emerging patterns of unconventional language use from the corpus indicate that L2 users may be in the process of linking linguistic forms with modality meanings, signalling the adaptive use of language for making meanings. This process, as argued before, is a result of the exposure to language events in the local context of use. Finally, the decrease in the overall frequency of modals and semi-modals suggests a growing awareness of register and genre, helping L2 student academic writing move towards the norms of academic discourse.

The study shows the value of applying corpus techniques to the investigation of L2 development. On the one hand, a corpus-driven approach enables the researchers to

identify patterns of language use by observing the data without *a priori* basis. In the present study, patterns of language use that do not conform to L1 grammar have been identified from the corpus by observing the co-occurring words of individual modals and semi-modals. On the other hand, empirical data about academic writing produced by the same group of students can help yield more generalizable findings. The question is whether these findings can apply to other contexts of language use.

The longitudinal learner corpus study reported here is different from the longitudinal case studies used in previous studies that take a dynamic complexity theory approach. Admittedly, tracking the language performance of a group of learners could obscure the variability at the individual level because individual performance is being averaged (Lowie & Verspoor, 2015; Lowie & Verspoor, 2019). The value of looking at a longitudinal learner corpus as a whole, however, is to allow the derivation of patterns of language use that do not conform to an idealized model of language. This value is believed to be able to compensate for this potential limitation.

CHAPTER 6: CORPUS STUDY OF STANCE ADVERBIALS

6.1 Introduction

The previous two chapters have focused on the use of evaluative *that*-clauses and modals and semi-modals in a longitudinal learner corpus. This chapter reports on an investigation of the use of stance adverbials in the same longitudinal learner corpus. While the use of stance adverbials is less common than that of evaluative *that*-clauses and modal auxiliaries in academic writing (Biber et al., 1999), adverbials are a major form of grammatical realizations for stance marking (Biber, 2006a; Conrad & Biber, 2000). Since the expression of evaluation is crucial for successful academic writing (Charles, 2006a; Hunston, 1989; Hunston & Thompson, 2000), as noted earlier, it is of importance to understand the use of stance adverbials in the academic writing by L2 users of English. While special attention has been given to the linguistic expression of stance by L2 users (Fordyce, 2013; Gablasova, Brezina, McEnery, & Boyd, 2017; Jiang, 2015; H. J. Yoon, 2017b; Zhao, 2017), relatively overlooked in the literature is how L2 users of English would go about learning to express their stance over time. This issue is addressed in the present study by examining changes in the use of stance adverbials in the same longitudinal learner corpus that has been used for the study of evaluative *that*-clauses and modals and semi-modals.

6.2 Background

The use of adverbials has been extensively studied in learner writing. Much of the existing research has been conducted on the use of adverbs of degree to modify adjectives and verbs (Charles, 2009; Erman, 2014; Granger, 1998b; Kennedy, 2003; Perez-Paredes & Dez-Bedmar, 2012). Granger (1998b), for example, used learner judgement test to compare the knowledge of amplifier-adjective collocations between NSs and NNSs of

English. Edmonds and Gudmestad (2014) partially replicated the study of Granger (1998b) by adding the variable of proficiency level. Their study indicated that advanced L2 users showed patterns of use that are similar to those of NSs with respect to collocations. This is not always the case. A corpus-based study of amplifier-adjective collocations by Wang (2017) shows that the distribution of intensifiers in the learner corpus was strikingly different from that in the native-speaker corpus. The similarities and differences between NNSs and NSs may be understood in light of the choice of reference corpus and the methods of analysis employed in the previous studies.

Another active strand of research is to investigate adverbials used as cohesive devices (e.g., Altenberg & Tapper, 1998; Gao, 2016; Granger & Tyson, 1996; Leedham & Cai, 2013; Pérez-Paredes & Sánchez-Tornel, 2014). This strand of research is often concerned with the difference between NS and NNS writing. Hinkel (2003), for example, compared the use of linking adverbials in argumentative essays produced by NS and NNSs students in a US university. This study indicates a marked difference between the essays of NSs and those of NNSs in that the linking adverbials of NNSs are characteristic of a colloquial style and a limited lexical repertoire. The idea that NNSs rely heavily on a limited range of linguistic resources has been repeated in later studies. Lei (2012), for example, by comparing a corpus of twenty doctoral theses written by L1 Chinese students with a corpus of published research articles, reported that the Chinese students relying more heavily on a small number of linking adverbials, though the overall frequency of linking adverbials used by the Chinese undergraduate students were higher than the frequency of linking adverbials used by professional writers. Similarly, Ha (2016) reported that, in comparison with native English writing, Korean learners' overuse of linking adverbials pervaded all the semantic categories.

These two lines of research related to the use of adverbials have largely concentrated on the differences between L1 and L2 student writing. While Granger (2015) argues that

a contrastive interlanguage analysis approach can adopt a non-deficit perspective on learner language, the ontologies that employ an idealized native-speaker model as a benchmark for L2 acquisition have *de facto* established a deficit view of L2 language (Ortega, 2018a). While these studies are useful for understanding the use of adverbials in learner writing, they have not addressed how the use of adverbials develops over time. Even less attention is given to the use of adverbials for stance expression. The objective of this study is to contribute to the understanding of language development by focusing on the use of stance adverbials.

6.3 Analytical Framework

Adverbials that are used for stance marking are referred to as stance adverbials. Stance adverbials express the writer's attitude or evaluation of the proposition in the clause (Biber et al., 1999, p. 966). Stance adverbials can be characterized with respect to three parameters: (1) semantic class, (2) grammatical realization, and (3) placement in the clause (Conrad & Biber, 2000). As for the semantic class, stance adverbials can be grouped into three classes: epistemic stance, attitudinal stance, and style stance. Epistemic stance adverbials focus on the truth value of the proposition, commenting on factors such as certainty (1), reality (2), sources (3), and limitations (4) of the proposition:

(1) *Maybe* many people think the Internet brings more harm to students. (021a)

Of course, there are many people disagree the first opinion. (003b)

In that case, we will *definitely* make a better use of the Internet. (027d)

(2) *Actually*, the Internet not only is good at our study but also can reduce pressure.

(092b)

In fact, there are many online class, so we can learn the new subjects on computer.

(072c)

It can *really* help students to make their dreams come true. (163d)

(3) *According to* the report, we could make a judge that a number of teens have been rely on the Internet. (022b)

According to myself and my experience, I disagree with this opinion. (040c)

According to a recent research, up to 60 percents of college students have no interest in the life outside their dorms. (100d)

(4) *Generally speaking*, I assume that Internet brings more good than harm to students. (013b)

Generally speaking, the Internet not only make our life more easier, but also make many people addicted to it. (017b)

Generally, The Internet brings more good than harm to students. (161b)

Attitudinal stance expresses the speaker's attitudes, feelings, value judgments and expectations:

(5) *Most importantly*, without the powerful Internet, we can not get involved in world and social life on everywhere. (036b)

Importantly, I also can learn many knowledge on Internet. (069b)

Importantly, internet can connect with others, it make us convenient. (069d)

Style stance adverbials convey a speaker's comment on the style or form of the utterance, often clarifying how the speaker is speaking or how the utterance should be understood.

(6) *To be honest*, I don't think I can keep away from Internet. (033a)

Frankly speaking, the Internet brings us more advantages than disadvantage.

(013c)

Frankly speak, people benefit from the Internet very much. (042d)

Adverbials can take the form of a single adverb (7), prepositional phrase (8), and finite subordinate clause (9):

(7) *Personally*, I don't agree with this opinion. (125a)

Maybe somebody thinks because of Internet. students drop out of school.

(156b)

Above all, the Internet *really* brings more harm than good to students. (141d)

(8) *In my opinion*, I think the Internet brings more harm than good to students.

(032a)

So, *in my view*, I think the Internet brings more good than harm to students.

(080b)

In fact, more and more students rely on the Internet, include me. (051d)

(9) The Internet brings more harm than good to students, *I think*. (044c)

However, The Internet isn't so safe *I think*. (121d)

In the 21th century, the Internet is the most popular things in the world, *I think*. (131d)

Single adverbs are the most common in all registers (Conrad & Biber, 2000). Prepositional phrases are the second most common in academic prose whereas finite subordinate clauses are the second most common in conversation (Biber et al., 1999, p. 862). Altogether, these three linguistic forms account for up to 90% of the grammatical realizations of stance adverbials across all registers (Conrad & Biber, 2000). While noun phrases are rarely used as stance adverbials, this grammatical structure is worthy of attention due to the high frequency of *no doubt*:

- (10) There is *no doubt* that the Internet can bring us harm if we don't use the Internet to do some meaningful things to myself. (112a)
- It's *no doubt* that Internet world is wonderful and colorful. (145b)
- There is *no doubt* that these disadvantages of the Internet brings harm influence for our study and life. (017c)

Most stance adverbials can occur in different clause positions: the initial place of a clause, before verbs, and at the end of the sentence:

- (11) *Actually*, for the Internet brings more harm of or good to students the question. (062d)
- In that case, we will *definitely* make a better use of the Internet. (027d)
- The Internet brings more harm than good to students, *I think*. (044c)

Thus, stance adverbials offer the writer a range of grammatical devices for the expression of evaluation.

6.4 Analytical Procedures

While computer programs are very useful for quantitative analysis of linguistic features in computer corpora, analyses of stance markers need to be complemented by a more qualitative approach (Hunston, 2007; R mer, 2008). All the adverbials were first retrieved from the longitudinal learner corpus. The retrieved adverbials were then manually analyzed to decide whether each adverbial is a stance marker or not. The relative frequency of stance adverbials in each text was calculated. In this study, one-way repeated measures ANOVA was performed to compare the relative frequency of stance adverbials across points in time. In this statistical procedure, all instances of stance adverbials were included. But for the analysis of the range of stance adverbials, only those stance adverbials that appeared in more than one text in a sub-corpus were included. This practice is followed throughout the thesis to minimize idiosyncrasy.

6.5 Results

6.5.1 Changes in the Frequency of Stance Adverbials over Time

This study explores how the relative frequency of stance adverbials changes over time. The results of the study indicate that there is no statistically significant difference between the frequency of stance adverbials across the four points in time, $F(2.87, 449.96) = .18, p = .91$, partial et squared (η_p^2) = .001 (see Table 6.1).

Table 6.1: One-way repeated measures ANOVA

Time 1		Time 2		Time 3		Time 4		<i>F</i>	<i>p</i>	η_p^2
<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
3.95	4.73	3.67	4.58	3.73	3.96	3.74	3.96	.18	.91	.001

Note: Greenhouse-Geisser was used to correct sphericity.

However, this is not to say that no changes took place during the period of this study. The trajectory for the relative frequency of stance adverbials reveals changes over time. Specifically, the relative frequency of stance adverbials first stood at 3.79 per 1,000 words, and then dropped to 3.15 per 1,000 words at Time 2 before it steadily increased to 3.68 per 1,000 words at Time 4 (see Figure 6.1).

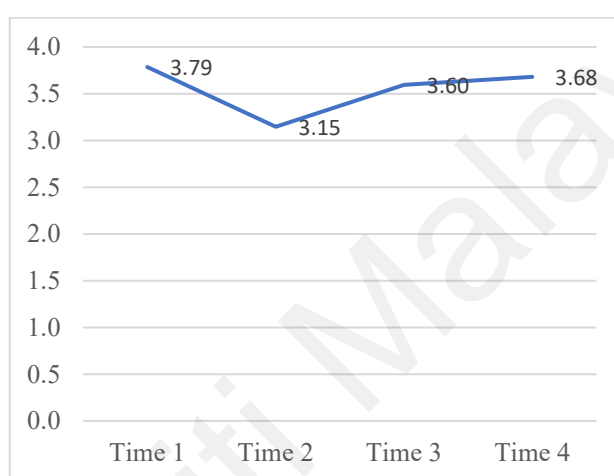


Figure 6.1: Frequency of stance adverbials over time

The relative frequency of syntactic forms also changes over time (see Table 6.2). Like the relative frequency of stance adverbials, the relative frequency of each grammatical form of stance adverbials went through fluctuation over time. Also, the percentage of all the syntactic forms of stance adverbials was calculated to shed light on the use of evaluative language. Prepositional phrases account for the largest percentage of stance adverbials whereas single adverbs were the second most used linguistic forms. This finding differs from the distribution of grammatical realizations of stance adverbials in large-scale native-speaker corpora (Biber et al., 1999; Conrad & Biber, 2000).

Table 6.2: Distribution of grammatical realizations

Grammatical forms	Time 1		Time 2		Time 3		Time 4	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Single adverb	1.57	41.6%	1.17	37.1%	1.02	28.0%	1.33	36.0%
Prepositional phrase	1.97	52.0%	1.59	50.5%	1.87	51.2%	1.92	52.2%
Noun phrase	0.24	6.4%	0.33	10.5%	0.70	19.2%	0.43	11.8%
Non-finite clause	0	0	0.06	1.9%	0.06	1.6%	0	0
Total	3.79	100%	3.15	100%	3.65	100.0%	3.68	100%

Note: Frequency per 1,000 words

Whereas finite subordinate clauses (e.g., *I think*) were shown to be less common in academic writing, in the learner corpus used for this study, only three instances of stance adverbials occurred in the form of finite subordinate clauses (see Example 9). No stance adverbials took place in the form of finite subordinate clauses at Time 1 or Time 4.

A closer look at the distribution of stance adverbials in the learner corpus (see Table 6.3) yields some interesting results. On one hand, a small number of stance adverbials prevailed the longitudinal learner corpus. Topping the list across the four points in time is the prepositional phrase *in my opinion*. On the other hand, a small number of stance adverbials (e.g., *personally*, *possibly* and *obviously*) are seen only at one point in time. What makes the results interesting is the presence of these stance adverbials at one time and its absence at another time. This unsystematic variation in linguistic choices suggests that L2 users have sociolinguistic agency, showing their understanding of how the use of one linguistic variant or another reflects the context of language use (van Compernelle & Williams, 2012, p. 237). Of interest is how the linguistic choices made by the L2 users vary across time. The next section takes advantage of the longitudinal learner corpus to track the use of particular linguistic items by individual students over time.

Table 6.3: Distribution of stance adverbials over time

Time 1		Time 2		Time 3		Time 4	
Adverbial	Freq.	Adverbial	Freq.	Adverbial	Freq.	Adverbial	Freq.
in my opinion	54 (1.64)	in my opinion	39 (1.17)	in my opinion	53 (1.55)	in my opinion	46 (1.25)
maybe	17 (0.51)	maybe	12 (0.36)	no doubt	24 (0.70)	in fact	16 (0.43)
really	11 (0.33)	no doubt	11 (0.33)	of course	12 (0.35)	maybe	16 (0.43)
of course	9 (0.27)	of course	7 (0.21)	maybe	8 (0.23)	no doubt	16 (0.43)
no doubt	8 (0.24)	actually	6 (0.18)	in fact	7 (0.20)	importantly	10 (0.27)
in fact	7 (0.21)	importantly	6 (0.18)	really	5 (0.15)	really	8 (0.22)
importantly	5 (0.15)	in fact	5 (0.15)	importantly	4 (0.12)	according to	7 (0.19)
actually	4 (0.12)	in my view	5 (0.15)	in my view	2 (0.06)	of course	6 (0.16)
in my view	4 (0.12)	according to	4 (0.12)	probably	2 (0.06)	actually	5 (0.14)
surely	2 (0.06)	generally	3 (0.09)	frankly speaking	2 (0.06)	in general	2 (0.05)
truly	2 (0.06)	really	3 (0.09)	actually	2 (0.06)	obviously	2 (0.05)
personally	2 (0.06)	generally speaking	2 (0.06)	according to	2 (0.06)	surely	2 (0.05)
		possibly	2 (0.06)				

Specifically, a few students repeatedly used a small number of high-frequency adverbials (i.e. *in my opinion*, *in fact*, *in short* and *more importantly*) across time. For example, one student used *in fact* at each of the four points in time and another student repeatedly used *in short* four times:

(12) *In fact*, Internet offer the better life to us. (024a)

In fact, the Internet is not [just] the Internet. (024b)

In fact, Internet addiction is not a real problem if we can well manage our time spend online. (024c)

But *in fact*, the Internet offer technical support to us to get resources from all over the world. (024d)

(13) *In short*, internet can brings us advantage also bring us disadvantage. (020a)

In short, Internet have advantage also have disadvantage. (020b)

In short, although Internet have advantage also have disadvantage. (020c)

In short, the Internet has good and bad for us. (020d)

Another example is that one student used *more importantly* at three points in time:

(14) *More importantly*, we can get help at any time. (084a)

More importantly, we often find problems when we do our homework. (084b)

More importantly, it is interesting to learn other countries' cultures. (084c)

While some stance adverbials were used by the students more than once, this is often not the case for the majority of stance adverbials. For example, *personally* occurred in the corpus three times, but in texts produced by three different students:

(15) *Personally*, I don't agree with this opinion. (125a)

Personally, I'd like to agree this opinion that the Internet brings more harm than good to students. (154a)

Personally, Internet advantage far outweigh the disadvantage. (031c)

There are instances in which students used a stance marker at an earlier point in time, but ceased to use this stance marker at a later time:

(16) *Surely*, we can make many friends in Internet and talk with them. (069a)

Surely, I can *talk* with my teachers or my classmates some problems after class. (069b)

(17) Internet *really* give us so many convenience, but we need to recognize which thing can better fit ourself. (106a)

They don't *really* want to do it, just lack of new idea to do other things they should do. (106b)

It is clear from these examples that while *surely* and *really* were part of the linguistic repertoire of student 069 and 106 respectively, they did not use these two stance adverbials at Time 3 or Time 4. This does not indicate that these two students regressed in their language learning, though it is often assumed in the SLA literature that language development entails an increased use of the target linguistic features. In exploring language development through learner corpora, the absence of a particular linguistic feature can be a matter of ability to produce the feature or a matter of choice (Gablasova, Brezina, & McEnery, 2017). For SLA studies that rely solely on a learner corpus, the presence of a linguistic feature at one time and its absence at a later point in time can be

used as a point of departure for research on sociolinguistic agency in making linguistic choices.

6.5.2 How L2 Users Go about Making Meaning over Time

The previous section presents results on the frequency of stance adverbials and their linguistic realizations. In this section, the focus is placed on the distribution of the semantic classes of stance adverbials. The results of the study show that more than 90% of stance adverbials express epistemic meanings and attitude and style stance markers altogether account for less than 10% of all the stance markers. This finding is consistent with that reported in previous studies (Biber et al., 1999; Conrad & Biber, 2000).

Overall, the percentage of each semantic class seems to have changed slightly. The proportion of epistemic stance markers decreased from 96.0% to 92.6% whereas the percentage of attitude stance markers increased from 4.0% to 7.4%. In contrast, style stance adverbials were seen only at Time 3.

Table 6.4: Distribution of semantic classes

Semantic class	Time 1		Time 2		Time 3		Time 4	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Epistemic	3.63	96.0%	2.97	94.3%	3.48	95.2%	3.41	92.6%
Attitude	0.15	4.0%	0.18	5.7%	0.12	3.2%	0.27	7.4%
Style	0	0	0	0	0.06	1.6%	0	0
Total	3.79	100%	3.15	100%	3.65	100.0%	3.68	100%

Note: Frequency per 1,000 words

Although no significant quantitative change in the use of stance adverbials was observed in the longitudinal learner corpus, a closer look at individual stance adverbials in their context of use has offered some insights. One stance adverbial that is most worthy of examination is the prepositional phrase *according to*. This stance adverbial has been reported to be of high frequency in academic writing by Chinese L2 users of English (D. Y. W. Lee & Chen, 2009; J. J. Lee et al., 2018). The writing task used for the study did not require the use of citation, but the longitudinal learner corpus displayed an increased use of *according to* over time. While the participating students had limited experience with academic writing, the way that they used *according to* in their argumentative essays shows similarity to that in professional academic writing. For example, in (18), the students used *the survey*, *Newspaper* and *a recent research*, as the source of evidence:

(18) The Internet is benefit for people, but who brings harm to students, *according to the survey*. (076b)

According to Newspaper I found that many teens' death thanks to they play computer day and night. (022c)

According to a recent research, up to 60 percents of college students have no interest in the life outside their dorms, and about a quarter of student has no ability to judge the quality of the contents in the Internet ... (100d)

While these instances of language use retrieved from the longitudinal learner corpus show awareness of the pattern of language use (i.e., *according to* followed by noun or noun phrase) and the rhetorical function (i.e., stance attribution) of *according to*, the use of this stance adverbial does not completely conform to conventions of academic writing. Pragmatically, *according to* is used to highlight the source of stance. Some instances retrieved from the learner corpus simply attributed stance to sources that are seldom

marked in the common practices of academic writing (D. Y. W. Lee & Chen, 2009), as exemplified in the following examples:

(19) *According to what I know of the society, I think the Internet brings more good than harm to students. (119b)*

According to myself and my experience, I disagree with this opinion. (040c)

So, *according to this*, I think the Internet brings more harm than good to students. (080d)

On the surface level, these sentences help construct validity by clarifying the basis on which the writer comes to his/her evaluation. However, these student writers cite sources that do not really have authority (e.g., *what I know of the society*, *myself and my experience* and *this*). One possible explanation for such writing practice is that the student writers may not be cognizant of the conventions of academic writing in general and the way of constructing authority in particular (Hyland, 2002; Peng, 2019; P. Thompson, 2012; Zhao, 2019).

Another interesting observation is that, at Time 4, more participants adopted the use of *according to* for the rhetorical function of stance attribution, but a more mixed picture emerged. Whereas two participants attributed the stance to a source of evidence (i.e., *a recent research* and *the report*), others seem to have used *according to* for a different purpose:

(20) *According to these experience*, I think the Internet brings more harm than good to students. (026d)

According to above words, it is hard to deny the facts that the Internet benefits us a lot. (149d)

According to these opinions, I think the Internet is good for students. (153d)

As can be seen in example (20), *according to* was also used to construct coherence in the text. While one major function of evaluation is to help discourse organization (G. Thompson & Hunston, 2000), the use of *according to* for coherence found in this study is quite unusual in academic writing.

6.6 Discussion

This study explored L2 development by investigating the use of stance adverbials in a longitudinal learner corpus of academic texts produced by a group of Chinese students. The study did not show any significant increase in the frequency of stance adverbials over time. One possible reason, as many would expect, is that the spanning period of the study is too short to observe noticeable quantitative changes (Ortega & Iberri-Shea, 2005). It should be noted, however, that noticeable changes can be observed within as short a period as this one (see e.g., Fogal, 2019b). An alternative explanation is that the pace of change in the frequency of use is subject to the type of linguistic features in question. As shown in previous studies, the acquisition of a linguistic structure is driven by the frequency, frequency distribution and form-meaning contingency of the structure in the linguistic input (N. C. Ellis, 2002; N. C. Ellis & Ferreira-Junior, 2009). The relatively low frequency of stance adverbials in natural language use can account for the slow change.

The study shows that a small number of high-frequency adverbials account for a large proportion of the stance adverbials. This finding is in line with previous studies on the distribution of linguistic resources in natural language in general (N. C. Ellis, 2012; N. C. Ellis & Ferreira-Junior, 2009) and studies on evaluative language in particular (Gablasova, Brezina, McEnery, et al., 2017). These previous studies show that a relatively small number of linguistic resources account for a large proportion of language use; both L1 and L2 users of English tend to prefer a limited set of stance markers. The predominance of a small number of stance adverbials observed in this study can be understood in light of the lexical and phrasal ‘teddy bear’ tendency and the Zipfian distribution of linguistic items in natural language use (N. C. Ellis, 2012; Hasselgren, 1994). The present study shows that the high-frequency stance adverbials in the longitudinal learner corpus are *in my opinion*, *maybe*, *of course*, and *no doubt*. Among these stance adverbials, the prepositional phrase *in my opinion* tops the list of stance adverbials across the four points in time. The predominance of this phrase may be explained by the phrasal ‘teddy bear’ tendency (N. C. Ellis, 2012). Considering that it is produced fluently and that it is the preferred way of expression for a group of learners, the prepositional phrase *in my opinion* can be considered formulaic language within these L2 users (Myles & Cordier, 2016). Apart from *in my opinion*, other high-frequency stance adverbials (e.g., *maybe*, *of course* and *no doubt*) can also be considered to be formulaic language, which is readily accessed and retrieved by the L2 users for stance marking (Myles & Cordier, 2016). On a further note, the use of formulaic sequences such as *in my opinion*, *of course* and *in fact* not only gives the learners a cognitive advantage in selecting grammatical structures, but also frees planning time for the content of the text (N. C. Ellis, Simpson-Vlach, & Maynard, 2008; Schmitt & Carter, 2004; Tremblay, Derwing, Libben, & Westbury, 2011). In this sense, the predominance of a small number of linguistic items in learner corpora should not be simply considered deficiency, for example, overuse.

Another point to note is related to register awareness. Language use has been shown to be register-specific (Biber, 2006b; Biber & Barbieri, 2007; Hardy & Friginal, 2016). However, previous studies suggest that learners of English, even of advanced levels, tend to be lacking in register awareness (Ädel, 2008a; Gilquin & Paquot, 2008; Leedham & Cai, 2013). While the high use of informal linguistic features observed in the present study seems to have supported this observation, a closer examination of the distribution of linguistic features yields interesting insights. The learner corpus is seen to feature a mixed use of high-frequency formal and informal linguistic variants of stance adverbials (e.g., *of course* and *maybe*). Whereas *of course* is one of the most common stance adverbials in academic writing, *maybe* is more commonly used in conversation (Biber et al., 1999). This mixed use of formal and informal features is not surprising considering that the difference between written and spoken registers is more of a gradual continuum than a clear-cut dichotomy (Ädel, 2008a); professional academic prose also involve informal linguistic features (Harwood, 2005; Hyland & Jiang, 2017).

On a further note, assessing learners' register awareness based on evidence at a single point in time would neglect the dynamics of language use and development (Hiver & Al-Hoorie, 2016; van Geert, 2008; Verspoor, Schmid, & Xu, 2012; Zheng, 2016). If learners of English are considered to develop their awareness of academic registers as they have more experience with language, they may be in the process of shifting from linguistic features of spoken registers to those more typical of academic writing (Shaw & Ting-Kun Liu, 1998). It may take a long time to observe noticeable changes in this regard, however. If a fixed learning target is too high for a learner, the outcome of learning is doomed to failure. Should the learner still aim for this unrealistic target? If not, what should be the reasonable assessment standard for language learning? Alternatively, language learning can be assessed against a criterion that is internal to individual learners (Chau, 2015; Ortega, 2009). Learners are assessed against themselves rather than external reference

points. In the classroom setting, adopting a learner-internal assessment criterion can highlight the progress that learners make (Pallotti, 2017), which would maintain the morale of the learners (Ortega, 2018a). This view of language assessment highlights the value of longitudinal learner data which allow the assessment of language development from a longitudinal perspective.

Finally, the analysis of the longitudinal learner corpus reveals that the changes in language use entail ‘messy little details’ (Larsen-Freeman, 2006; Lowie & Verspoor, 2019). In the learner corpus used for this study, the choice of linguistic items is not entirely predictable. This ‘messy’ pattern of language use is evidenced by the non-linear changes in the frequency of stance adverbials, their grammatical forms and semantic classes. The ‘messy little details’ can be seen from the presence and absence of particular stance adverbials. For example, *generally*, a stance adverbial that is common in academic writing is present at Time 2, but absent at Time 3 and Time 4. To go one step further, the patterns of language development may not be all that systematic (R. Ellis, 1999). While SLA researchers have attempted to establish acquisition orders and sequences (see the special issue of *Language Learning*, Volume 65, Issue 1, *Orders and sequences in the acquisition of L2 morphosyntax, 40 years on*), there is no universal order of acquisition (Murakami & Alexopoulou, 2016), at least at the individual level (Bulté & Housen, 2018; Larsen-Freeman, 2019; Lowie & Verspoor, 2019). Additionally, the developmental pattern for individual learners is often unpredictable (Larsen-Freeman, 2019; Lowie & Verspoor, 2015). Learners may be able to develop sophisticated use of language at what traditional SLA research calls low-intermediate levels. This explains the presence of academic-like stance adverbials in the learner corpus used for the present study.

This study has pedagogical implications. Stance adverbials should be integrated into academic writing instruction at tertiary education (Charles, 2009). Writing instruction

needs to take into consideration the form-meaning/function mapping of the stance markers to be taught to student writers who may encounter great difficulty in making appropriate choice of stance adverbials in response to the context of language use (Hinkel, 2003). The sophisticated but unconventional use of stance adverbials observed in this study highlights the importance of connecting linguistic forms and meanings/functions in language teaching. As Ortega (2011) has noted, instruction that takes the learning of new linguistic forms out of context is less likely to yield satisfactory results. Thus, a form-function pedagogy is needed (Tarone, 2015). It should be made clear here that to become part of the target discourse community does not suggest that L2 users should conform to the native-speaker norms. What is important is that L2 users are aware of their linguistic choices, the resulting rhetorical effects and the identity they wish to construct (Kohn & Hoffstaedter, 2017; Larsen-Freeman, 2019; Schreiber, 2015; van Compernelle & Williams, 2012).

Assessment is an important component of language instruction. This study has a contribution to assessment practice (Atai & Shafiee, 2017; R. Ellis, 2010; Kurzer, 2018; Storch, 2018). Evaluative language plays an important role in academic writing in that it functions to organize discourse, express values, and maintain relations between the writer and the readers (Hunston & Thompson, 2000). This study shows that L2 users of English have their personal preferences for a small number of stance markers and that they display the sociolinguistic agency of selecting stance markers to express evaluation. Therefore, assessing language development based solely on the range and frequency of stance markers can be called into question. When it comes to the use of evaluative language, students should be allowed to position themselves in their written text in a way they are comfortable with (Gablasova, Brezina, McEnery, et al., 2017). For those language instructors who would intend to show respect for the sociolinguistic agency of their students, they may consider applying an interlanguage approach to language teaching

where the teacher understands the acquisition process from the perspective of students and takes students' interlanguage productions as the best possible version of their use of L2 (Pallotti, 2017). Alternatively, the teacher can consider implementing what Larsen-Freeman (2019) calls 'learner-driven feedback' where students decide how and on what they receive feedback from the teacher.

6.7 Conclusion

This study investigated the use of adverbials as grammatical stance markers in a longitudinal learner corpus of argumentative essays. The results of the study indicate that the relative frequency of stance adverbials slightly decreased during the period of the study. As for the grammatical realization, the proportion of stance adverbials in the form of single adverb decreased whereas the proportion of stance adverbials in the form of noun phrase doubled during the period of study. The percentage of stance adverbials in the form of prepositional phrase remained almost the same. As for the stance expressed, the students made less epistemic meaning but used increasingly more attitudinal stance markers over time.

Qualitative analyses of the learner corpus displayed sophisticated uses of stance adverbials. It has been shown that the way that the stance adverbials were used in the texts became more aligned with the conventions of academic writing. However, in some cases, stance adverbials used for citation purposes (e.g., *according to*) did not really achieve the intended rhetorical effect, for example, constructing an authoritative voice. These findings suggest the need for explicit instruction on the use of stance adverbials in academic writing (Charles, 2009).

These observations, along with the study of evaluative *that*-clauses and the study of modals and semi-modals, produced further evidence on the dynamic nature of language

development. The study raises a question: if a target is too high for a learner to achieve, is the learning doomed to failure? What would be the reasonable criteria for language assessment? The findings of the study attach great value to a learner-internal assessment criterion, which can better reflect the progress students make. Longitudinal learner data are indispensable to this purpose.

Universiti Malaya

CHAPTER 7: DISCUSSION

7.1 Introduction

The general aim of this thesis is to investigate the use of grammatical stance markers in L2 writing over time and to contribute to a better understanding of L2 evaluative language development based on evidence from a longitudinal learner corpus. This chapter aims to answer the questions brought up in Chapter 1:

1. How does the use of grammatical stance markers in the argumentative essays produced by a group of Chinese undergraduate students change over time?
2. How does the stance expressed by the grammatical stance markers change over time?

7.2 Changes in the Frequency of Grammatical Stance Markers

As for evaluative *that*-clause, observations are made of the longitudinal changes in its relative frequency, the relative frequency and proportion of its structural variants, and the range of words that control evaluative *that*-clause. From Time 1 to Time 4, the frequency of evaluative *that*-clauses decreased during the study. However, the trajectory for the use of evaluative *that*-clauses is not linear: it first experienced a rise at Time 2 and Time 3 and then a drop at Time 4. A look at the use of its structural variants also shows fluctuation over time. While the relative frequency of noun *that*-clauses increased steadily, the relative frequency of verb and adjective *that*-clauses underwent some fluctuation. The trajectory for verb *that*-clauses is very similar to that for the evaluative *that*-clause as a whole. Changes are observed in the proportions of the structural variants of evaluative *that*-clauses, i.e., verb, noun and adjective *that*-clauses. Specifically, the proportion of verb *that*-clauses declined from 94.6% to 81.8% and the proportions of noun and adjective

that-clauses rose from 5.4% to 13.6% and from zero to 4.6% respectively. None of the trajectories for verb, adjective or noun *that*-clauses are straight.

The non-linear nature of language development is also shown in the use of modality markers (i.e., modals and semi-modals). Over time, the relative frequencies of individual modals and semi-modals decreased, with some fluctuation between the points in time. What is interesting about the use of modality is that a few individual modals (i.e., *can* and *will*) were predominant at all points in time. From a usage-based perspective on language learning, this demonstrates the students' preference for particular linguistic items over others. This finding is not surprising considering that natural language use often displays skewed distribution (N. C. Ellis & Ferreira-Junior, 2009) and that L2 users are shown to have a personal preference for particular meanings and linguistic forms (Zhang & Sabet, 2016).

Although no statistically significant change is observed in the use of stance adverbials, the relative frequency of stance adverbials also displays a non-linear, though less curved, path. Fluctuation is observed in the distribution of the linguistic realizations and semantic classes of stance adverbials. But the range of stance adverbials that met the emergence criterion of two independent occurrences has remained almost unchanged, i.e., 12 types of stance adverbials at Time 1, 3 and 4 and 13 types of stance adverbials at Time 2.

Two major findings of the study are worthy of discussion. The first one is that while the use of grammatical stance markers in the longitudinal learner corpus changed over time, not all types of stance markers have undergone noticeable quantitative changes. The differences in the developmental trajectories for different types of stance markers could be partly explained by the effect of frequency on language acquisition (N. C. Ellis, 2002). The three types of grammatical stance markers differ markedly in terms of frequency, frequency distribution and function (N. C. Ellis & Ferreira-Junior, 2009). Generally, those

less common linguistic items are less salient, and it takes more time for users to identify the patterns of their use. This is the case for stance adverbials. The frequency of stance adverbials in the linguistic input of these students is relatively low. This is perhaps one of the reasons for the largely unchanged trajectory for stance adverbials. The effect of frequency on language acquisition needs to be considered along with the learners' stage of language acquisition, or in a more neutral term, experience with languaculturing (Chau, 2015). Another finding is that the use of particular linguistic features does not always increase as L2 users gain more experience with languaculturing (Chau, 2015). It has been observed in the longitudinal learner corpus that the use of evaluative *that*-clauses and modals and semi-modals decreased over time, though the use of some structural variants of evaluative *that*-clauses (e.g., noun and adjective *that*-clause) increased. This suggests that language learning is not simply about the expanding use of linguistic forms. Rather, it is more about the ability to make linguistic choices. The decreased use of particular linguistic forms provides direct evidence for the point that the absence of these forms is 'a matter of choice rather than a matter of mastery' (Man & Chau, 2019, p. 31). The next section discusses how the participating students make linguistic choices in their argumentative essays.

7.3 Changes in the Patterns of Use of Grammatical Stance Markers

Noticeable changes have taken place in the controlling words of evaluative *that*-clauses. As compared with Time 1, the range of words controlling *that*-clauses expanded over time. While no adjective was used to accompany evaluative *that*-clause at Time 1, adjective *that*-clauses started to appear at Time 2 and the range of the controlling adjectives expanded at Time 3 and Time 4, illustrated as follows:

(1) It is *well known* that Internet brings us more convenient and advantage.

(013b)

It is *well known* that the Internet has developed faster. (025b)

Thirdly, It is *well-known* that the Internet will be use widely. (032b)

(2) It is *well-known* that nowadays many middle school students has been taken with glasses. (025c)

It is *clear* that Internet is a good way for them to find the answer. (079c)

It is *important* that students also can practice foreige languages by use the Internet. (153c)

(3) It is *obvious* that the Internet bring more good to our. (121d)

In the information age, it's *undeniable* that the Internet play an important role in our life. (058d)

It is *vital* that The Internet has stronger ability that can beyond to control with national, students can watch anything on line. (151d)

The expanding range of controlling words for evaluative *that*-clauses can be considered as the signs that the student writers are expanding their linguistic repertoire. Additionally, more academic-like words (4) and sequences of words (5) emerged during the study. Academic-like words are understood as the words that belong to the Academic Word List (Coxhead, 2000) and academic-like word sequences are those more typical of academic writing, for example, noun *that*-clause (Biber et al., 2011).

(4) According to the report is *estimated* that more and more students use Internet to make new friends by using softwares. (097d)

It's *no denying* that the Internet has its disadvantage as well. (104d)

There is *no denying* that the Internet can make the message spread more quickly. (120d)

(5) I agree with the *idea* that Internet brings more good than harm to students. (097d)

It is hard to deny the *fact* that students have a most important things to studying well. (129d)

I insist on my *view* that the Internet bring more good than harm to student. (145d)

(6) It is *undeniable* that the Internet is play a important part. (067d)

In other words, it is *clear* that the Internet brings more good than harm to students. (079d)

It is *obvious* that the Internet bring more good to our. (121d)

Interestingly, the increased use of academic-like words and expressions is accompanied by informal linguistic features. One of the prominent informal linguistic features is the first-person pronouns/determiners plus a noun *that*-complement clause, illustrated as follows:

(7) I draw a *conclusion* that the Internet brings more good than harm to students.

(097d)

I have a *idea* that the Internet brings more good than harm to student. (104d)

I insist on **my view** that the Internet bring more good than harm to student.

(145d)

On one hand, noun *that*-clauses convey evaluation in a neutral way by concealing the source of evaluation (Charles, 2007; Hyland & Tse, 2005a; Jiang, 2017). On the other hand, the first-person pronouns/determiners make the source of evaluation explicit. The mixed use of these two linguistic features created a conflicting image when it comes to the management of the source of stance. This mixture of formal and informal features forms a typical feature of the argumentative essays in the present longitudinal learner corpus. This should not be simply considered as being problematic. Informal features are also prevalent in professional academic writing or L1 academic writing (Hyland & Jiang, 2017; J. J. Lee, Bychkovska, & Maxwell, 2019). Rather, the ‘messy’ picture of changes in language use can be seen as part of the adapting process of language learning (N. C. Ellis & Larsen-Freeman, 2009b; Housen, Simoens, & Ellis, 2016).

This kind of innovative language use is also observed in the use of modals. Analyses of the learner corpus have revealed unconventional patterns of modals, e.g., *must + be + verb* (8), *must + to-infinitive clause* (9), and *modal verb + modal verb* (10):

(8) Last but not least, the Internet is a make friends good place, but we *must be not spend* too many time. (020c)

We have a lot of homework should be do everyday, and we *must be spend* a lot of time in finishing our homework. (035d)

The Internet *must be brings* more good to students. (048d)

(9) The Internet have a weath of things, but we *must to learn* the goods from it, regard the Internet as an e-learning tool. (024c)

And now the thing we *must to do* is that we should use the Internet in right way. (112d)

Our parents *must to spend* the most of time with their childen. (159d)

(10) I think that you *must will* be get addicted in the Internet. (006c)

I want to tell you that in true life, we are not *must can* talk with other as in the Internet. (012c)

If we use it for good, the Internet *must will* reture you more good than harm to you. (065c)

Generally, these patterns of language use decreased over time. For example, there are 6 instances of *must + be + verb* at Time 1, 3 instances at Time 2 and 3, and 2 instances at Time 4. It should be noted that these unconventional patterns persisted towards the end of the study period. These patterns of language use could have been considered to be imperfect from a monolingual native-speaker model, though they are generally intelligible, at least for those who are familiar with the writing of L1 Chinese users of English. The impression can be quite different if these unconventional patterns are viewed

from a bilingual perspective. If we remember that these L2 users of English are fluent in Chinese and that they are exploring the linguistic forms in a second language for meaning making, the way that they use language is impressive, though these patterns of language use deviate from the rules prescribed in L1 English grammar. Admittedly, these L2 users of English were not fully aware of the prescribed grammatical rules for the use of *must*. However, they are creative in making use of the linguistic resources in English in using these unconventional patterns. Taking their own performance as the reference point, they were developing more ways of meaning making and they had shown creativity in making use of their linguistic resources (Kharkhurin, 2016). This creativity is also demonstrated in the use of stance adverbials. Take *according to* for example, the use of this stance adverbial is grammatically correct, i.e., *according to* is followed by a noun phrase:

(11) *According to what I know of the society*, I think the Internet brings more good than harm to students. (119b)

According to myself and my experience, I disagree with this opinion. (040c)

So, *according to this*, I think the Internet brings more harm than good to students. (080d)

(12) *According to these experience*, I think the Internet brings more harm than good to students. (026d)

According to above words, it is hard to deny the facts that the Internet benefits us a lot. (149d)

According to these opinions, I think the Internet is good for students. (153d)

But the way that this stance adverbial was used to construct an authorial voice does not conform to the conventions of academic writing (Hyland, 2002; Peng, 2019; P.

Thompson, 2012). In example (11), the sources of information do not show credibility whereas in example (12) *according to* and its following noun phrase seems to function as a cohesive device. It is surprising to see this creativity in making use of linguistic resources, though creativity of this kind is often suppressed in language instruction based on a monolingual native-speaker model. But from a bilingual perspective, creative language use is to be encouraged (Kharkhurin, 2016). To go one step further, learners of English should be encouraged to draw on multilingualism as a resource and making use of their L1s to benefit their learning and writing (Illman & Pietilä, 2018).

7.4 Changes in the Stances Expressed

Language development is essentially a dynamic meaning-making process (Chau, 2015). Analyses of the grammatical stance markers in the longitudinal learner corpus have revealed how a group of Chinese undergraduate students go about making evaluative meanings in their argumentative essays over time. In the case of evaluative *that*-clauses, it has been found that the evaluative meanings made during the period of study have become less explicit and more implicit. The percentage of *that*-clauses with an explicit source of stance dropped from 95.4% to 79.1%. This is partly because these students used fewer noun *that*-clauses (13) and adjective *that*-clauses (14):

(13) Despite the *fact* that the internet has some negative aspects, but we have to recognize it let our life and study better. (008d)

I don't agree with this *opinion* that the Internet brings more harm than good to students. (150d)

I against with the *view* that the Internet brings more harm than good to students. (096d)

(14) It is *clear* that Internet is a good way for them to find the answer. (079c)

It is *important* that the Internet brings the effect to the people. (120c)

It is *obvious* that the Internet bring more good to our. (121d)

Whereas the grammatical structure noun *that*-clause allows the writer to conceal the source of evaluation (Charles, 2007; Hyland & Tse, 2005a, 2005b), not all noun *that*-clauses in the longitudinal learner corpus express evaluation in an ambiguous or implicit way. This linguistic structure seems to function as a structural variant of reporting verb *that*-clause.

(15) I hold the *view* that the Internet brings more benefits to us. (102b)

I have the *opinion* that the Internet also has its good hands. (104b)

I have a *idea* that the Internet brings more good than harm to student. (104d)

It is also observed in the longitudinal learner corpus that student writers increasingly used nouns that discursively construct objectivity and evidentiality (Charles, 2007):

(16) In my opinion, playing computer games don't effect *the fact* that the Internet brings more good than bad to students. (104c)

And we can't ignore *the fact* that internet has been brought our a lot of convenient. (033d)

It is hard to deny *the fact* that Internet becomes more and more important in our life. (156d)

As for the use of modals and semi-modals, modality markers that express the meaning of permission/possibility/ability (17) account for over 60% of all modality markers at all times while modality markers that express obligation/necessity (18) and volition/prediction (19) account for less than 30% and 20% of all modality markers respectively. During the study, the proportion of modality markers that express the meaning of permission/possibility/ability has increased whereas the proportion of modality markers that are used to express the meaning of obligation/necessity and volition and prediction has decreased.

(17) The Internet *may* cause our confident to down. (012a)

By the Internet, students *can* find the resources of study. (153c)

And in my opinion, it is difficult for them to be self-disciplined because it *might* be the first time that they live without their parents' care and see.

(138c)

(18) So we *must* use it in a proper way. (032c)

Also, everyone *should* have self-discipline to use the Internet. (157b)

We should learn to make the most of Internet rather than be crazy about Internet. (153b)

(19) And they also *will* lost the abilities of cope with the problems. (025c)

But Internet also *will* bring some harm to students, like some unhealthy information. (106b)

Because they think we *would* spend more time in it and pose a challenge on our grade. (014d)

One major feature of academic discourse is the construction of certainty and uncertainty of knowledge (Hyland, 1998a; McEnery & Kifle, 2002; Sheldon, 2018; Wharton, 2012). The meaning group of permission/possibility/ability helps the writer to fulfil this rhetorical function. As the modality markers associated with the meaning group of permission/possibility/ability became more prominent in the learner corpus of argumentative essays, the students' writing is thus suggested to be more aligned with the discourse practices of academic writing.

In the case of stance adverbials, epistemic stance markers are predominant in the corpus, accounting for over 92.6% of all stance adverbials. This is also the case in large-scale corpora of monolingual native-speaker data where the most common stance markers all mark epistemic stance (Conrad & Biber, 2000, p. 64). In contrast, style stance is extremely rare. In the entire learner corpus, there are only five instances of style stance (20), with two of them occurring at Time 3. There seem to be minor changes in the evaluative meanings made. There is a slight decrease in the proportion of epistemic stance (21) and a small increase in the proportion of attitude stance (22). Incidentally, both the percentage of increase and decrease are 3.4%.

(20) *To be honest*, I don't think I can keep away from Internet. (033a)

Frankly speaking, the Internet brings us more advantages than disadvantage.

(013c)

Third, *frankly speaking*. Students prefer to study on the Internet. (057c)

(21) *Actually*, the Internet not only is good at our study but also can reduce pressure. (092b)

Maybe they have many hobbies like playing basketball. (044c)

In fact, network is not horrible, as long as we know more about it. (124c)

(22) *Most importantly*, without the powerful Internet, we can not get involved in world and social life on everywhere. (036b)

Importantly, I also can learn many knowledge on Internet. (069b)

Importantly, internet can connect with others, it make us convenient. (069d)

The focus of this thesis is placed on the developmental patterns of evaluative language. While analyses of the longitudinal learner corpus could not determine the factors that influence language development because of the naturalistic nature of the design of the study (Kibler & Hardigree, 2017), it would be useful to discuss what makes for the changes in language use. The literature has suggested that any change in language use can be attributed to the influence of multiple factors (e.g., instruction, feedback, L1, genre and task) and that no single cause has priority over others (Ortega, 2009, 2015). Despite this complexity of language development, the changing use of grammatical stance markers can be understood from the usage-based approaches: language development and language use are inseparable (Chau, 2015; Tyler, 2010). Language users vary their choice of linguistic forms in communication (R. Ellis, 1999). Their linguistic choices are based on their understanding of the meaning potentials available to them in a given community and how the use of one linguistic variant or another reflects and creates the context in which it is used (van Compernelle & Williams, 2012). Whereas language use is largely shaped by the norms of a given discourse community, individuals have their own preferences for linguistic choices (The Douglas Fir Group, 2016). It has been noted that all natural language use is a meaning-making process (Chau, 2015; Wei, 2016b). Ideally, language users are aware of the consequences of their linguistic choices. This is not always the case, however. Whether the linguistic choices can fulfil the communicative purposes of language users also depends on the discourse practices of a given community.

Language users' ability to recognize and use the social and symbolic meaning-making possibilities of language develops over time as they have more experience with languaculturing (Chau, 2015).

Variability is a key driver and a harbinger of language development (Verspoor et al., 2008). In making evaluative meanings, student writers in the study vary the linguistic variants of grammatical stance markers they use. As illustrated in example (23), in marking a personal voice, the student (126) used *On my opinions* at Time 1, *On my opinion* at Time 2 and *I have a opinion* at Time 4.

(23) *On my opinions*, we should know the Internet of harm and good. (126a)

On my opinion, I will think the Internet brings more good than harm to students. (126b)

I have a opinion that we not only make the most of the Internet resours but also reduse students are influented the harmful resours. (126d)

Another example that illustrated this point is a paragraph from a student text (104d). In this short paragraph, the student used three forms of grammatical stance markers, i.e., adverbial, noun *that*-clause and verb *that*-clause, illustrated as follows:

As far as I'm concerned, the Internet has its own advantage but not confined that its disadvantage. In other words, *I have a idea* that the Internet brings more good than harm to student. *I believe* that it's good or harm totally depends on how we to use it. (104d)

It seems clear from these examples that an L2 user does not need to go so far to acquire more than one linguistic form to realize one single function. As suggested by Ellis (1992), L2 users may have three types of communicative need: (1) interpersonal need, (2) expressive need, and (3) sociolinguistic need. L2 users have a desire for variety for its

own sake and that they have the need to vary the use of the linguistic forms at disposal in accordance with the context of communication. Drawing on the insights from Ellis's work, it is suggested in this thesis that variation in the use of grammatical stance markers might be driven by an expressive need and sociolinguistic need. The expressive need can be illustrated by example (23) and the short paragraph from a student text (104d). The sociolinguistic need is closely associated with stylistic considerations. Fogal's (2017) study of authorial voice offers evidence for this point. Drawing on interview data, this study shows that stylistic analyses influence authorial voice development, as illustrated by a quote from the interview data:

I think it's [stylistics] a really good idea because they [the analyses] influence me to use hedge and booster and each [feature]. Each author has a habit of writing. So when I saw many types of habit I could see my habit as well. (Can you explain more?) In my case there are not enough voices [target rhetorical features] but author use very well those voices [rhetorical features] to say their opinion or feeling so I thought, 'Oh. I have to steal this skill'. (Maru, postintervention interview). (Fogal, 2017, p. 16)

As discussed earlier in the Literature Review, there are multiple sources of variation in language use (Ortega, 2009, 2015). But not all variability can be attributed to an external source because "some variability is an intrinsic and central property of a self-organizing, dynamic system" (Verspoor et al., 2008, p. 229). In this thesis, the student writers who produced the texts that comprise the longitudinal learner corpus did not receive focused instruction on the use of grammatical stance markers, nor did they receive feedback concerning the use of grammatical stance markers. The changing use of grammatical stance markers can be partly explained by the student writers' communicative need.

7.5 How Chinese Students Learnt to Evaluate over Time

This thesis sheds light on how a group of Chinese students developed their use of grammatical stance markers in argumentative writing over time. The findings show that the developmental trajectory for the use of grammatical stance markers changed in a non-linear manner. This suggests that the students were adapting their language resources to the mutable spatial and temporal contexts of language use (Larsen-Freeman, 2018). And this adapting process is both dynamic and complex: the students increased the use of some grammatical devices (e.g., noun *that*-clause and adjective *that*-clause) and reduced the use of others (e.g., modals).

Changes in the use of grammatical stance markers have an influence on the evaluation expressed in the student texts. The students expressed their evaluation in a more implicit manner over time. They learnt to conceal the source of stance to construct a sense of credibility in their argumentation. They also learnt to attribute the source of stance to a third person or entity, either to create a space for negotiation and acknowledge alternative perspectives or to support their stance. In expressing modality, the students increasingly expressed more evaluative meanings concerning permission, possibility and ability and reduced the expression of evaluative meanings concerning obligation, necessity, volition and prediction. This is in line with previous studies which show that academic writing features more epistemic stance (e.g., possibility and ability) than attitudinal stance (e.g., obligation and volition) (Biber et al., 1999).

However, the developmental process is not that straightforward. In the case of stance adverbials, the percentage of epistemic stance decreased and the percentage of attitudinal stance increased. This is in contrast with the case of modals and semi-modals where the percentage of epistemic stance (i.e., permission, possibility and ability) increased and the percentage of attitudinal stance (i.e., obligation and volition) decreased. This shows the

complexity of learning the grammatical stance markers. The students were not using language as a thing. They were languaculturing (Chau, 2015) and constructing their evaluative meanings through the course of a communicative event.

7.6 Conclusion

This chapter answered the questions raised in Chapter 1. The findings have shed light on the changing use of grammatical stance markers and how a group of Chinese students learnt to evaluate over time. This thesis also shows the value of a longitudinal learner corpus in studying L2 development. First, a longitudinal learner corpus allows the observation of changes in patterns of language use. This is not possible in longitudinal case studies or cross-sectional learner corpora. Particular linguistic features have a low frequency of occurrences in natural language use. It may not be possible to observe an adequate number of occurrences of particular linguistic features in a small number of texts. Nor is it possible to identify emerging patterns of language use in a cross-sectional learner corpus over time. A longitudinal learner corpus of texts enables the identification of language use patterns and the changes in language use patterns over time. It also allows observation of patterns of language use that deviate from the idealized native-speaker model. One example that can illustrate this point is the pattern of modal plus modal that emerges from the corpus:

(24) The Internet *will can* improve the quality of your life. (049a)

We are not *must can* talk with other as in the Internet. (012c)

If we use it for good, the Internet *must will* reture you more good than harm to you. (065c)

The multiple occurrences of this pattern suggest that combining two modal verbs is not an idiosyncratic language use. In example (24), *will* is used to mark future tense, *can* is used to express the meaning of ability, and *must* is used to express necessity. Chinese L2 users of English may tend to neglect the polysemous nature of modal verbs and only acquire one aspect of the meaning, though this speculation is to be confirmed in future research. Whatever the explanation, unconventional patterns of language use like this can offer new insights into language development.

Another methodological advantage of using a longitudinal learner corpus is that the first wave of data could be used as the reference point for comparison, which allows the use of a learner-internal criterion for language assessment (Chau, 2015; Ortega, 2009). In this case, there is no longer the need to consider the choice of native-speaker data or L2 benchmark (cf. Monteiro et al., 2018). It should be noted that longitudinal learner corpora do not naturally guarantee a neutral way of looking at the language of the L2 user, however. Researchers could still use a monolingual native-speaker model for comparison (see e.g., Larsen-Freeman, 2006; Polat & Kim, 2014). Analyses of longitudinal learner data should be complemented by an analytical approach that allows the identification of emerging patterns of language use.

CHAPTER 8: CONCLUSION

8.1 Introduction

This thesis has reported on three longitudinal studies of the use of grammatical stance markers in a longitudinal learner corpus. The findings of the thesis have shed light on the changing use of grammatical stance markers. This final chapter of the thesis summarizes the major findings of the thesis and discusses the contribution of the thesis. It concludes with recommendations for future research.

8.2 Summary of Major Findings

The three corpus studies reported in this thesis have examined the use of a set of grammatical stance markers in a longitudinal corpus of argumentative essays. The major findings reported in the thesis are summarized as follows:

1. The relative frequency of grammatical stance markers changed over time and the longitudinal changes were non-linear.
2. The developmental trajectories vary with specific grammatical stance markers.
3. The use of grammatical stance markers did not always increase as L2 users gained more experience with languaculturing (Chau, 2015).
4. As for evaluative *that*-clauses, the proportion of *that*-clauses with explicit stance sources decreased while the proportion of *that*-clauses with implicit stance sources increased.
5. As for the modality markers, the proportion of modality markers that express the meaning of permission/possibility/ability increased while the proportion

of modality markers that express the meaning of obligation/necessity and volition/prediction decreased.

6. As for stance adverbials, there is a slight decrease in the proportion of epistemic stance and a small increase in the proportion of attitude stance.
7. The student essays featured increasingly more modals and semi-modals expressing permission/possibility/ability and fewer modals and semi-modals expressing obligation/necessity and volition/prediction.

8.3 Contribution of the Study

Central to SLA and language teaching research is the goal of language learning. Native-like competence has long been taken as the natural goal of L2 learning and as the benchmark for assessing L2 success (see e.g., Revesz, Ekiert, & Torgersen, 2014; Thewissen, 2013; Vercellotti, 2017). Despite repeated criticisms of the monolingual view of language learning (Cook, 2016a, 2016b; Ortega, 2018a), monolingual native-speaker norms are still widely conceptualized as the idealized goal of language learning. The point of reference for assessing language learning is an issue of power. A native-speaker norm as the target for language learning, in essence, denies the rights for some human beings to show their membership of particular groups (Cook, 2007). This leads to a deficit view of the language used by L2 users.

This thesis contributes to the reinforcement of the non-essentialist ontologies of language by recognizing L2 users as legitimate speakers of English. The changing use of grammatical stance markers observed in the longitudinal learner corpus has been investigated under non-essentialist lenses. This thesis interprets L2 use as legitimate human meaning-making (Chau, 2015). This alternative view of L2 use has an impact on the identity of L2 users. The development charted creates “a positive image of L2 users

rather than seeing them as failed native speakers” (Cook, 1999, p. 185). The L2 users involved in the study are conceived to agentively make use of their linguistic resources.

This thesis demonstrates that it is meaningful and feasible to perform linguistic analysis of L2 use without referring to accuracy, a construct associated with standard English. The thesis is not concerned with accuracy in language use in the student writing (cf. Kibler & Hardigree, 2017). The position of the thesis is this: “L2 is a legitimate variety of human language and language learning is a process that requires no comparison with an external point of reference, idealized or otherwise” (Man & Chau, 2019, p. 31; see also Chau, 2015). An L2 is not an imperfect version of monolingual native-speaker performance. From a non-essentialist view, language is not a thing; rather, it is a practice or process (Chau, 2015; Ortega, 2018c). It is something we do, not something we have. As Ortega (2018c) notes, “language is located in social activity which is distributed among social actors, rather than in any individual brain” (p. 7). An idealized standard of accuracy may be irrelevant to many multilinguals. Like WEs and ELF (Jenkins, 2009; Jenkins, Baker, & Dewey, 2018; Seidlhofer, 2009), future research may need to give more attention to issues of ideology and identity as well as language users’ intentions and capabilities (Man & Chau, 2019). A study concerned with language accuracy would inevitably involve an external point of reference, which is against the whole idea of showing respect for L2 as a legitimate variety of human language (Chau, 2015; Man & Chau, 2019). The position of this thesis, together with the methodology applied, is thus a conscious choice that demonstrates my commitment to what Ortega (2018a) has called a “project of reconceptualizing linguistic development under non-essentialist lenses” (Man & Chau, 2019, p. 75).

8.4 Implications for Language Teaching

Although SLA research does not directly contribute to language teaching practices, the findings from the thesis have relevance for teacher training and education. As Ortega and Iberri-Shea (2005) note, longitudinal research can inform educational practitioners of the timing, duration and content of optimal educational practices for L2 learning. The thesis charted the development of evaluative language in the essays written by Chinese students in the first semester of their undergraduate study. The changing use of linguistic structures such as the controlling words for evaluative *that*-clauses suggests that the students were adapting their language resources to the writing task (Larsen-Freeman, 2018). It would be helpful for instructors to raise their students' awareness about what makes appropriate choices in different contexts of language use and expose students to the linguistic choices that are characteristic of the specific contexts (Man & Chau, 2019). The results on the use of evaluative *that*-clauses, modals and semi-modals, and stance adverbials suggest that explicit instruction on stance markers can be given at the beginning of the undergraduate study (Charles, 2011). For the undergraduates to align with the conventions of academic writing, instructors may need to pay attention to the mapping between grammatical structures and their functions in the specific context.

The thesis shows that treating L2 use in its own right is not only essential to respect the rights of the multilinguals (Chau, 2015), but also feasible in practice. The feasibility of treating L2 use in its own right has important implications for language learning and teaching in the EAP context. A main goal of language teaching in this light would be to help L2 users "to acquire the benefits of bilingualism in cognitive ability and language awareness" (Cook, 2007, p. 237). ELT instructors could apply an interlanguage approach to teaching: understand the acquisition process from the perspective of learners, grant more learner autonomy in language learning, and try not to correct learners' production 'errors' (Pallotti, 2017). In practice, to show respect for L2 use, instructors can give

students the autonomy to decide how and on what they receive feedback from the instructor (Larsen-Freeman, 2019). To promote multilingual competence (Cook, 2012), the foci of language instruction may be on raising the awareness of Global Englishes among students (Fang & Ren, 2018; Galloway & Rose, 2014, 2018) and fostering their sociolinguistic agency (van Compernelle & Williams, 2012).

8.5 Limitations of the Study

This thesis did not investigate the causes or factors for language development. Nor did the thesis investigate language development at the individual level or variability in individual learner performance. Admittedly, averaged data on the general patterns of language development do not reflect variability in individual learner performance (Lowie & Verspoor, 2019; van Geert, 2011). As part of the goal of SLA research is to explain the individual variability that human beings exhibit in learning an additional language (Ortega, 2005b), future research can track the use of grammatical stance markers in the written texts of individual learners. It is also important to point out that there was no feedback given to the students in this study. The students were, however, encouraged to consult the instructor by the end of the course regarding their writing performance. The decision on having no feedback was a conscious choice in this research to investigate language development in its naturalistic classroom environment. Further research could of course investigate how input and feedback might contribute to changing language use over time.

8.6 Recommendations for Future Research

First and most obvious of all, it would be useful for a longitudinal study to span a relatively long time to observe significant changes (cf. Ortega, 2003). But empirical research has shown that a study that spans as short a period as four weeks could display substantial changes in the frequency of the linguistic structures under examination (see e.g., Mazgutova & Kormos, 2015). While the present study spanned only a short semester, noticeable changes were observed in the frequency of evaluative *that*-clauses and modals. In contrast, only minor changes were observed in the use of stance adverbials. This suggests that the pace of language development varies with the particular linguistic devices under examination. Thus, “there is no ‘standard’ timeframe that applies to all linguistic investigations” (Man & Chau, 2019, p. 30). While a longitudinal study of L2 development ideally spans as long as possible, for practical reasons, researchers may need to consider the timeframe that is required for the specific research purpose of their respective investigations.

Second, this study has used a repeated-task research design. As discussed earlier, genre, topic and prompt can significantly influence writing performance (Alexopoulou et al., 2017; Hinkel, 2009; H. J. Yoon & Polio, 2017) and reduce the degree of comparability of the texts produced by the same participants across points in time. This repeated-task research design arises from the call for a controlled task for the same participants. The key question is whether the observed changes in language use on one writing task over time can apply to other contexts of language use (Larsen-Freeman, 2006). Future research might consider whether and to what extent repeating the same task and differing tasks in longitudinal investigations that study language development would produce differences in the results. Future research that employs a similar controlled task may consider practical difficulties in implementing the repeated-task research design. The participants expressed boredom and frustration towards repeating the same task during this study. The

situation could be more complicated when participants are required to repeat the same task more than four times. Attention to ethical issues is required as no teacher feedback is provided on the essays written by the participants. Delayed but detailed feedback is one way to compensate for the participants. Given the importance of a controlled task for ensuring the comparability of data collected across time, these practical difficulties are worthy of consideration in future research.

While L2 users of English in this thesis are considered as bilinguals, evidence on language use comes only from data of their L2 use. In fact, bilinguals would apply their knowledge in both L1 and L2 in the process of making use of linguistic resources (Illman & Pietilä, 2018). In light of this, evidence on all the languages of the participating students is crucial for studying language development among bi/multilinguals (Ortega, 2016, 2018a, 2018c). SLA researchers who are interested in the language development of bi/multilinguals can build bi/multilingual longitudinal learner corpora. Learner corpora of this kind would be useful for knowing how bi/multilinguals would go about making linguistic choices over time. Bi/multilingual longitudinal learner corpora would also be useful to investigate language interactions and cross-linguistic influence.

8.7 Conclusion

This thesis shows a personal commitment to reconceptualizing linguistic development under non-essentialist lenses (Ortega, 2018a). While the non-essentialist ontologies of language would treat L2 users in their own right, respecting the rights of everyday citizens to feel confident about the language they speak (Cook, 1999), it is not easy to perform linguistic analysis of L2 use under non-essentialist lenses. I have more than once felt the convenience of giving in to pluralist ideologies which value multilingualism and at the same time preserve the standard language ideologies. But I remained committed to the

non-essentialist ontologies of language and L2 use of grammatical stance markers has been treated in its own right. Deviation from an idealized monolingual model has been interpreted as differences, not deficiencies. I hope this thesis, by demonstrating the feasibility of studying L2 development under non-essentialist lenses, would encourage more research efforts in this research area.

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