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Appraisal Analysis on Lecture Discourse of ELF
Lecturers Teaching Content Subjects at An EMI
University in China

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Abstract

This study focuses specifically on the lecture discourse of academics working in a Chinese EMI university when teaching different disciplines using English as the academic lingua franca. The aim of the study is to investigate linguistic patterns of evaluative language used by university lecturers and to describe how evaluative meanings are encoded; in other words, establishing a pattern of what is appraised and how it is appraised in academic lectures. The linguistic data of this research is real-time lecture discourse recorded from 12 lecturers teaching content courses in humanities and hard sciences; all of the transcribed spoken data of this research were coded using the framework of APPRAISAL in SFL (systemic functional grammar). All the appraisal expressions identified in this current study have been defined as appraisal signals, i.e., attitude signal, engagement signal, graduation signal. These expressions can be regarded as discourse signals embedded in the lecture discourse and the research focus of this current study is to describe how EMI academics use appraisal expressions to signal their evaluative meanings in academic lectures. Results show that the meaning of an appraisal signal is closely associated with its co-text. The linguistic meanings of such co-text may refer to the referents being evaluated in the verbal context, some frequently used pronoun patterns, and lecturers' modulations of the evaluative meanings and their flexible use of integrating different types of appraisal signals. Findings regarding the disciplinary differences and ELF features of the appraisal signals have also been discussed. It can be concluded that appraisal signals are useful linguistic devices to enhance communicativeness of the lecture discourse in use and essential to the clarity and mutual intelligibility of the ELF communication in academic lectures at EMI universities.

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Chapter 1 Introduction

1.1 My research interest

My research interest in this study started with my working experience in an A-ranking university in China where English was the medium of instruction (EMI), and I had attended academic lectures in this university on a regular basis for about four years. This EMI university was jointly founded by two prestigious universities, one from Beijing and the other from Hong Kong. Apart from Chinese language and physical education courses, the medium of instruction of all other courses at this university, including teaching materials, handouts and examinations, was English. Furthermore, this university was one of the first in China to use English as the medium of instruction in recognition of the emphasis being placed on the internationalization of higher education in China. The university has given me a great opportunity to work with its academics who were expected to deliver all of their academic lectures entirely in the English language. These academics came from China and overseas countries with PhD degrees, teaching subjects in the disciplines of science, humanities, arts and business. Almost all of the Chinese academics had overseas experience and acquired their PhD degrees from countries where English was an official language; those academics from overseas countries were mainly English native speakers, while a number of English non-native speakers came from countries other than China, such as Italy, the Netherlands, South Korea, and Malaysia. During my years of working with academics of different nationalities at this EMI university, I noticed and have become familiar with their different ways of communicating using the English language. However, it remains unknown to me whether there might be some common features of the lecture discourse being used in their EMI classrooms, and whether there are any differences in the discourse features between EMI teaching staff from different countries.

My interest in the EMI classroom discourse is further strengthened since previous studies on lecture discourse mainly exploit corpora of spoken data with little or no annotation for specific discourse level features (Biber, 2006; Hyland & Tse, 2009; Chang, 2012; Liu, 2019; Liu & Chen, 2020), and more empirical studies on texts with annotations from real-time spoken data are needed to explore the naturally occurring spoken language features in classroom interactions. As Walsh points out (2011), the first step in any endeavour to improve teaching and learning is to look at classroom interactions. EMI education has been criticised for being less effective for course delivery and academic development in both language and content courses (Hu & Alsagoff, 2010; Hou, 2011). Some studies focus on the concerns and challenges that EMI education has brought to university teachers, the most overriding of which is the language impediment that poses a negative impact on the in-class teaching, especially of content courses (Hung & Lan, 2017, Chen & Peng, 2019). My starting point in proposing this study is to help Chinese academics like myself to reflect on our own academic discourse in a transnational context, by taking into consideration the language challenges that we have as well as the types of discourse features that may be beneficial to the effectiveness of our teaching. The present study then sets out to examine the use of evaluative language in academic lectures, as university lecturers very often need to deal with differing attitudes and evaluations in class (Biber, 2006).

1.2 Introducing evaluative language

In recent years, scholars have become increasingly interested in the study of evaluative language and attitudinal resources in discourse (Thompson, 2014a; White, 2015; Hunston & Su, 2019; Su & Hunston, 2019; Hyland & Zou, 2021). Evaluative language is indispensable in academic discourse as academics constantly need to make evaluations to establish credibility and authority (Itakura & Tsui, 2011). A number of studies focusing on the use of evaluative language have been undertaken in academic settings, covering various topics such as teacher feedback (Hu & Choo, 2016), computer-mediated interactions (Vinagre & Esteban, 2018), voice

constructions in L2 students' speaking and writing (Morton & Llinares, 2018) and discourse changes in textbooks (Myskow, 2018a). As indicated by Hyland (2005), the use of evaluative language should be explored intensively with reference to specific registers and contexts. More recently, Hyland and Zou (2021) investigated doctoral students' personal attitudes and stance in their spoken discourse when giving thesis presentations. They found that monologic spoken discourse such as presentation speech contains rich stance features: science students emphasize the validity and reliability of information whereas students from social sciences pay more attention to personal position and authority.

Academic lecture is the major mode of teaching activity in university settings following a tradition that teachers deliver the course content to a whole class of students, a crucial means of academic communication (Young, 1990; Thompson, 1994, 2003; Flowerdew & Miller, 2005; Lee, 2009; Cheng, 2012; Liu, 2019; Liu & Chen, 2020). The significance of academic lectures lies in the process of imparting information and knowledge based on a specific discipline (Thompson, 1994). University lecturers manage an authoritative role in transmitting knowledge in academic settings, and this enables them to have a direct influence on how students might approach and interpret the knowledge provided (Biber, 2006). It is worth noting that, in the knowledge-transmitting process in class, lecturers not only pass on the facts and information that students need to know about the subject, but also generate and transmit their own understanding and opinions of the knowledge. Biber (2006) indicates that lecturers possess a dominant power in expressing their own personal opinions and attitudes, and their stance is certainly an important factor in the educational process as the reliability of the statements they are giving is crucial to the veracity of the teaching and learning. Therefore, the use of evaluative language seems inevitable in academic lectures, as lecturers are required to present not only the information and knowledge relevant to the curriculum but also to express their own understandings and evaluations of the disciplinary contents.

Evaluative language contains meanings with regard to people's attitudes and stances. It usually concerns 1) positive and negative emotions and dispositions, 2) an authorial voice of whether to engage other voices, and 3) a need for modulating the evaluative meanings of an evaluation (Martin and White, 2005). Meanings of language choices, as Halliday (2014: 25) clarifies, relate to how experience and interpersonal relationships are transformed into meanings. These meanings are conveyed in the systemic patterns of language choice, and it is necessary to analyse the functions of these choices and patterns so as to understand their meanings in language use. The language of evaluative choices and patterns, however, can be extremely rich as it can cross any grammatical and lexical boundaries; in other words, they can be embedded in any type of grammatical and lexical expressions (Hunston, 2011; Martin & White, 2005). Tomlinson (2014), however, argues that evaluative language is mainly concerned with lexical choices rather than grammatical structures. For lexical expressions, Hunston and Su (2019: 574) state that adjectives are of great importance as there are "only a minority of adjectives that do not express evaluative meanings", words such as being nervous ("anxious and ashamed"), being angry ("annoyed, furious and incensed") and to praise ("efficient, excellent and effective"). The aim of this current study, therefore, is to investigate what discourse features there might be in lecturers' use of evaluative language for the classroom communication in academic lectures.

1.3 The EMI / ELF context

One distinctive feature of EMI is the use of English as academic Lingua Franca. In the university where I used to work, lectures were delivered in English and classroom communication was led by academics from different countries having a range of differing L1s and diverse cultural backgrounds. Therefore, English is employed as the lingua franca (ELF) in the EMI context, and more specifically, as the academic ELF for educational purposes at tertiary level. ELF studies on academic spoken language are still rare compared with the extensive investigations into the written language

(Mauranen, 2003; Mauranen et al., 2010b). Moreover, little research has been carried out into academic ELF speaking in the classroom setting and this represents a major gap in the studies of classroom communication (Björkman, 2008; Smit, 2010). In EMI universities, academics must be well-prepared to engage successfully in ELF communication, not just in terms of using the English language to lecture but, more specifically, being ELF speakers, they should regard the students as their ELF partners in EMI classroom communication. Therefore, academic lecturers in EMI universities are ELF lecturers and the EMI classroom interaction should be regarded as a shared means of academic ELF communication between ELF lecturers and their students. Successful ELF classroom communication will then largely influence the efficiency of teaching and learning in such ELF lectures of the EMI context.

An examination of the lecture discourse of the ELF academic lectures will thus present the features of the spoken language used in this academic context, for example, the way in which ELF lecturers express opinions and give evaluations in the ELF classroom communications. Lecturers' personal opinions and evaluations are likely to influence the nature of their classroom interactions. Their personal stance is embedded in the language they use when intending to share their feelings, to maintain their authoritative roles and to align with their students. The function of these appraisal resources could signal interpersonal meanings that occur between people (Halliday, 1994), in this case between university lecturers and students. These kinds of interpersonal meanings in teacher's utterances can be analysed and graded through specific linguistic items, as introduced at the beginning of this chapter, known as evaluative language (Martin & White, 2005). This current study is therefore designed to follow this research focus and aims to shed new light on the use of appraisal signals as evaluative language in lecture discourse, especially on how these appraisal expressions could signal evaluative meanings in disciplinary academic lectures. Additionally, as discussed above, these university academics are also ELF lecturers in the EMI classroom communication; hence, this study adopts an academic ELF perspective to study the lecture discourse and aims to explore the distinctive appraisal

expressions of evaluative language used for the ELF classroom communication in academic lectures.

1.4 The theoretical framework of this study

To achieve an understanding of the evaluative language of the lecture discourse, a theoretical framework is needed to analyse the spoken data – a theoretical framework which not only measures the grammatical features but also the meaning expressed in these features for communicative purposes. APPRAISAL is a theoretical framework based on systemic functional linguistics (SFL) that was originally created by M.A.K. Halliday and his colleagues (Martin, 1992; Matthiessen, 1995; Halliday, 1994/2004). SFL regards language as a resource for meaning-making through systemic patterns of choice (Halliday, 1994) with three identifiable modes of meaning (technically known as metafunction), namely ideational – ‘using language to talk about the world’, interpersonal – ‘using language to interact with other people’, and textual – ‘organizing language to fit in its context’ (Thompson, 2014a:28). APPRAISAL has been proposed and developed by Martin, White, and other scholars (Eggins & Slade 1997; Martin 1992, 1997, 2002; Martin & White 2005; Coffin 2006; Martin & Rose 2007; Hood 2010; White 2003, 2015), and has been clearly demonstrated to be a useful tool to detect interpersonal meanings in a range of various discourses, e.g., academic writing (Hood, 2010; Liu, 2013; McKinley, 2018; Geng & Wharton, 2019) and casual conversation (Eggins & Slade, 1997), as well as differing subjects such as science (Veel, 1998) and history (Morton & Llinares, 2018). Since the APPRAISAL analysis can be used to examine not only language choices but also the interpersonal meanings of the language in use, it thus suits the need of the present study on understanding the evaluative language of the lecture discourse for classroom communications.

Another important reason why APPRAISAL is chosen as the theoretical approach of this current study is concerned with the evaluative language in the lecture discourse. Lecture is probably the most frequently used teaching method in higher education.

Many scholars have discussed that a lecture is not just series of information segments that a lecturer passes on in a neutral tone; a very important part of the message is the lecturer's evaluation of the validity, appropriacy and relevance of their information (Dudley-Evans & Johns 1981, Thompson 1994). Evaluative language constantly appears in classroom discourse and the evaluative choices can be used to analyse the gradability of emotions and attitudes of university academics (Biber, 2006). APPRAISAL, so far, is the most widely and intensively used framework in SFL to investigate the systems of evaluative choices (Thompson 2014a). As White (2015) states, APPRAISAL analysis focuses on positive or negative assessments in spoken / written texts, and such attitudinal utterances can be strengthened or weakened in actual interactions with prior speakers or potential respondents. For instance, lecturers could address their students with a statement of either an absolute yes or no, or with an utterance indicating a scaling of a positive or negative assessment.

1.5 Aims of the study and the research questions

The lecture discourse in EMI universities varies a great deal in terms of disciplinary-specific features when using evaluative language to express interpersonal meanings in classroom communications. Interpersonal meanings concern exchange of information for the purpose of enacting social relationships (Halliday & Matthiessen, 2014), in this case, student-teacher relationships in ELF classrooms. Previous studies on academic lectures value the interactive resources in the lecture discourse, such as engaging and evaluative use of discourse markers (Thompson, 2003; Bu, 2014). However, few studies have been carried out to analyse the disciplinary-specific use of discourse markers for distinctive classroom interactions (Tang, 2017; Rappa & Tang, 2018), and the extent to which a lecturer's personal opinions and attitudes can influence the communicative process of such interactions. Evaluative language carries rich interpersonal meanings and have a substantial presence in academic discourse (Itakura & Tsui, 2011), and yet little attention has been paid to its use in academic lectures (Lin, 2012; Lin & Lau, 2021). Hence, studies on the use of evaluative language

in academic lectures should be encouraged as they can be an effective means to facilitate classroom communication, and especially to smooth the academic communication specific to a discipline.

As explained earlier, academic lecturers are also ELF lecturers teaching content-based courses in the EMI universities and this involves both NNS and NS as they are all conducting ELF communications in the EMI classrooms. Their lecture discourse will therefore be largely influenced by the complexity of conducting ELF communication for the purposes of teaching and learning disciplinary knowledge. Using English as an academic lingua franca in speaking is of profound significance, and yet very few studies have been carried out in this dimension, especially with regard to classroom settings (Mauranen, 2003; Björkman, 2008; Mauranen et al., 2010b; Smit, 2010). ELF communication in the academic context can also be challenging as ELF speakers may encounter a range of difficulties that are caused by 'proficiency, cultural differences, institutional communicative goals and pragmatic issues connected with the discourse' (Hanusková, 2019: 48). Accordingly, the features of the lecture discourse in ELF academic lectures also need to be broadened in relation to how university academics would communicate in lectures when expressing their own personal attitudes and assessments in the ELF communications irrespective of their differing L1 backgrounds.

The aim of this study therefore is to investigate patterns of evaluative language by university academics and to describe how evaluative meanings are encoded; in other words, establishing a pattern of what is appraised and how it is appraised in the ELF academic lectures. From a methodological aspect, this research intends to gain insight into the understanding of spoken data utilizing the framework of APPRAISAL to concentrate specifically on the spoken discourse of academic lectures. From a theoretical point of view, this study is expected to enhance the understanding of evaluative language in ELF lectures where English is used as the academic lingua franca for the classroom communication. Finally, the practical significance of this current study can be twofold: 1) it could prompt ELF lecturers to recognise their own use of

evaluative language in academic lectures, especially disciplinary lectures, and this may inspire discourse strategies to maximize the effectiveness of disciplinary content teaching; and 2) the present study should also be able to provide some ELF-related communication strategies from a linguistic perspective which could help regulate lecturers' language and interaction in the ELF classroom communication, such as lecturers' use of evaluative language. This should then be beneficial to the development of teaching and learning in EMI education.

In brief, this study is to focus specifically on the lecture discourse of academics working in Chinese EMI universities when teaching different disciplines using English as the academic lingua franca. The research focus of the study, more precisely, concentrates on discovering the use of appraisal signals as evaluative language in disciplinary lectures given by ELF lecturers speaking various L1s. This research project aims to address the following three fundamental questions:

RQ1: How are appraisal signals embedded in the lecture discourse of ELF academic lectures?

The answer to the first overarching research question will be based on detailed descriptions of interpersonal semantic choices of the ELF lecturers when they are:

RQ1a signaling their attitudinal feelings in their lecture discourse?

RQ1b signaling engagement meanings in their lecture discourse?

RQ1c signaling the intensity of evaluation in their lecture discourse?

RQ2: What are the disciplinary-specific features of the appraisal signals in ELF academic lectures between soft sciences and hard sciences?

RQ3: What are the ELF-specific features of the appraisal signals in ELF academic lectures between lecturers of different L1 backgrounds?

1.6 Organisation of the thesis

This thesis consists of nine chapters, including the chapter of introduction presented above. Chapter 2 provides a selective review of existing literature focusing on three major topics relevant to the current study: lecture discourse analysis, English as an academic lingua franca with a focus on spoken discourse, and the theoretical framework of APPRAISAL in the domain of systemic functional grammar. The background of lecture discourse for this study is established starting from the review on classroom contexts, followed by literature on the understanding of evaluative language and academic lectures, especially the disciplinary-specific lectures of social sciences and hard sciences. The review of literature on English as an academic lingua franca highlights the importance of academic ELF in speaking with some demonstrations of ELF-specific linguistic forms; particular attention is then paid to academic ELF in the EMI context. APPRAISAL is introduced from the detailed analysis on the forms of evaluative language, followed by explications of some distinct frameworks including a separate section on the APPRAISAL framework. This part also includes some discussions on evaluative language in ELF academic lectures, exploring adjustments of APPRAISAL specific to the study of lecture discourse in this context. Chapter 3 describes the research design of the present study. Necessary details of the research site and participants involved in the study are provided together with the data collection procedures. The spoken data of this study is introduced with a section explaining the rationale for the transcribing of the research data. The chapter then explicates in the data analysis, demonstrating the qualitative analysis of the whole research project. Finally, the theoretical framework of this study is demonstrated by a pilot study explaining the analytical procedures of how the framework can be applied whilst suggesting some possible modifications to the original framework. Chapters 4 to 6 are the three finding chapters describing appraisal expressions in relation to both disciplinary-specific and ELF-specific discourse features. Each of these three chapters focuses on one research question of this current study, i.e., RQ1 concerning the discourse features of the evaluative language identified in the ELF

academic lectures, RQ2 concerning the disciplinary differences of the use of this evaluative language between lecturers from humanities and sciences, and RQ3 concerning the differences of such discourse features between lecturers having various L1 backgrounds. Chapter 7 is a case study presenting a text analysis using part of a science lecture episode. A detailed demonstration of the appraisal analysis of the lecture discourse is laid out regarding both disciplinary and ELF-specific features of the appraisal signals. Chapter 8 presents the discussions on the use of these appraisal expressions embedded in the lecture discourse and also considers the two major dimensions of disciplinary-specific and ELF-specific linguistic features with reference to existing relevant studies. Chapter 9 is the concluding chapter uncovering answers to the research questions before summarizing the importance and implication of the findings as well as indicating some limitations and future studies. Finally, the thesis closes with some concluding remarks to sum up the significance of the present research project.

Chapter 2 Literature review

2.1 Introduction

This chapter presents an overview of the literature background covered in this current study, which concerns three main topics: lecture discourse (Section 2.2), English as an academic lingua franca in speaking (Section 2.3) and the framework of APPRAISAL in SFL (Section 2.4). The review on lecture discourse starts with the introduction of classroom context, followed by discussions on academic lectures, with specific attention to disciplinary differences of academic lectures in soft and hard sciences. The second major topic of the literature review shifts its focus to English as an academic lingua franca. This part starts with the conceptualising of ELF being an ongoing debate in the field and continues with some illustrations of linguistic forms of academic ELF before introducing academic ELF features in the spoken language. The review then narrows its focus onto academic ELF in speaking within the EMI context and ends with a section presenting empirical studies of ELF-specific linguistic features. The third topic of the literature review concerns the theoretical framework being used for this current study. This part of the literature review synthesizes significant theories, frameworks and empirical studies for an understanding of evaluative language in the classroom context, with the objective to bring together connections among the other two major topics, i.e., disciplinary-specific lecture discourse and academic ELF in speaking.

2.2 Understanding lecture discourse

The discourse of a lecture can be readily situated within the broader study of classroom discourse; in many ways the kinds of interaction found in lectures are similar to the interactions of classrooms. Therefore, before exploring research specifically on academic lectures, a selective review on classroom discourse will be performed. The organization of classroom discourse is fundamentally pedagogic

(Sinclair and Coulthard, 1992). Sinclair (1987) reveals some features of classroom discourse which can be related to two major dimensions – the institutional dimension (also encompassing a social dimension) and the classroom dimension. First of all, the view of the institution will have a direct influence on the teaching mode thereby affecting the classroom discourse because teachers need to follow the institutional regulations; for instance, the English language is assigned as the medium of instruction in EMI institutions. As to the classroom-related dimension, one salient feature is that teacher-student interaction is unequal since teachers always have the dominant control in class and the class discourse are didactic in purpose. The teacher-student interaction typically and predictably follows the order of an initiating move (I), a responding move (R) and a follow-up or evaluation (F) move (Sinclair & Coulthard, 1975; Sinclair, 1987). These interactions mainly refer to teacher's lecturing the whole class or interactive moves between a teacher and an individual student or moves among groups of students (Sinclair, 1987). Even though this IRF sequence reflects the nature of classroom interactions; there can be alternative sequences due to various interactions in class (Walsh, 2011); and on most occasions, only I move appears with the R and F move being optional (Sauntson, 2012). Johnson (1992) also agrees that classroom communication is very much dependent on the teacher's teaching methodology and their use of the language which can be rather dynamic. In the same vein, other studies have shown that classroom interaction may not be very communicative and there is often a lack of genuine communication between teachers and students in the classroom (Nunan, 1987; Thornbury, 1996). Garton (2012) suggests that teacher-fronted or teacher-led interaction limits students' contributions to classroom discourse, and teachers should encourage students to take initiative in turn-taking classroom interactions.

Walsh (2003) listed four typical features of classroom discourse for managing interactions in the classroom, which help clarify rules and expectations in classroom communication. Jones (2016) explains that interactions are governed by sets of rules and expectations which enable or constrain people's participation in all kinds of

activities and decide the roles they can play as well as the expectations they are supposed to meet. First of all, according to Walsh (2003), teachers have the prime power and responsibility to control the discourse and students mainly just take cues from the teacher, so teacher's control of the interaction is the first feature of classroom discourse. The second feature is teacher's modification of speech. In Walsh's description (2003: 31), teacher's speech resembles parents talking, being 'slower, louder and more deliberate' with greater use of pausing, emphasis, gestures and facial expressions. The third feature Walsh refers to is teacher's use of elicitation techniques, typically how teachers ask questions and encourage students to respond. The last typical feature of classroom discourse is called repair, including teacher's direct and indirect corrections of students' errors. These four features typify classroom communication, which are mainly guided and regulated by the discourse of the teacher. Walsh (2011) also provides in-depth analysis of classroom interaction and regards it as the centre of teaching and learning where teachers very often need to manage groups of students on all kinds of tasks and activities of the classroom learning process. Walsh suggests that teachers need to acquire what he calls Classroom Interactional Competence (CIC) to meet challenges in class and this ability is not just confined to language classes. He defines CIC as 'teacher's and students' ability to use interaction as a tool for mediating and assisting learning' (Walsh, 2011: 132). According to Walsh, CIC has three unique features: 1) CIC should be applied appropriately not only to the pedagogic goal of a particular class but also to the specific context of each particular interaction in the class; 2) CIC regards learning as a process where teachers create space for learners to participate and contribute; 3) CIC encourages learners to elaborate and extend their turns.

As to the forms of classroom discourse, short clauses are the main grammatical constituent, especially for university lectures (Biber, 2006). For instance, complement clauses, 'especially *that*-clauses controlled by verbs, (e.g., *I know that he did it*)' are frequently used in conversations (Biber et al., 2004:14). Questions, for example, are fairly common in classroom teaching (Barbieri, 2015), which includes *wh*-questions,

yes/no-questions, alternative questions and question tags (Biber et al., 2002). Tsui (1996) suggests that teachers should ask more referential questions (open-ended and often with a *wh*- question) rather than display questions (with answers already known) to encourage learner response. Other scholars also agree that questions constantly occur in teacher's classroom language and questioning techniques play a vital role in expressing interpersonal meanings in class (Richards, 1990; Thornbury 1996; Tsui, 1996). As to phrases and word groups, a clause can be detached into or realized by nominal, verbal, adverbial and prepositional groups (Sinclair & Coulthard, 1992), among which nominal phrases and prepositional phrases can be found in most classroom teaching (Biber et al., 2004).

2.2.1 Within the classroom context

Exploring classroom interactions and functions of classroom discourse in use should also consider the determining factor of context (Fairclough, 1992). This idea is supported by Van Dijk (2009) who says that language in use differs according to different contexts influenced by various social, personal and situational variables which refer to context of situation. Van Dijk (2009: 3) asserts that context can be interpreted in two ways: 1) it can be 'verbal context' or 'co-text' as in traditional linguistics meaning preceding or subsequent words within a discourse, such as words indicating a specific referent; 2) it can also refer to a specific social situation where the language is used, such as the language used in a classroom context. Seedhouse (2019:10) views classroom contexts as sub-varieties of classroom interactions which he refers to as "interfaces' between pedagogy and interaction'. In other words, classroom contexts combine specific pedagogical foci with particular classroom interactions; the different moves in the IRF structure should also be seen as context of different situations where classroom discourse unfolds and makes their functions matter.

Edwards & Westgate (1994: X) outline classroom discourse as being delivered in 'verbal context' and 'context of situation'. As the names imply, verbal context refers to how a word is embedded in a text amid other words, equivalent to co-text (Van Dijk, 2009), i.e., how teachers construct their utterances using different language items; context of situation is then associated with the overall setting where the language is used in a classroom, in this case, for segments of teaching and learning, or during interactions between teachers and students. Also, classroom context is dynamic – it matters from the outset when the teachers start to speak and flows with modifications throughout the class (Edwards & Westgate 1994); it also explains why teachers and students might have different types of attitudes and motivations during all the teaching activities (Edwards, 2009). With the goal to prompt learning, teachers generalize and elaborate knowledge and ideas, as well as interact and cooperate with students – the language they use in class matters in every verbal context and can be consequential in any given situation. As far as classroom context is concerned, therefore, investigation could be made into: 1) the study of verbal context in relation to structures and mechanisms of the teacher's spoken language in use, i.e., co-text of the classroom discourse in use (Edwards & Westgate 1994; Van Dijk, 2009); 2) the analysis of context for interactions in various classroom moves, mainly the I move in the classroom discourse (Sauntson, 2012); and 3) the understanding of the social and situational context, as Sinclair (1987) points out the social prospect and school regulations for an institution.

2.2.2 Evaluative language in classroom settings

According to Biber (2006), university lectures are very often concerned with evaluative language that conveys personal attitudes and assessments. As mentioned before, teachers give evaluations on students' response, either being positive or negative, or sometimes they choose to leave their evaluations open without taking any stance (Weninger, 2020). When teachers organize their discourse, they most often give opinions on the knowledge they teach, and these opinions are also associated with

their stancetaking. Jadallah et al. (2020: 41) analyse reference and indexicality in classroom discourse based on the communicative impact of teacher's speech. The former refers literally to objects and concepts in teacher's spoken discourse; the latter is associated with socio-pragmatic functions of teacher's expressions and can often be divided into boosters ('to convey certainty') and hedges ('to denote tentativeness'). However, boosters and hedges have not been widely discussed in the domain of classroom discourse (Jadallah et al., 2020), considering their multiple functions for pedagogical and social purposes in class. Jadallah et al. (2020) list some key functions of these technical expressions, such as softening or intensifying teacher's speech so as to build teacher-student solidarity, adding a collaborative tone to teacher talk rather than authoritative and monologic. Besides, teacher's stance-taking is normally perceivable for their students to understand, and students' understandings directly contribute to successful teaching and learning.

The analysis of evaluative language should also consider the context of different structural moves, following the IRF structure identified by Sinclair and Coulthard (1975), in all teaching and learning activities. Cullen (2002) emphasizes the E-move and explains that teachers often provide target elaboration or evaluation on students' response through this move which directly stimulates learning as well as the next move of teacher talk. For example, teachers may reply to a student's R-move with an explicit evaluation of acceptance or rejection, such as *yeah, excellent, not quite and no*. According to Cullen (2002), such evaluative follow-ups appear very frequently in teacher's E-move, not exclusively but rather typically. However, Cullen (2002) also points out that if teachers rely exclusively on evaluative language in the E-move, students will feel hindered from further communication with the teacher. Also, Hellermann (2003) states that teachers often provide positive evaluations almost instantly yet give out negative evaluations with some delay and hesitation.

2.2.2.1 Stance in lexical bundles – understanding evaluative language in classroom settings from corpus study

Hyland (2005)'s framework of stance and engagement is closely relevant to the understanding of academic discourse in the classroom context. Hyland and Tse (2009: 123) examined the use of words from the academic word list (COXHEAD 2000) in a corpus of texts from diverse disciplines, considering the collocations and co-text and the way in which these linguistic items contribute to lexical bundles. They specify one particular category of lexical bundles as participant-oriented which looks into the stance features (writer's attitudes and evaluations) and engagement features (how writers engage with their readers) of the writer or reader in academic discourse. According to Hyland and Tse (2009: 125), two thirds of the participant-oriented bundles relate to writer's stance, among which hedging information seems to vastly outnumber complete commitment to a proposition. Also, they assert that there is a major disciplinary difference in the application of these lexis as stance bundles are prevalent in social science corpora where writers in these fields tend to be more willing to show their attitudes, whereas engagement bundles occurred mostly in hard sciences. What's more, the sub-groups of Shared knowledge and Personal asides in Hyland (2005)'s framework of Stance and Engagement is of particular relevance to the classroom context; as teachers often align with students with reference to shared knowledge or by adding arguments and comments onto what is being lectured and discussed in class.

Biber, Conrad and Cortes (2004) examined the use of lexical bundles in classroom teaching, including stance expressions, discourse organizers, and referential expressions. They found that there is a high frequency of the use of these lexical bundles in classroom teaching, especially more stance and discourse organizing bundles in conversation and more referential bundles in academic prose. Liu and Chen (2020: 130) conducted a study comparing the use of lexical bundles in science disciplines and soft sciences. They discovered that: 1) there is a much greater variety of lexical bundles being used in the former than in the latter with expressions such as

'I am going to' and *'this is going to'* demonstrating logical reasoning behind a formula or a result; 2) lexical bundles concerning information of time and space, specification of a focus and description of quality appear more frequently in lectures of soft sciences, for example when describing background information to a historical event.

Different from Hyland's function-based perspective on writers' stance bundles discussed above, Biber (2006) focuses on forms of stance bundles in university classroom settings. Biber (2006: 95) observes that modals occur frequently in the spoken language, and he regards modal verbs as 'the most common grammatical device used to mark stance in university registers'; and stance bundles are especially important for classroom teaching and class management. Biber (2006:106) also indicates that stance structure of 'stance verb + *that*-clause' appears constantly in speaking in university settings, among which certainty verbs (such as *recognize* and *conclude*) and likelihood verbs (such as *think* and *guess*) are the two most common stance verbs. Biber particularly points out that certainty verbs are used more frequently in the teacher-centred academic registers which include classroom teaching and class management. Furthermore, Biber (2006) divides the stance bundles into two major groups: (1) epistemic stance bundles and (2) attitudinal / modality stance bundles. The former associates with personal certainty on knowledge and the latter are attitudes oriented towards actions and events. According to Biber (2006: 140), epistemic stance bundles very often, if not always, express uncertainty in classroom teaching, such as *'I don't know if...'* or *'I don't think so, because...'*. Biber (2006: 140-142) also reveals, attitudinal / modality stance bundles are usually personal as well, and he further divides this group into four categories: desire bundles, obligation/directive bundles, intention/prediction bundles, and ability bundles. Desire bundles concern personal wishes or inquiries about others, as in class when teachers ask students to start a discussion and say *'I want you to work in pairs and discuss...'* Obligation/directive bundles refer to obligations or directives which require the participants to take some actions. The degree of the directive force can vary using different modal verbs such as *'you need to work on...'* and *'you might want to...'*. The

third group, intention/prediction bundles indicate speaker's own intention for a future act, such as *'what we are going to do in our seminar...'*. Ability bundles are often related to skills and tasks that students are expected to accomplish; for example, a teacher might say *'I want you to be able to...'* in order to encourage students to obtain some knowledge or skill. Also, speakers, or in this case teachers, often use first personal pronouns to work with stance bundles for an overtly expressed attitude. These stance bundles create a vivid picture of classroom discourse and can help understand the delivery of certainty / uncertainty in the classroom setting.

2.2.2.2 Critique on the lexical bundle approach to the study of evaluative language

The analysis of lexical bundles from the corpus study focuses typically on the formulaic language use according to a range of frequency-based bundles retrieved from a specific corpus. For stance bundles, they carry interpersonal meanings of the discourse in use, which rely heavily on the contextual factors that could trigger a degree of personal attitude or stance. These situational variables result in different kinds of verbal contexts where a stance bundle may occur for a specific communicative purpose. On one hand, the lexical item of a stance bundle can be difficult to define as they can be generated dynamically according to the prevailing human emotions and perceptions in a particular situation. On the other hand, the variations in the discourse patterns of these stance bundles need to be carefully examined, for instance, the stance structures in the above paragraph that Biber summarised (2006), since they may also influence the evaluative meanings embedded in the proposition. For academic communication in classroom settings, the use of stance bundles can be prevalent for a range of different interactive purposes. The classroom context is dynamic, and teachers constantly need to give their opinions and elaborate their ideas according to the teaching contents or student responses. The analysis of stance bundles in classroom settings needs to consider the language use according to the dynamics of the classroom communication and the different verbal contexts which might influence the bundle use in a specific interaction.

2.2.3 Academic lectures

Academic lectures have been examined from various aspects to provide support for lectures and students to achieve academic development in a classroom, as lecture comprehension can be challenging for university students in terms of linguistic difficulties and cognitive processing of the knowledge (Young, 1990; Thompson, 1994, 2003). One major research focus on academic lectures is to study the organisation of a lecture, including overall organisations (Young, 1990; Thompson, 2003), lecture introductions (Thompson, 1994; Lee, 2009), and closings (Cheng, 2012). Some other studies focus on the language teaching implications of studying academic lectures (De Carrico & Nattinger, 1988; Flowerdew & Miller, 2005). Also, scholarly attention has been paid to language features, for example, genre and textual organization of lecture discourse (Blackwell & White, 2018), and specific lecture discourse such as pronouns (Rounds, 1987; Young, 1990; Fortanet, 2004), discourse markers (Thompson, 2003; Jung, 2003, 2006), metadiscourse (Hyland 1998, 2004, 2017; Tang, 2017; Hyland & Jiang, 2018) and questions (Richards, 1990; Thornbury 1996; Tsui, 1996; Chang, 2012).

2.2.3.1 Understanding academic lectures from both genre-based and lexis-based approaches

About lecture introductions, Thompson (1994) analysed the rhetorical features of lecture discourse which function as linguistic signals to sequence different structures within lecture introductions. Thompson (1994: 176-178) suggests a pedagogical pattern using genre-based analysis: two major functions of a lecture introduction and each with their own sub-functions – Function 1) setting up lecture framework and Function 2) putting topic in context. Function 1 seeks to introduce the goal of a lecture by providing the topic, scope, structure, and aims of the lecture; Function 2 is closely related to the content of a lecture by emphasizing the relevance and importance of the topic and engaging students with some content they have already known. The purpose of these genre-based functions is to prepare students for being able to predict what to expect in class and getting ready to understand the lecture. Thompson

(1994) also points out that these functions and sub-functions do not progress with a fixed order within the introduction and there may not be a preferred pattern generally shared by every academic lecture; in other words, lecturers are free to design their own introductions and will need to make spontaneous decisions according to what is happening in real-time in class. Lecture closings, however, offer lecturers and students a chance to review and summarize what has been delivered in class, as well as some time to ask questions and to engage in informal interactions that could enhance teacher-student relationships (Cheng, 2012). Understanding academic lectures from a genre-based perspective can help students to organize and interpret the information they receive in class so as to enhance their comprehension of the lecture.

Regarding pedagogical implications, De Carrico and Nattinger (1988) propose a lexical phrase approach to the comprehension of academic lectures. They suggest that lexical chunks such as *'as it were, that goes without saying, and on the other hand* (p. 91) 1) occur frequently and idiomatically in spoken discourse, 2) carry relatively more information than single items and therefore help our brains to store more information, and 3) can enhance fluency in speaking. De Carrico and Nattinger (1988: 95-96) regard lexical phrases as macro-markers in academic lectures and divide them into eight functional categories: 1) topic markers (e.g., *We'll be looking at...*), 2) topic shifters (e.g., *So let's turn to...*), 3) summarizers (e.g., *What I'm saying is that ...*), 4) exemplifiers (e.g., *Take / say X here for example...*), 5) relators (e.g., *You might say that...*), 6) evaluators (e.g., *No problem with that... and Look how important...*), 7) qualifiers (e.g., *That's true, but...*), and 8) aside markers (e.g., *I guess I got off the track here...*). They state that these lexical chunks perform interpersonal functions such as clarifying and asserting to smooth a conversation, hedging for politeness and compliment, and expressing personal attitudes of liking and agreement. The use of these linguistic aspects can help establish a close rapport between lecturers and their students.

2.2.3.2 Understanding interactivity in lecture discourse

The interactivity coded in the lecture discourse has captured scholarly attention in the study of academic lectures. Morell (2004) compares non-interactive and interactive lectures and finds out that: in interactive lectures, 1) linguistic use of personal pronouns appears frequently; 2) discourse markers such as elicitation markers (e.g., *What do you think...?, I have a question for you..., and Does anyone have an answer for that?* p. 331) are of great importance; 3) display and referential questions are fairly common, and similar to what has been mentioned earlier in this section (Tsui, 1996), the use of referential questions should be encouraged for student participation; and 4) negotiation of meaning is necessary to smooth understanding and maintain classroom interaction, especially through the use of confirmation checks and clarification requests. Evaluative language can also indicate interactivity embedded in the lecture discourse as it extends the interpersonal account of lecture discourse by realising the evaluative meanings of lecturers' attitude and stance in the classroom communication. However, little scholarly attention has been paid to evaluative resources in relation to the context of academic lectures (Lin, 2012).

An understanding of metadiscourse and discourse markers has an enlightening significance for the study of evaluative language in academic lectures, as they are both closely associated with the interpersonal function of the language in use. In spoken discourse, metadiscourse can have such four useful functions in promoting conversation as 'semantic framing, social signalling, state-of-consciousness signalling, and communicative signalling' (Keller, 1979: 219). Metadiscourse can also be a useful device amenable to the organisation of discourse and an effective signal to indicate interpersonal meanings such as engaging the audience and expressing an addresser's attitudes (Hyland, 1998). According to Jung (2006), discourse markers contribute significantly to L2 learners' listening comprehension so as to facilitate communication between speakers and listeners; discourse markers such as contextualization markers are expected to aid the communicative process working as signals and links between ideas. These contextualization markers include (Jung, 2006: 1931):

previews (e.g., *There are four stages of this culture shock*), topic shifters (e.g., *Let's go back a minute*), summarizers (e.g., *To sum up so far*), emphasis markers (e.g., *Let me repeat it*), exemplifiers (e.g., *for example*), relators (e.g., *Goes along with that*), definition markers (e.g., *That's called*), rhetorical questions (e.g., *What is culture shock?*), and logical connectives (e.g., *first, second, and, or, well, all right, OK, and now*).

Other scholars also agree that personal pronouns such as *I*, *we* and *you* can facilitate face-to-face interaction and help engage students in class (Rounds, 1987; Young, 1990; Fortanet, 2004). But Fortanet (2004: 46) also indicates that first-person pronoun *I* 'may have on most occasions the effect of distancing, causing negative politeness'. By contrast, lecturers' use of personal pronouns, such as '*you* and *your* referring to students and *we*, *our* and *us* involving both students and lectures' in academic lectures perform an interpersonal function because they carry lecturer's attitude and stance that could help engage students and establish positive teacher-student relationships in class (Morell, 2004: 328). Furthermore, the use of questions should also be encouraged for the interactivity in academic lectures as it can be a useful device to invite student participation and smooth classroom communication (Morell, 2004). According to Thompson (1998: 140), questions in academic lectures can be classified into two groups based on two different orientations: audience-oriented and content-oriented. There are three major functions of audience-oriented question: 1) to check comprehension, 2) to elicit a response from the audience, and 3) to seek an agreement. Content-oriented questions, which may not expect a response from the audience, mainly perform the functions of emphasising specific information and thought-provoking.

2.2.3.3 Empirical studies of metadiscourse and discourse markers in academic lectures

Regarding the functions of metadiscourse and discourse markers in academic lectures, Fortanet (2004: 63) investigated the discourse function of pronoun *we* in lecture speech and regarded it as an engaging metadiscourse in oral speech. Fortanet found

that 1) the use of *we* has declined in academic spoken speech whereas the use of the pronoun *I* has increased; 2) *we* usually refers to 'a large group of people of whom the speaker is the representative or spokesperson' in academic spoken discourse; and 3) 'inclusive *we*' is more commonly used in academic speech than 'exclusive *we*'; however, the meaning of *we* can be vague and dependent on the listeners' interpretation. Fortanet (2004) also suggested that such lecture discourse can serve as linguistic cues to assist students, especially non-native students, to follow the classroom communication. Considering the use of discourse markers in academic lectures, Othman (2010: 665) conducted a case study studying the 'anticipated' and 'real' meanings of discourse markers such as *okay*, *right* and *yeah* used by four native speaker lecturers. Some interesting findings include: 1) these three discourse makers often function as structural organisers of the lecture discourse and such signals are textually important in the spoken discourse as lectures tend to be monologic; 2) lecturers use these discourse markers for interpersonal functions, such as checking students' understanding, prompting students' understandings of their intended information and action and challenging students to join a conversation.

As to investigations into lecture discourse, Bu (2014: 460-463) analysed the use of metadiscourse in 10 academic lectures and drew conclusions from the occurrence of metadiscourse while considering its relevance and appropriacy as well as its role in academic lectures. First of all, metadiscourse has a substantial presence in lecture discourse. Second, lecturers' appropriate use of metadiscourse can be based on three factors: 1) lecturers' cognitive process of retrieving a word with optimal relevance for effective communication; 2) the explicitness of an utterance through which students could capture the meaning of the discourse with minimal effort; and 3) metadiscourse that could help students decode conceptual representations and procedural meaning (such as '*but*' and '*however*' encode contrastive procedural meaning). Finally, Bu concluded that the appropriacy of the metadiscourse will be beneficial to lecturers' construction of coherent and effective lecture discourse as well as students' prompt interpretation of the information and knowledge that has been delivered.

2.2.4 Academic lectures in social science and hard science

Studies on academic lectures should also consider the features of specific disciplinary differences (Smit, 2010). The discursive and linguistic conventions differ widely across different disciplines and there has been a growing research interest in the study of discourse variations between different disciplines (Hyland, 2004; Kuteeva & Airey, 2014; Dafouz & Smit, 2016; Durrant, 2017; Liu & Chen, 2020). Hyland (2004) indicates that knowledge construction in the sciences very often relies on experiential logics and proof whereas communication in humanities elaborates arguments with personal stance and narratives. Chang (2012) also agrees that the knowledge in soft science is often sophisticated involving multidimensional interpretations and arguments, therefore the lecturing of these subjects tends to be more persuasive rather than progressing with the linear developments of shared knowledge in hard fields. Neumann, Parry and Becher (2002: 406) further clarify the differences between the soft science (e.g., history, anthropology and education) and the hard (e.g., physics, chemistry and engineering). The former is 'reiterative, holistic, concerned with particulars and having a qualitative bias', with 'the enhancement of professional practice and aiming to yield protocols and procedures'; the academic communications in such communities pay special attention to 'solitary pursuit manifesting only a limited overlap of interest' between scholars. The latter, hard sciences, however, focus on 'cumulative, atomistic structure, concerned with universals, simplification and a quantitative emphasis' and 'mastery of the physical environment and is geared towards products and techniques'; the academic communications in such communities value the importance of 'joint or multiple authorship'. Björkman (2008: 120), on the other hand, points out the distinctions of using verbal and non-verbal materials in the academic ELF communication amongst different disciplines: it seems that subjects such as economics, engineering and linguistics, very often use non-verbal materials as visual aids to promote understanding in teaching and learning, whereas

disciplines such as philosophy, literary study and history largely rely on verbal materials.

Such disciplinary differences thus play a decisive role in the transmission of the disciplinary knowledge in academic lectures. According to Liu and Chen (2020: 130), the lecture discourse in the science disciplines can be 'relatively more organized and routinized' frequently 'explaining formulas and theories, introducing new equipment and its applications, or explaining how an experiment should be carried out', whereas those in the soft sciences can be more creative and illustrative. This view is supported by Csomay (2005), as classroom talk in soft science is often characterized by speaker stance, using discourse markers such as *you know* and *I mean*. Chang (2012) explores university professors' use of questions in different disciplinary lectures and finds out that those working in the field of soft science such as humanities and social sciences tend to ask more engaging questions and their knowledge production seems to be more dialogic and interactive in nature than those of their counterparts in hard sciences such as biology and medicine. Therefore, different academic disciplines may have their own linguistic features and disciplinary-specific discourse practices.

Academic communication concerning disciplinary knowledge should also consider the importance of metadiscourse (Hyland, 2004; Hyland & Jiang, 2018). The use of metadiscourse in particular disciplinary communities encourages 'interpretations consistent with the disciplinary knowledge and community-specific rhetorical expectations' (Hyland, 2004: 136). Tang (2017) explored how teachers make use of metadiscourse in science classes from 125 lessons with 6 teachers and 173 students. According to Tang (2017: 557-564), there can be two major categories of metadiscourse in science classrooms that could help impart scientific knowledge in the classroom communication, 'organizational and evaluative metadiscourse'. The former can be further divided into 'text connective, knowledge connective, and activity connective', and the latter includes subcategories of 'attitude marker, epistemology marker, and interpretative marker'. Text connectives are the most

commonly used organizational metadiscourse in the science classroom; as the name indicates, they can help organize the lecture discourse and guide students to follow the ongoing explanations of a concept or a result. Knowledge connectives are used to present connections between prior and new knowledge whereas activity connectives are used to provide students with links between an ongoing activity and an external activity. Attitude markers are the most common evaluative metadiscourse found in the science classroom where teachers would express their own evaluation of and stance on propositional content using expressions concerning importance, challenge and affect. Epistemology markers clarify the validity of the information based on teachers' evidential stance drawn on sensory experiences, logic, other scientists or their own personal beliefs. The last evaluative metadiscourse is the interpretative marker which can be an important device in directing students to align with the attitude of the teacher. Three interpretive markers have been identified and summarized by Tang (2017): modifier (to modifier the force of a speech often using modal verbs such as '*must, should and may*'), paraphrase (to signal to students that what has been said will be paraphrased for more clarification), and projection (to explain the source of the information). A list of the metadiscourse is presented with examples in the Table 2-1 below.

Table 2-1 Functions of metadiscourse in science classrooms (Tang, 2017: 557-564)

Category	Function	Example
<i>Organizational metadiscourse</i>		
Text Connective	Relate to an earlier conversation;	<i>If I go back to the experiment just now...</i>
	Signpost to an anticipated conversation in the near future;	<i>Okay, we will learn more about the metal displacement reaction in the next few chapters.</i>
	Connect parts of a conversation in a sequential manner;	<i>We need to start off with how it happens first, alright.</i>
	Focus attention to a particular topic of a segment of the conversation.	<i>For scenario 1a, we were talking about...</i>
Knowledge Connective	Relate to students' prior knowledge	<i>From your knowledge from sec 1 and sec 2, when you were learning...</i>
	Using a known idea to address current problem	<i>Okay, this is the concept behind it. Now, how do we apply into it...</i>

Activity Connective	Highlight actions or work processes to be carried out;	<i>what we're trying to do here is, we are trying to</i>
	Relate to activities outside class.	<i>Remember I told you about the marathon?</i>
<i>Evaluative metadiscourse</i>		
Attitude marker	Signal the importance of specific content;	<i>So this is an important link between the two.</i>
	Signal the difficulty encountered by most students regarding specific content;	<i>If not, then we are going to the difficult part,</i>
	Express range of expressions toward specific content (e.g., surprise, humour, excitement, boredom).	<i>Looks pretty cool huh?</i>
Epistemology marker	Evidential status based on observation;	<i>We observed that the amount of water vapor in cup A was more. Did you all see that?</i>
	Evidential status based on logic;	<i>Please make sure you have a logical flow of answer alright.</i>
	Evidential status based on scientists' work and beliefs;	<i>Back then all scientists do that, including Newton, Faraday.</i>
	Evidential status based on personal beliefs.	<i>I believe . . . nobody really knows.</i>
Interpretive marker	Signal how strictly or loosely information is to be interpreted;	<i>we want to make use of 'particles', ...</i>
	Signal another way to help students interpret information or way of phrasing;	<i>However, the way for us to craft answer in Physics right is the same</i>
	Direct students toward a source, voice, or point of view.	<i>In your report, you must tell people about the plant cell.</i>

Rappa and Tang (2018: 2) conducted a study to investigate the construction of discourse strategies to provide scientific explanations of disciplinary literacy in the science classroom. They proposed a genre-based instructional method to scaffold the classroom discourse, known as PRO – ‘Premise, Reasoning and Outcome’. Premise is to provide the basic information of the explanation before demonstrating the logical reasoning process as well as leading to the outcome of the explanation. They suggested incorporating such genre elements into teachers’ metadiscourse when giving scientific explanations of disciplinary literacy so as to effectively advance students’ understanding and acquisition of what is imparted. Also, metadiscourse can be a necessary component for classroom interaction and is particularly important for the opening and reviewing stages of a scientific explanation (Tang, 2017). As to disciplinary differences of discourse in use, Liu (2019: 215) made an investigation into

how academics of different disciplines (between the hard- and the soft-science lectures) and genders (between male and female lecturers) use intensifiers in their lectures, including words such as '*absolutely, entirely, extremely, greatly, highly, particularly, quite, really, totally, terribly, utterly and very*'. They conclude that lectures in the hard sciences used much less intensifiers than lectures in the soft sciences, and discipline can be a more influential variable than gender in the analysis of intensifiers in academic lectures.

In summary, from the theories and empirical studies of academic lectures and disciplinary differences reviewed above, interactive resources such as discourse markers, metadiscourse, the use of pronouns and questions can be helpful in enhancing classroom communication and there have been numerous studies on the forms and functions of these linguistic items used in academic lectures. However, as discussed in the Introduction chapter and Section 2.2.3 of this current chapter, evaluative language is also an important interactive resource which is commonly used in academic lectures, yet it has rarely been studied specifically in relation to such academic context. Therefore, this indicates a major research gap and special attention should be paid to the understanding of evaluative language as a particular discourse signal to express interpersonal meanings in academic lectures. Lecturers are in a constant state of expressing personal opinions and attitudes when imparting information and knowledge in class and their use of evaluative language can certainly be an important linguistic device to facilitate classroom communication (Biber, 2006). Furthermore, the above literature review on disciplinary differences of lecture discourse suggests that the study of disciplinary-specific discourse practice should be encouraged, and that research is particularly rare on distinctive classroom interactions, such as explaining scientific concepts in academic lectures (Tang, 2017; Rappa & Tang, 2018). Again, evaluative language plays a key role in such interactions, as in the lecturing process, lecturers not only transmit the knowledge of these concepts but also their own understanding and opinions of the information that they are providing.

2.2.5 Summary

This section has concentrated on the background of lecture discourse that is relevant to this research. It began with some discussions on classroom context, emphasizing the importance of co-text and context of situation within a classroom. This part of the review also paid special attention to the understanding of evaluative language used in classroom settings with the study of lexical bundles used in academic lectures as an example. Also elucidated herein were some detailed reviews concerning academic lectures, being the specific classroom context this current study will be focusing on. Finally, special attention has been paid to disciplinary-specific lectures and discourse variations between academic lectures in hard and soft sciences.

2.3 Understanding academic ELF

Conceptualising ELF has always been under debate since the notion was first established (Jenkins, 2015). Even though, according to Jenkins (2015), English users today can be divided into four distinct groups: 1) NS speakers (native), 2) ESL speakers (English as a second language), 3) EFL speakers (English as a foreign language), and 4) ELF speakers (English as a lingua franca); ELF should not be codified as a language variety because it lacks sufficient stability to form a unified language or a speech community (Jenkins, 2015; Mauranen, 2017: 9). Jenkins (2015: 45) specifies that ELF possesses the nature of being highly flexible and contingent; this ELF fluidity occurs in substantial linguistic variations from ELF speakers who have diverse L1s and even in the same speaker depending upon the context of the communication. Similarly to Jenkins, Seidlhofer (2011: 77) asserts that ELF 'is not a variety of English but a variable way of using it' – a variable way to the NS norms of English: ELF circulates as a lingua franca between people who do not share a native language. Therefore, the study of English as a lingua franca is challenging – as 1) ELF should be seen as an adaptable and inevitable development of the English language in use, not as inefficiency of conforming to the native language norms; 2) the uniqueness of forms and functions

of the ELF should be further explored and described on a large scale (Seidlhofer, 2011: 24).

Mauranen (2017, 2018) suggests that ELF can be approached through three perspectives, i.e., the macro, the meso and the micro – 1) the macro-social perspective regards ELF as a contact language flexibly accommodating a speech community, 2) the meso level refers to the interactions between individuals which happen within this speech community, and 3) the micro level is the individual's language systems acting on these interactions. These three levels are closely related to each other, yet each can be perceived as a system of its own. At the macro level, the ELF community is now the largest group of English users in the world (Jenkins, 2015) but studies still tend to treat ELF users as English learners rather than as a distinct language group in its own right (Mauranen, 2003). From the meso and micro perspective, ELF speakers are educated and competent users of different L1s but have to use English as their contact language for daily and professional communication (Mauranen, 2003; Jenkins, 2015). Mauranen (2012, 2017) also agrees with Seidlhofer (2011) that ELF is a contact language for communication between people from anywhere in the world, and that this includes both non-native and native speakers of English. For instance, following Mauranen's definition, a group of native speakers tend to use ELF if one of the group is using English as a second language.

Unlike Seidlhofer and Mauranen, Seargeant (2012) argues that ELF should be regarded as a function or a strategy for communicative interaction, rather than a specific variety within the English language. Seargeant (2012: 89) elaborates this argument by suggesting that the reason why English is used as a lingua franca is because people often adjust their own ways of using the language so as to accommodate each other and to be effective and appropriate when communicating within diverse cultural and linguistic contexts. Similarly, Seidlhofer and Widdowson (2009) agree that ELF speakers tend to cooperate with each other in terms of sharing and comity to achieve effective communication. Deterding (2013) concludes that ELF users communicate in

innovative and creative ways with resourceful interaction patterns due to their diverse language backgrounds and their independence from constrained native-speaker norms. Deterding (2013) further explains that ELF users tend to concentrate on effective ways of making themselves understood rather than the standard and normative use of the English language; therefore, there can be shared patterns or strategies of how ELF users could interact and communicate even though they are from different countries having various L1s.

Firth (1996: 243-245) suggested two strategies to enhance communicative effectiveness in ELF communication: 1) 'Let it pass' – interlocutors prioritize mutual understanding and let unclear or redundant words and utterances pass; 2) 'Make it normal' – interlocutors focus on the content of the talk and hearers would treat the speakers' non-standard linguistic usage as 'normal' and 'ordinary'. Mauranen (2006: 147) proposed some proactive strategies that can be used to facilitate mutual intelligibility between interlocutors in ELF communication, such as 1) 'frequent confirmation checks' using direct questions and repetition of lexical items, 2) self-repair using 'grammatical self-correction', and 3) 'signaling misunderstanding' explicitly using specific questions or repetitions of problematic items that are unclear, or using hedging to signal confusion and seek for clarifications. Other studies have also shown that accommodation skills such as repetition, paraphrasing, code-switching, clarification, self-repair can help with ELF communication (Kirkpatrick, 2008). Kaur (2012: 610) discovered that ELF users could take advantage of self-repetition as a communicative strategy to enhance clarity in ELF communication as repetition can help them to 'simplify speech production, hold the floor, or gain planning time' in various interactions. The self-repetition strategy includes repetition of 'parallel phrasing' and 'key word repetition' that could promote the meaning-making process in the ELF communication (p. 593). However, Kaur (2020) also suggests that corrections of lexical replacement should be encouraged if the ELF users use an inaccurate word or an approximation that disturbs the communication and they would pay close attention to these corrections, especially if it is a content word.

2.3.1 Linguistic forms of academic ELF

Ranta (2017) observes that there are very few scholarly studies focusing on ELF grammar and that this is due to the assumption that most of the ELF grammar features have already been covered in the studies of second-language acquisition (SLA), a research topic that has already been intensively explored. Since ELF and SLA both concern the usage of a second language, there seems to be rather limited ELF-specific grammar features. Ranta (2017) nevertheless objects to this trend and claims that ELF and SLA are clearly different as the former investigates language use for communicative purposes in real-life situations while the latter is mainly concerned with language learning in classroom settings. In the same vein, Mauranen (2012) also emphasizes the contrast between SLA and ELF for three reasons: 1) SLA and ELF have their own distinctive goals – learning in the case of the former and communication for the latter; 2) SLA learners pay close attention to language forms on which they will be tested whereas ELF speakers focus more on the content of their communication and mutual intelligibility of the interaction; and 3) learners in SLA normally share the same L1 and cultural backgrounds while ELF speakers share neither. Therefore, this current study is determined to look for ELF-specific linguistic features and forms other than just those sharing similarities with grammar studies in SLA.

ELF studies emphasize the importance of communicative effectiveness in both writing and speaking forms of academic communication. As to syntactic structures in ELF academic writing, for example, ELF academic users tend to use longer sentences with coordinate phrases and complex nominals to enhance the efficiency and clarity of communication in writing (Wu et al., 2020). They rely heavily on complex nominal phrases as these phrases carry a similar amount of information but are economically shorter than clauses, which contributes to the length of sentences through embedding at phrasal level. Language forms in ELF academic speaking, in contrast, are not a significantly decisive factor in ELF communication, and non-standard expressions

often appear which do not hinder the communicative effectiveness. These linguistic forms may be non-standard or even incorrect, according to native-speaker norms, but they do not disturb the efficiency of the ELF communication; therefore, the grammatical standards of native English may be less important than the comprehensibility of the ELF communication (Firth, 1990; Björkman, 2008). Reverting to the ELF meso and micro levels (Mauranen, 2017), some frequently occurring language features may be firmly entrenched, and this may eventually formulate ELF-specific forms or generate new meanings of the traditional language forms for the purpose of advancing communication effectiveness.

Regarding language forms in speaking, Björkman (2008:109) suggests two dimensions to understand academic ELF: 'Morphological' and 'Syntactic'. For the morphological group, ELF users tend to 1) use non-standard word formation ('e.g. *boringdom, discriminization, forsify, levelized*'), 2) use comparatives in an analytic way ('e.g. *more narrow, more cheap, more clear*'), and 3) use non-standard plural forms ('e.g. *how many hydrogen, peoples*'). For the syntactic group, Björkman (2008: 111-115) further classified the features based on phrasal level and clausal level. Distinctive features of ELF syntax can be described in terms of overuse, underuse or misuse, but any negative connotations in the description below are not intended to be critical of these forms within ELF discourse. For noun phrases, ELF users seem to 1) ignore the plural forms of a noun, 2) make non-standard use of articles, and 3) double comparatives and superlatives. For verb phrases, issues are often associated with subject-verb disagreement, tense and aspect as well as some non-standard use of passive voice. In clausal level, ELF users sometimes like to speak with 1) non-standard question formation such as using interrogative pronouns without question word order; 2) topic information at the beginning of a sentence, which is a typical feature common to both native and non-native speakers of English but which can be grammatically incorrect; 3) disregard of standard word order and 4) non-stand use of negation. Seidlhofer (2004: 220) also lists out some ELF grammatical features that are often brought up in language classrooms:

- Dropping the third person present tense – s
- Confusing the relative pronouns *who* and *which*
- Omitting definite and indefinite articles where they are obligatory in ENL, and
- inserting them where they do not occur in ENL
- Failing to use correct forms in tag questions (e.g., *isn't it?* or *no? instead of shouldn't they?*)
- Inserting redundant prepositions, as in *We have to study about...*
- Overusing certain verbs of high semantic generality, such as *do, have, make, put, take*
- Replacing infinitive-constructions with *that*-clauses, as in *I want that*
- Overdoing explicitness (e.g., *black colour rather than just black*)

2.3.2 Academic ELF in speaking

Academic English has long been studied and analysed primarily in the written mode as written data may be more accessible than spoken data and more manageable with traditional linguistic methods (Mauranen et al., 2010b). However, global academic communication has increased rapidly over recent decades and there is no doubt that equal importance should be attached to the study of academic lingua franca of the spoken language. The readjustment of research balance between written and spoken language in academia has attracted increasing attention, a trend which has expanded notably with the creation of corpora of academic spoken language. ELFA (English as a lingua franca in academic settings) has been established containing one million words on the academic spoken discourse by a variety of ELF users which only includes a small proportion of native speakers (Mauranen et al., 2010a). This distinct corpus is important for the study of academic spoken discourse, and it is clear that more ELF corpora will be needed for future ELF studies.

Academic ELF directs scholarly attention to ELF in educational settings (Mauranen 2003; Mauranen et al., 2010a; Mauranen et al., 2010b); especially with the ELFA project, more studies on spoken English of academic ELF will be carried out. Some studies central to the classroom talk from an academic ELF perspective are highly

recommended (Björkman 2008, 2011, 2012; Smit, 2010) but more studies are still needed, as Seidlhofer (2011) states that more research should be carried out on unique ELF functions and forms according to a specific context, as in the current study lecture discourse in the context of ELF academic lectures. Research on ELF classroom discourse highlights how knowledge is socially organized and how knowledge would concern interaction (Firth, 1990). Smit (2010: 80) strongly points out that ELF classrooms are 'setting-sensitive': general investigations into ELF talk cannot be automatically extended to classroom settings and vice versa. According to Björkman (2012:95), university lectures are chiefly monologic and interactions involving students can be difficult to achieve; teachers' linguistic choices will have a direct impact on student involvement and the communicative effectiveness in the classroom. As to the ELF forms, Biber (2006) says the linguistic characteristics of classroom lectures in a university tend to be colloquial which resembles many typical features from everyday conversation rather than academic writing. The features include: questions for comprehension checks – 'ok?'; use of pronouns – *I, we, and you*; adverbials – *really* and *a lot*; and modal and semi-modal verbs like *can* and *be going to* (Biber, 2006: 4).

The interpersonal aspects of language and intercultural competence are vital in academic ELF speaking (Mauranen, 2003), as ELF communication should be oriented towards mutual intelligibility between different ELF speakers (Mauranen, 2006). Firth (1990) emphasizes that talk should be interactive in ELF settings. The effectiveness of successful ELF communication is based on participants' joint achievements rather than an individual's proficient but one-way performance (Mauranen et al., 2010a). Following these emphases, Firth (1990) also suggests that there is no need to attach native language norms to achieve efficiency in ELF communication. ELF users share neither the same mother tongue nor a common culture (Firth, 1996); therefore, ELF communication should be regarded as intercultural communication (Jenkins, 2015) and the communicative competence belongs equally to every intercultural speaker, not necessarily just to English native speakers (Byram, 1997). Mauranen (2010a:184)

even claims that there should be 'no native speakers of academic English'; ELF speakers should not be marginalized by features such as 'foreign accents, lack of idiom, or culture-specific communicative styles' provided that they can 'negotiate and manage communicative situations successfully and fluently' (Mauranen, 2003: 517); the qualities of clarity and effectiveness for ELF communication should be highly valued (Mauranen et al., 2010a).

However, academic ELF communication can be challenging for non-native speakers as they may suffer the pressure of real time language production so the amount of hesitation and lexical approximation can be high (Metsä-Ketelä, 2016: 332). Mauranen (2012: 117) regards lexical approximation as a communicative strategy that could facilitate ELF communication. According to Metsä-Ketelä (2016: 339), ELF users often employ vague expressions to help with their speech organisation and they often use these expressions to describe illustrative examples so as to smooth the communication explicitly and effectively, including expressions such as '*like, such as, and (let's) say*'. Vagueness is commonplace in daily language use; as the name indicates, it relates to expressions having a lack of sufficient and precise information and details. It is a fundamental phenomenon in human communication (Channell, 1994; Jucker et al., 2003; McCarthy, 2020). According to Channell (1994: 20), vague is in contrast with precise and the vagueness can be either purposely intended or based on intrinsic ambiguity; vagueness is expressed dependant on the shared knowledge between speakers, inevitably involving consideration and inference of the context. It was observed that 'any social group sharing interests and knowledge employs non-specificity in talking about their shared interest' (Channell, 1994: 193). Jucker et al. (2003) regard vagueness as an interactional strategy between speakers and addressees for different communicative purposes. They summarized that vagueness can be especially important in the management of conversations. It can be used as a 'focus device' to draw addressees' attention to the most relevant information when introducing a particular entity. It can 'place descriptions on a scale' and help listeners to process and interpret relevant information of a referent such as quantity and

quality. It can help express personal attitudes and evaluations to serve some social functions such as being polite, softening criticism and establishing rapport (Jucker et al., 2003: 1765-1766). There can be four main groups of vague expressions: 1) 'vague additives' which includes expressions such as *'about, approximately, and stuff like that'*; 2) 'vague placeholders' such as *'thingy'* and *'whatsit'*; 3) vague quantifiers such as *'tons of'*; and 4) 'vague implicature' such as *'Sam is 6 feet tall'* whereas in fact Sam might be slightly shorter or taller than 6 feet (Channell, 1994: 18).

In addition to this grouping, more recently, Li (2017: 98) found that the variety of vagueness mainly concerns: 1) "quantity" (e.g. *a number of*); 2) 'time' (e.g. *from time to time*); 3) 'degree' (e.g. *appropriate*); and 4) 'category' (e.g. *such measures*)." However, McCarthy (2020: 208) suggests that studies on vagueness should focus on the most frequent expressions and their subtle differences such as *'or something (like that), and so on, or whatever, etcetera'*. These expressions Li and McCarthy discussed are also interactive resource expressing personal attitudes and opinions and in fact vagueness can be regarded as a particular nature of evaluative language when expressing evaluative meanings on a scale, as speakers / writers can sharpen or blur the vagueness and assertiveness of their attitudes and opinions using vague language (Martin & White, 2005). Metsä-Ketelä (2016) also indicated that vague expressions are interpersonal by nature as they can often be used to convey affective meanings such as politeness or to act as markers to indicate interpersonal involvement. Vague expression can be a useful device to 'maintain a balance between precision and over-elaboration' (Li, 2017: 106), as vagueness can be a 'desirable feature of natural language' and precision can be 'timewasting and inflexible' (Williamson, 1994: 4869).

2.3.3 Academic ELF: ELF lectures in EMI universities

Murata and Iino (2017) interpret EMI from an ELF perspective, i.e., 'English-medium instruction conducted in the context where English is used as a lingua franca for content-learning/teaching among students and teachers from different linguacultural

backgrounds' (p404); or in brief, 'introducing an ELF perspective into the 'E' of EMI' (p408). Having an increasing number of teachers or students from diverse countries with various language backgrounds, it may not be long before the academic environment of English-medium instruction can be reconsidered as ELF-medium instruction. As Smit (2010) elaborates, it cannot be prescribed and regulated that all the teaching and learning activities are organized solely in the English language in an ELF context, or in this case in the ELF academic lectures. However, the medium in such a context should be more strictly defined as it concerns not only the medium of the language but also the interactional context as well as the means for cognitive processing. One striking feature of EMI education concerning ELF is that English is not the only language of teaching and learning in the EMI context as long as it involves ELF speakers or/and ELF communication. For instance, if a Chinese academic communicates with a Chinese student using English, they can easily switch to conversations in the Chinese language for a quick explanation; if a French EMI academic talking to a Chinese student who can speak French, they could extend their conversations in French. This bi- or multilingual feature excels in EMI education. Also, even if all of the teaching communication is conducted exclusively in the English language, students can still achieve their learning through cognitive processes in their L1 or communications with their peers having the same L1.

Regarding ELF in classroom settings, Smit (2010: 81) reinforces ELF as a classroom language to attain interculturally communicative understanding through 'constructing oral practices' and 'pursuing subject-specific educational goals' among members speaking a second language for a certain period of time. Smit (2010: 79-81) conceptualizes ELF as a classroom language on five components: 1) most ELF teachers and students are temporary residents in a place undertaking educational activities in another language and their oral practices are influenced by people having diverse multilingual/cultural backgrounds; 2) the ELF oral practice can be measured from three dimensions – situated communication in classroom interactions, established practice of specific disciplinary discourse, conventions and genres, and individual

repertoire being individual language and cultural backgrounds; 3) there are two objectives of tertiary classroom interaction – being communicative for transactional purposes and being educational for teaching and learning; 4) classroom-specific features and dynamics should not be overlooked; 5) ELF classroom communication involves multilingual English speakers and should be analysed in its own right (see also Mauranen, 2003).

The international academic environment embraces ELF, and EMI universities employ academic staff from countries all over the world, both English native speakers (NS) and non-native speakers of English (NNS). According to Mauranen's (2017) macro perspective, how effectively ELF works as a contact language within the EMI speech community will affect the language perceptions of both teachers and students. In an EMI university context, the majority of students share the same native language and cultural background; academics who have the same L1 with their students also share these advantages but are required to communicate using ELF as medium of instruction in class; other academics who do not possess this advantage, however, will have to use ELF communication when teaching L2 students. As reviewed above, the major difference between SLA and ELF lies in the setting, whether the interactional event happens in real-life circumstances or in the classroom (Mauranen, 2012; Ranta, 2017). In EMI settings, however, the situation is rather complex, as it concerns both ELF communication and the classroom context. In other words, ELF lecturers will have to: 1) communicate smoothly with their ELF counterparts also being their students, 2) impart knowledge using ELF-medium-instruction to help students with their learning of a university discipline, and 3) focus on the teaching and learning content while at the same time not overlooking the importance of using correct language forms so as not to risk imparting incorrect or inaccurate usage to their students. According to Zhang (2017), lecturer's language use is one of the most important factors contributing to the effectiveness of teaching and learning in EMI lectures.

2.3.3.1 Contents of curriculum in Chinese EMI universities

As discussed above, the English-medium-instruction should really be renamed as ELF-medium-instruction in current EMI universities. The ultimate goal of such universities is to impart disciplinary content knowledge, and disciplinary courses are taught using the English language as a Lingua Franca without explicit language learning aims. Gibbons (2003) points out that English acts both as a target and a medium of education in English-medium schools where students are not only learning English as a subject but also are conducting their learning through it, so that content-based knowledge should progress concurrently with the development of students' English. According to Zhang (2017), the English language always plays a key role in the content of curriculum across various disciplines, as many terminologies and theories have originated and been developed in the English language with the consequence that textbooks and reference books across many disciplines tend to be more numerous and richer in content in this language. Teachers and students in EMI universities are required to acquire and accumulate academic literacy and theories in the English language when constructing their disciplinary knowledge and conducting their disciplinary practices. Contents of the curriculum and assessment methods would also be devised in relation to the characteristics of each academic discipline and its approved standards (Neumann et al., 2002). However, some scholars claim that using English as the medium of instruction at school level overlooks the essential disciplinary differences in the everyday teaching activity and the general language use in the EMI context fails to allow disciplinary-specific adjustments for knowledge-making practices and educational goals (Kuteeva & Airey, 2014; Dafouz & Smit, 2016). Zhang (2017) argues, therefore, that instead of focusing on the influences that EMI courses may bring to students' level of English, more importance should be attached to the role that English could actually play in effective teaching and learning at tertiary level.

2.3.3.2 *ELF lecturers in Chinese EMI universities*

Research focusing on EMI context is still at its initial stage and more empirical studies on spoken classroom discourse are needed, especially studies on non-native academics (Kim and Tatar, 2017). Chinese EMI universities employ academic staff from many countries who are also ELF lecturers with a diverse language background. Some are from English-speaking countries while others are using English as their second language with a high level of English proficiency evidenced through their engagement with the international research community of their respective disciplines. In these EMI universities, ELF lecturers from English-speaking countries possess a predominant language advantage compared with those from non-English speaking countries (Zhang, 2018). However, Widdowson (1994) asserts that NS do have the advantage of speaking authentic native language, but this authenticity is more reliable in real-life contexts rather than classroom context and it certainly does not guarantee pedagogical advantages over NNS. In other words, NS academics, without a shared L1 with their students, may also have challenges in their teaching delivery as they may not be readily understood by their L2 students (Ryan & Viète, 2009). Hence, classroom discourse for effective communication and interaction in ELF lectures is worth researching concerning both NS and NNS academics. However, Kim and Tatar (2017) intensify that there are very few empirical studies in the present academic field that focus on non-native English-speaking academics and the challenges they face in the EMI classroom, despite the fact that there is now a considerable number of English non-native speaking teaching staff working in EMI universities and conducting their subject teaching entirely in a second language.

2.3.4 Empirical studies into forms and functions of ELF-specific linguistic features

Metsä-Ketelä (2016) carried out an empirical study using the ELFA corpus investigating how academic ELF speakers apply vagueness using general extenders such as '*so on*,

et cetera, and *or something (like that)*' to express hesitation and politeness. The application of such general extenders can be regarded as an effective vagueness strategy in ELF-communication as, on the one hand, they enable ELF-users to express their personal positions and exemplify their opinions and, on the other, they enhance comprehension in the interaction through discourse explicitness. There is another study from Metsä-Ketelä (2012: 263) investigating the frequency of general extenders, vague classifiers (*'some sort of'* and *'some kind of'*, to signal a degree of uncertainty and hesitation), metadiscourse particles (*'let's say'* and *'so to say'*, to modify the appropriateness and exactness of what has been said in a metaphorical way), and indefinite prepositional phrases (*'in a way'*, *'to some extent'* and *'to some degree'*, to render a statement less unequivocal or less dogmatic). Metsä-Ketelä (2012) also compared the frequency of vague expressions used by ELF-speakers and NS as well as their usage between technology domains and humanities and social sciences. It seems that 1) ELF-users tend to use almost twice as many vague expressions than NS and 2) vagueness seems to be much more commonly used in the academic domain of technology rather than soft sciences. McCarthy (2020) agreed that vagueness can be a fundamental communicative act and he compared the use of general extenders between business and academic contexts. In the classroom communication, he suggests that such general extenders can be useful tools to help graft new knowledge onto shared knowledge and teachers should be encouraged to use these vague expressions to avoid lengthy elaborations.

Also considering ELF-related communication strategies, Bjørge (2010: 197) studied verbal and non-verbal backchannelling in ELF interactions involving 51 students from 16 nationalities. Backchannelling can be regarded as a negotiation strategy in the ELF communication and according to this study, non-verbal backchannelling such as head nods was used most frequently. Some statistical results have been drawn based on the use of verbal backchannelling: 1) the most frequently used linguistic items are *'yes/yeah, mhm and ok'*, 2) other lexical items such as *'ah, definitely, exactly, excellent, good, of course, oh, right, so and sure'* were also used quite frequently, and 3) some

repetition of the words from the previous speaker also occur as backchannelling. However, the use of words such as *excellent*, *good* and *right* can be interpreted as evaluative language carrying positive feedback in classroom communication. Regarding linguistic features in ELF communication for communicative purposes, House (2009: 178-181) conducted a corpus-based case study exploring the use of *you know* among ELF speakers. Four hypotheses have been confirmed in this study: 1) the phrase of *you know* occurs most frequently in the medial position of ELF conversations as opposed to at the beginning or the end of a conversation; 2) personal attributes play a key role in the consistent use of *you know*, and they are often used for 'considered talk' rather than small talk; 3) *you know* very often co-occurs with conjunctions such as '*and, but and because*' so as to reinforce explicitly the coherent relationships being expressed; and 4) *you know* has been used as a 'self-serving strategy' to earn time for the formulation of an utterance in the ELF conversations.

For other communication strategies, Björkman (2012: 93) investigated the communicative effectiveness of using questions among university teachers and students. The use of questions has been analysed based on both syntactical and phonological features that appear in an utterance; the study discovered that listening comprehension could be drawn from three cues: 'syntax with specific reference to word order', 'utterance-final rising question intonation' and 'the interrogative adverb / pronoun (in *Wh*-questions only)'. Björkman (2012) recommended that the academic ELF communication would progress more smoothly if all the three cues are provided to facilitate listening comprehension. Nevertheless, if the syntax is non-standard or the interrogative adverb / pronoun is unheard, the final rising question intonation can still work sufficiently to register the questions. Also, Hanusková (2019) analysed the interactional features of academic discourse used in university seminars for the purpose of preventing communication breakdown in the academic ELF context. Hanusková indicates that some ELF speakers experience difficulties with the use of lexical items for three possible reasons: 1) vocabulary limitations, 2) insufficient time

to recall a particular expression, and 3) concern about the appropriacy and acceptability of using a word in a given context.

As discussed above, more empirical studies concerning EMI lecture discourse will give a better understanding of academic lectures given by different ELF lecturers and the academic English they use in an EMI context. Chen and Peng (2019: 220) conducted a case study interviewing Chinese EMI lecturers for their viewpoints of content teaching in EMI universities. They regard it as vital for lecturers to conceptualize EMI and to help them to be aware of the role that English plays in the content learning, especially the differences between learning English and learning content knowledge *through* English. Some participants in their study suggested that students' understanding of the content should be prioritized and specific language use should be optimized, such as 'simplifying teaching language' and 'using concept-checking questions'. Al Makoshi (2014: 271-274) completed a PhD thesis on the comparison of NNS and NS' use of English discourse markers (DMs) in medical EMI lectures; this research focuses primarily on two kinds of discourse markers – 1) structural DMs (SDMs, e.g. *okay, so, because*; p. ii) which function as Topic Initiators, Topic Developers, Summarizers and Closers to organize each utterance, and 2) Interactional DMs (IDMs, e.g. *okay?, I mean, any questions?* p. ii) which refer to Confirmation Checks, Elicitors and Rephrasers. Makoshi's thesis indicates that NS lecturers use more SDMs than NNS whereas NNS lecturers use IDMs more frequently; SDMs appear frequently as Topic Initiators and Closers for NNS in contrast to Topic Developers and Summarizers for NS; IDMs of Confirmation Checks and Elicitors are used more frequently to draw contrasts by NNS lecturers, and by contrast Rephrasers seem to be more greatly preferred by NS. Regarding other discourse features of NNS lecturers, Camiciottoli (2004) discovers that, for instance, non-native lecturers often use coordinating conjunction instead of specific and more appropriate topic shifters, and they frequently rely on discourse structuring expressions (such as *first* and *let's move on to*) to signal the progress of the class, not just for learners but also for themselves. These differences not only

distinguish the language use of NNS and NS, but also reflect the diversity of EMI / ELF lecture discourse.

In summary, as mentioned in the Introduction, EMI academic lectures are also ELF lectures in the EMI context. More studies in academic spoken language are needed (Mauranen, 2003; Mauranen et al., 2010b) and research into academic ELF in speaking in the classroom setting is especially rare (Björkman, 2008; Smit, 2010). The present study of evaluative language used in academic lectures will thus present some unique discourse features of the spoken academic ELF used by the ELF lecturers. As lecturers very often project their own opinions and attitudes in their classroom communication, their choice of evaluative language is then a consideration worthy of further research into the effectiveness of spoken academic ELF. Furthermore, investigating the forms and functions of the evaluative language in ELF communications can help provide useful ELF-related communication strategy which would then contribute not only to the practical implications of using academic ELF in university lectures, but also to the theoretical development of regarding academic ELF as a medium of instruction in EMI education.

2.3.5 Summary

This section has foregrounded the ELF context, particularly interested in features of English as an academic lingua franca in speaking. The first part of the review has clarified some different ways of conceptualising ELF from leading scholars of the field, with some explanations on the ELF community and how ELF speakers communicate as well as some ELF communication strategies. Subsequently, there have been some elaborations on ELF linguistic forms, forms of the spoken language in particular; a comparison between SLA and ELF has also been provided opposing the assumption that most of the ELF grammar features are common to those in SLA. This section then progressively narrowed its focus onto ELF in academic settings with some emphasis on ELF classrooms. Building upon the idea covered in the introduction that EMI

universities employ ELF lecturers having transnational backgrounds, this section has also provided more discussions on its impact on the contents of curriculum and the lecturers from an academic ELF perspective. Some empirical studies concerning ELF-specific linguistic features and the ELF / EMI academic context have been reviewed and discussed towards the end.

2.4 Understanding interpersonal meanings using APPRAISAL

The conceptual framework of SFL lies in the interpretation '(1) of texts, (2) of the system, and (3) of the elements of linguistic structures' (Halliday, 1994:39). Anything written or spoken which is formed by language with meanings and functions to serve human needs is a text – texts are semantic units (Halliday, 1994). How the language is used then shapes the system with components of linguistic structures; at the same time meanings are realised through these wordings – that is grammar or lexicogrammar, to be more specific (Halliday, 1994; Halliday & Hasan, 1976). There have been well-established explorations of grammar through its meaning and function with a focus on the analysis of clause and clause constituents (Thompson, 2014a). Eggins (2004) regards clauses as one necessary component to grammatical analysis within the frame of text and its relations to register (situational context of the text) and genre (cultural context of the text). Since SFL places an emphasis on language meanings and functions, particular attention should be paid to the higher level of language unit (Halliday & Matthiessen, 1994, 2004 and 2014), primarily starting from clause rather than smaller grammatical units such as groups (word complexes) and words. This also includes clause complex – the grammatical unit above clause when more than one clause is linked through a logico-semantic relation. In brief, SFL looks at language (both written and spoken) from a semantic perspective, and explores how meanings and functions are realised through grammatical analysis, especially of clauses.

As mentioned in the introduction, there are three metafunctions in SFL (Halliday, 1994): (1) ideational metafunction – reflections to the environment, (2) interpersonal metafunction – interactions with other people, (3) textual metafunction – how the first two metafunctions are organized to fit into a context. Each of these three metafunctions leads to a system that can be used to analyse meanings in terms of all kinds of language choices, meanings of clauses, phrases and so on. The experiential meaning generated by the ideational metafunction concerns human being's experience of the world, which can be analysed using the grammatical system of Transitivity. The transitivity system breaks down these experiences into grammar constituents of process, participants and circumstances. For instance, in a clause *We will begin our class for today*. The pronoun *we* is the participant with *begin our class* indicating a process and *for today* the circumstances. Interpersonal metafunction is created by interactions that occur between people and interpersonal meanings can be demonstrated with both semantic and grammatical devices. From a semantic point of view, making use of language is a purposeful behaviour (Eggins & Slade, 1997) – people use language to achieve certain goals; interpersonal metafunction links, in particular, to the achievements on taking up a role relationship with others when expressing some kinds of attitude (Bloor & Bloor, 2004; Eggins, 2004); or in other words, people use interpersonal meanings to share values so as to build up social relations (Hood, 2012). While the ideational metafunction and interpersonal metafunction refer to the content of an event, the textual metafunction then highlights the language organization of the text that describes these contents so as to facilitate the other two metafunctions. The major system to construct textual meaning is the system of Theme as Theme being the first element in a clause representing what is being talked about in the message.

Martin and White (2005) stress that a text, including both written and spoken discourse, possesses an interactive nature where feelings are involved, values shared and people aligned. According to Halliday (1994), the nature of texts results in the exchange of either information or goods-and-services between participants, which

could refer to any information and goods-and-services that someone could supply or is being required to provide in either written or spoken forms. These two commodities being traded between people can be regarded as the purpose for the exchange between people. The purpose of the exchange, however, is realised by the role of either giving or demanding of the participants. In other words, the participant is taking a speech role of either a giver or a demander of the information/goods-and-services being exchanged. Therefore, the exchange here is interpersonal – if one party initiates the speech, the other party will make a response accordingly. In this interaction process, Halliday (1994:69) concludes four speech functions: OFFER, COMMAND, STATEMENT and QUESTION which are respectively matched by acceptance / rejection, undertaking / refusal, acknowledgment / contradiction, and answer / disclaimer. These speech functions are semantic which convey interpersonal meanings of the speech, but can be studied through discourse analysis on grammar. The interpersonal meaning then can be coded and analysed from a grammatical perspective, such as the grammatical system of MOOD (Halliday, 1994; Eggins, 2004), which includes subsystems of Mood, Polarity and Modality. In the subsystem of Mood, there are three basic mood types: Declarative Mood, Interrogative Mood and Imperative Mood. These three Mood types are distinguished by the order or existence of Subject and Finite, i.e., Declarative – Subject ^ Finite, Interrogative – Finite ^ Subject, and Imperative – No Subject or Finite. As to Polarity and Modality, the former refers to the two poles of positive and negative whereas the latter indicates an intermediate possibility between yes and no. In Halliday's words, modality is 'varying degrees of polarity, different ways of construing the semantic space between the positive and negative poles' (2014: 692).

Different from Halliday (2004: 10) who regards clause as the 'central processing unit in lexicogrammar', Martin and White (2005) look at interpersonal meanings from a lexis-based perspective. Halliday (1994, 2004) treats grammar as if it has a linear compositional rank with clause being at the top rank followed by group / phrase, and then word and morpheme, but he also states the fact that the major constituent of a

clause is either a phrase or a word group; and he also clarifies that interpersonal meanings tend to be 'organized in more fluid patterns, often in that intermediate space where grammar and lexis merge' (Halliday, 2013: 32). Martin and White (2005), however, explore interpersonal meanings through lexical resources in a text where speakers / writers present their own subjectivities such as emotions, feelings, attitudes and stance towards people and the world around them. These interpersonal meanings Martin and White (2005) refer to concern people's emotional feelings (like / dislike), attitudes towards human behaviour (clever / stupid) or things and natural phenomenon (cute / spectacular), as well as associations with different dialogic voices. These lexis-oriented appraisal resources can be categorized broadly into separate groups to represent different interpersonal functions.

2.4.1 Forms of evaluative language

As discussed above, writers/speakers construct interpersonal meanings to enact social relationships; in doing so, they share their opinions, values and emotions for alignment and rapport with their respondents. This kind of subjective information coded in the communicative texts are evaluative stance or appraisal language that has become a significant domain in the study of interpersonal meanings. The analysis of evaluative language can be very challenging as it is not constrained to a specific set of language forms – they can be embedded in any grammatical or lexical range of expressions; in other words, they are irrespective of any grammatical or lexical boundaries (Martin & White, 2005; Martin & Rose, 2007; Hunston, 2011). For instance, evaluative language can be writer/speaker's evaluations on entities which are usually expressed using nominal phrases such as *original text*, and values on propositions which are often delivered through clauses (Thompson & Hunston, 2000). This idea combines how Martin and White (2005) look at interpersonal meanings through lexis-based perspective with Halliday's postulation that meanings are realised by clauses (Halliday, 1994). Therefore, a form-based dimension on the study of evaluative language can be further divided into lexis-based and clause-based perspectives.

Evaluative meaning can be applied explicitly through lexical items, and these specific evaluative signals are especially common in interpersonal registers, spoken registers in particular as in conversations and classroom teaching (Biber, 2006). From the form-based perspective of studying the evaluative language, according to Hunston (2011:13), evaluative meanings can be delivered through various lexical items, such as ‘nouns (e.g., *success*), verbs (e.g., *fail*), adjectives (e.g., *excellent*) and adverbs (e.g., *unfortunately*)’; it can also be expressed by phrases – ‘what Sinclair has noted that *my cup of tea* is evaluative even though the individual words *cup* and *tea* are not’. Moreover, Biber and Zhang (2018) have noted that attitudinal meanings can also be expressed by the use of implicit lexical connotations of words and phrases. Hunston (1994), on the other hand, further points out that evaluative language can be indirect using implicit grammatical means such as conjunction, subordination, repetition, contrast, and so on; and some grammatical patterns can be very useful for the understanding of evaluative language (Hunston, 2011; Hunston & Su, 2019). Biber (2006: 133), however, looks into lexis using corpus approaches to language analysis; ‘the most frequent recurring sequences of words’ are titled as lexical bundles which are a relatively loose string of words, not in complete grammatical structures but function as a unit in discourse; according to Biber, lexical bundles must meet two criteria: one of frequency per million words and a second of dispersion across multiple texts. Lexical bundles can perform ‘referential and stance functions’ in academic lectures’ and they can also be used as ‘discourse organizers’ in the lecture discourse (Liu & Chen, 2020: 122). Biber (2006: 139) singles out a particular group among lexical bundles, known as stance bundles which specialize in expressing interpersonal meanings through attitudes or assessments of certainty towards actions and events. Word group is clearly defined in SFL as in the rank of linguistic unit, equivalent to phrase; a lexical bundle is a string of words used with a high frequency in corpus texts; stance bundles, by contrast, should be interpreted from a semantic point of view as it is closely related to interpersonal functions of lexis.

According to Biber, Conrad and Leech (2002: 23), 'nouns and verbs are clearly the most common types of words overall'. One special class of common nouns can be 'package nouns' which are often followed by *of*-phrases referring to units (*groups of students*), quantities (*a bit of time* and *a piece of paper*) and species (*two types of bacteria*) (p. 60). These package nouns are also vague expressions (Channell, 1994) indicating speakers' attitudes to and assertions of the quantification information provided in the clause. Quantifiers such as '*all, both, each, every, many, some, any and a few*' (p. 74-75) also contain similar kind of vagueness relating to quantification information without precise information of details. Personal pronouns appear frequently in conversations, such as first-person pronouns *I* and *we*, and the second-person pronoun *you* (Biber et al., 2002); pronouns such as 1st person subject, 1st person object and 1st person possessive pronoun are often related to speaker / writer stance (Biber, 2006: 90). Biber (2006: 90) also lists out five frequently-used stance structures concerning pronouns: (1) 1st person pronoun + stance verb (such as *think, know* and *believe*) + *that*-clause; (2) 1st person pronoun + stance adjective (such as *certain* and *sure*) + *that*-clause; (3) Stance adjective (such as *good* and *interesting*) + *me* + *to*-clause; (4) Stance adjective or stance verb + *me* + complement clauses; and (5) *Our* + stance noun (such as *ability* and *success*) + *to*-clause. Also, compound pronouns beginning with '*every, some, any, and no*' are also closely related to attitudes of vagueness and assertions coded in the clause, words such as *everyone, something, anybody* and *nobody* (Biber et al., 2002: 100).

Regarding verbs, Biber, Conrad and Leech (2002: 110) listed the twelve most common lexical verbs in English: activity verbs – *get, go, make, come, take, give* and mental verbs – *know, think, see, want, mean*; and the word *say* is the most common lexical verb overall. Mental verbs often appear in *that*-clause functioning as reporting verbs expressing personal thoughts and attitudes of certainty (p. 315), such as *I think, I know*, and *I guess*. Other verbs such as semi-modals and modal verbs can also carry evaluative meanings. For instance, '*dare, need, had better, would rather, have to/have got to, be able to, be going to, be bound to, and want*' can be used to express

willingness or obligation; these words are marginalized from general words as they are often used to realize modal functions (Palmer, 1990: 25). Modal verbs can also work as function words indicating a semantic range of vagueness and indeterminacy in the English language (Palmer, 1990). 'There are nine central modal verbs in English: *can, could, may, might, must, should, will, would, and shall*'; each of the modal verbs can deliver two different types of meanings, i.e., information concerning personal opinions and logical reasoning or necessity (Biber et al., 2002: 174 & 176). Halliday (2014) goes on to interpret modality multidimensionally as being both objective (e.g., to objectify an evaluation) and subjective (e.g., to make a personal judgement), as well as being either explicit or implicit.

Adjectives have often been used to express evaluative meanings, (Conrad and Biber 2000; Martin and White, 2005; Hunston, 2011), working as either a descriptor or a classifier to illustrate a quality of a referent (Biber et al., 2002). According to Biber, Conrad and Leech (2002), descriptors of adjectives are commonly used to describe 'colour, size and weight, chronology and age, emotion, and other characteristics' and these adjectives can be inflected to comparatives and superlatives to demonstrate gradable features of a quality (p. 197). Some descriptors carry evaluative meanings such as 'judgments, emotions, and emphasis', for example, *good, bad, great and best* (p. 197). In comparison, classifiers specify or restrict a referent, usually the reference of a head noun; these adjectives can be 'relational (e.g., *additional, final*)', 'classificational (e.g., *average, chief*)', and 'restrictive (e.g., *particular, general*)' (p. 197). Some classifiers point out the subject area of noun, such as '*chemical, environmental, industrial, legal, mental, oral, phonetic, political and social*' (p. 197). Different from descriptors, classifiers concern no gradability, for example, 'the word absolute is not gradable – something cannot be more or less absolute' and 'alive is not a gradable adjective since something is either alive or dead' (Biber et al., 2002: 188-189). According to Hunston and Su (2019: 574), most adjectives convey evaluative meanings, words such as '*efficient, excellent and effective*'. Englebretson (2007) regards adjectives as illustrative and highlighting that can conceptualize evaluation or

stance in both speech and writing. Hunston and Francis (2000: 189-190) extract two specific patterns using evaluative adjectives: (1) there be + an indefinite pronoun (such as *anything* and *nothing*) + an evaluative adjective + a prepositional phrase – this structure is strongly associated with evaluation that always makes an adjective evaluative; and (2) it + be / other link verb + an adjective or adjective group + *that*-clause / *to*-infinitive clause – the evaluative meanings in this structure often relate to the scale of ‘*good/bad, easy/difficult, probable/impossible* and so on’.

Adverbs also plays a significant role in evaluative language that can be used to describe circumstances of ‘actions, processes, and states’ in relation to information of time, place and manner (Biber et al., 2002: 23). The combinations of adverb + adjective is prevalent in both conversation registers and academic pros; in conversations, adverbs such as ‘*really, too, pretty, quite, or very*’ are often used to describe the degree of adjectives such as ‘*bad, good, nice or quick*’; in academic pros, however, adverbs such as ‘*more, quite or very*’ are most common and often used to ‘express specific qualities rather than general value judgement’, such as to describe statistical measurements as quite high (Biber et al., 2002: 205). These adverbs are modifiers at word or phrasal level but can also be titled as adverbials at clause level, i.e., to specify circumstances of a clause or to ‘express a speaker's feelings, evaluation, or comments on what the clause is about’ (Biber et al., 2002: 354). Biber and Finegan (1988: 7) investigate a large number of corpus texts and conclude six groups of lexical adverbials that can indicate overt attitudes in writer and speaker’s discourse: ‘(1) honestly adverbials (*truth, truthful, and truthfully*) – expressing manner of speaking, (2) generally adverbials (*brief and briefly*) – expressing generation and usuality, (3) surely adverbials (*certain and certainly*) – expressing certainty, (4) actually adverbials (*factually and fact*)– expressing greater certainty, (5) maybe adverbials (*maybe and perhaps*)– expressing likelihood and hedging, and (6) amazingly adverbials (*happily and luckily*)– attitudes in terms of content’.

2.4.2 Frameworks focusing on functions of evaluative language

2.4.2.1 *The system of Modality*

Halliday explores modality at such a great depth that he divides it into two major groups: Modalisation and Modulation. The former concerns propositions which encompass probability (for example, *certainly* and *possibly*) and usuality (for example, *always* and *usually*); while the latter is associated with propositions, characterised by obligation and inclination (such as *supposed to* and *willing to*). In brief, Halliday (2014: 144) regards modality as 'likely or unlikely (if a proposition), desirable or undesirable (if a proposal)'. As mentioned above, these meanings of the speech functions can be analysed from a grammatical perspective. According to Halliday (1994: 89), Modalisation (probability and usuality) can be delivered in three different ways with grammar: (1) by a finite modal operator, as *might be* in *There might be something wrong with the screen*. (2) modulised by a modal Adjunct of either probability or usuality, such as *probably* in *There is probably something wrong with the screen*; *usually* in *The screen usually works well*. (3) by both (1) and (2) together: for example, *Make sure the screen will always work*. Modulation (obligation and inclination), in a similar way, can also be realised in three different ways: (1) as with modalisation, by a finite modal operator, see *should be* in *I should turn on the screen first*. or *will* in *I will turn on the screen first*. (2) by an expansion of a Predicator, typically through a passive verb – *The screen is supposed to be turned on first*. or an adjective – *I am happy to turn this on*. (3) by both together as well: *I should be able to turn the screen on*. In comparison with Modality, however, Polarity is a precise choice either being positive or negative without any intermediate degrees which is specified by a Finite verbal operator such as *is / isn't* or *do / don't* – *The screen is working*. / *The screen is not working*.

2.4.2.2 *The system of Evaluation*

The system of Evaluation introduced here is proposed by Thompson and Hunston (2000). The evaluation system they refer to has three functions: (1) expressing opinion,

(2) maintaining relationships, and (3) organizing the discourse. For the first function in this evaluation system, the act of evaluation not only concerns individual opinions but also reflects the value system of a community, which can be regarded as a part of a social ideology. The second function of evaluation encompasses three ways of building up relationships: manipulation (to persuade readers to agree with the writer or the underlying ideology), hedging (a compromising way to be polite) and politeness (to achieve a positive reader-writer relationship). These first two functions describe extralinguistic situations while the third function concerns only the texts itself where evaluation takes the role of organizing the discourse as well as indicating the key point of the discourse. Thompson and Hunston (2000) identify evaluations from both conceptual and linguistic perspectives. Conceptually, there are three typical characteristics of evaluation they have proposed: contrasting to a norm, reflecting people's subjective reaction of an event and being value-laden in terms of goal-achievement. Linguistically, on the other hand, they analyse evaluation through three aspects: lexis, grammar and text. In addition to the identification of evaluation, they also discuss some factors in relation to these evaluations which they title as the four parameters of evaluation: (1) good-bad or positive-negative, (2) certainty, (3) expectedness, and (4) importance or relevance.

2.4.2.3 Taking a stance

The notion of stance can be broad, covering not only personal evaluations, but also community values and sociocultural backgrounds. Englebretson (2007) points out five conceptual principles in understanding a stance: (1) three levels of stancetaking – a. physical action, b. personal attitude/belief/evaluation and c. social morality; (2) stance should be perceivable for others to interpret and inspect; (3) stance is constructed among people through their interactions and collaborations with each other involving different stances; (4) stance reflects sociocultural frameworks or physical contexts; (5) stance can be consequential, leading a consequence for the participants. Du Bois (2007: 139) defines stance as a public social act, and suggests a toolkit for stance

analysis – the stance triangle. The three nodes of the stance triangle would be: the first subject, the second subject and the shared stance object. Taking a dialogue as an example – Teacher: *Thanks for your translation. The first one is more colloquial and the second one is more formal and is more within the setting.* – Student: *Ok.* The participants teacher and student are the first and the second subject while student's translation is the shared stance object being evaluated. For Du Bois, each single stance act combines three informative elements: (1) evaluation of an object, (2) positioning of a subject, and (3) aligning with other subjects. Following the dialogue example above, the Predicator like functions for evaluation and positioning for both Subject A and B, and the word *too* in B's stance serves to align with the view of A.

The term Stance was also introduced in Hyland (2005)'s analysis model in academic writing, regarding Stance and Engagement as two significant sides of reader-writer interaction. For Hyland, writers maintain their stance by expressing their attitudinal feelings such as judgments, opinions and commitments in their writing. These evaluative resources, on the other hand, attract and resonate with readers, also working as Engagement to connect to others rather than just presenting the writers themselves. In Hyland's model, there are four main elements for Stance and five major elements for Engagement. The four elements for Stance are: (1) Hedge, (2) Booster, (3) Attitude markers, and (4) Self-mention. Hedge (perhaps / possible) allows writers to be modest and avoid complete commitments as well as to open up a discursive space for arguments. Unlike Hedges, writers use Boosters to express certainty so as to build up interpersonal solidarity with their readers, words such as *of course* and *obviously*. Attitude markers, as the name implies, are the words related to writers' attitudes. These markers can be verbs such as *love* and *hate*, adverbs such as *luckily* and *sadly*, or adjectives like *smart* and *stupid*. Self-mention relates to first person pronouns and possessive adjectives where addressors project themselves. The five elements for Engagement are: (1) Reader pronouns (*you/your/inclusive we*), (2) Directives, where addressors request receivers to, for example, *imagine* or *consider*, (3) Questions, when addressors engage receivers with a question, (4) Shared

knowledge – knowledge that receivers are familiar or highly likely to accept, and (5) personal asides, adding on a comment in the middle of an argument to create an active dialogic atmosphere.

2.4.2.4 Comparisons of the introductory frameworks discussed above

Although Halliday discussed modality in great depth within the interpersonal metafunction, he did not attach it to evaluative meanings like the other frameworks introduced above. These scholars have been using different frameworks to analyse various aspects of evaluative meanings in respect to the interpersonal system. As Stubbs (1996) notes modality is not just a category of modal verbs; it should contain all kinds of wordings that speaker/writer could use to modulate their likes and dislikes. Taking an example from above: *There might be something wrong with the screen*. This statement can simply be regarded as a piece of information given by a teacher. However, it can also be seen as an evaluation coloured with an attitude of the addressor. The modal operator *might* indicates a probability that there could be something wrong with the screen which is also an evaluative opinion expressed by the teacher speaker.

All of the frameworks introduced above are related to personal assessment or evaluation in discourse. The system of Evaluation proposed by Thompson and Hunston (2000) and the system of Stance and Engagement devised by Hyland (2005) are both based on written language, so as to focus on reader/writer relationship. By comparison, Thompson and Hunston (2000) emphasize the functions of evaluation in not only individual opinions but also the value systems of a community. They access evaluation in discourse from lexical items to text as a whole, but with consideration of extralinguistic conditions. Hyland (2005), however, tends to adopt a more form-focused approach and identifies the read/writer relationship from linguistic choices of evaluative feelings. Compared with the systems just mentioned, stance-taking raised by Englebretson (2007) and Du Bois (2007), however, is regarded as an active process

of communication for both speakers and writers. Englebretson (2007) even insists that stancetaking is an everyday act, which can be delivered by not only personal opinions but also physical actions. For Du Bois, every stance contains at least three different aspects: evaluation, positioning and alignment. Even though these aspects have clear boundaries between each other and can present different aspects of a same stance, further clarification is needed on how to construe and further divide the meanings of each aspect.

2.4.3 The APPRAISAL System

The section above introduces some different approaches that play an important role in addressing evaluative language. Thompson and Hunston (2000) illustrate evaluation from both conceptual and linguistic perspectives in relation to its functions of expressing individual opinions and values of a community. The concept of Stance is also prevalent in the study of evaluative language as it has been discussed with regards to different conceptual meanings in diverse contexts, such as the context of academic writing in Hyland (2005)'s analysis. The APPRAISAL system, in contrast, is a comprehensive theoretical framework that can be used to 'systematize a varied set of linguistic resources that speakers and writers use to negotiate evaluations with their addressees and to construct solidarity around shared values' (Thompson, 2014a: 80). The linguistic resources of APPRAISAL are words and phrases having a stance, technically stance chunks in some cases similar to stance bundles in Biber (2006)'s corpus analysis. As mentioned earlier, evaluative language conveys shared opinions and emotions to construe alignment between writers/speakers and their respondents. The term 'solidarity' in APPRAISAL is related to not just good/bad or agreement/disagreement between different individuals or texts as many of the approaches above would aim at, but also to embrace diverse viewpoints so as to enhance understanding and maintain relationships (Martin and White, 2005).

2.4.3.1 The three domains of APPRAISAL

As mentioned earlier, writers / speakers use evaluative language to signal their attitudes, which can be shown directly or indirectly in discourse. Martin and White (2005) divide general attitudes into two groups: inscribed attitude and invoked attitude. The former expresses attitude directly or explicitly, while the latter delivers attitude indirectly or implicitly. Inscribed attitude identifies the polarity and gradability in the discourse where the values of these resources can be adjusted (Hood, 2010). For example, the inscribed attitude in *Something is wrong with the screen* can be modulated up by adding an adverb *terribly* – *Something is terribly wrong with the screen*. In order to understand these attitudes, Martin & White (2005) summarized a coherent framework to map out the stance and attitudes conveyed in the discourse, which is titled the system of APPRAISAL. There are three domains of the APPRAISAL theory (Martin & White, 2005): ATTITUDE, ENGAGEMENT and GRADUATION. The system of ATTITUDE concerns the feelings in the attitudes, focusing on the emotional reactions, judgments of behaviours and construction of valuations. The system of ENGAGEMENT tracks the sources of our attitudes, while GRADUATION, the last system, deals with the scale and grading of evaluative meanings.

Table 2-2 An overview of the APPRAISAL system (Martin & White, 2005)

ATTITUDE	AFFECT	INCLINATION	
		HAPPINESS	
		SECURITY	
		SATISFACTION	
	JUDGEMENT	SOCIAL SANCTION	VERACITY
			PROPRIETY
		SOCIAL ESTEEM	NORMALITY
			CAPACITY
			TENACITY
	APPRECIATION	REACTION	IMPACT
			QUALITY
		COMPOSITION	COMPLEXITY
			BALANCE
VALUATION			
ENGAGEMENT	EXPAND	ENTERTAIN	ENTERTAIN

		ATTRIBUTE	ACKNOWLEDGE
			DISTANCE
CONTRACT		DISCLAIM	COUNTER
			DENY
		PROCLAIM	CONCUR
			PRONOUNCE
			ENDORSE
FORCE	INTENSIFICATION	PROCESS	
		QUALITY	
	QUANTIFICATION	EXTENT	
		MASS	
		NUMBER	
		FOCUS	
GRADUATION			

ATTITUDE

The first domain of APPRAISAL is ATTITUDE, which deals with attitudinal meanings in the discourse that can be divided into three subsystems: AFFECT, JUDGEEMENT and APPRECIATION. AFFECT reflects positive and negative feelings within the discourse and Halliday (1994) regards it as an affective mental process. It can also function as a device to activate the evaluative stance of the others which might or might not agree with the voice of the speaker; therefore, it influences the alignment and rapport between different speakers. The AFFECT emotion revealed from the grammar can be related to quality, process and comment in this subsystem which can be classified into four categories: INCLINATION, HAPPINESS, SECURITY and SATISFACTION. INCLINATION includes positive meanings in relation to desire and negative meanings concerning fear. HAPPINESS can be positive feelings of cheer and affection and negative feelings of misery and antipathy. SECURITY concerns feelings such as disquiet and surprise as well as confidence and trust. SATISFACTION, the last category in AFFECT is a mixture feeling of either ennui and displeasure or interest and pleasure (Martin & White, 2005: 48-51). JUDGEEMENT is formed according to evaluations on human behaviour, which is concerned with social norms of what is right and what is wrong (Martin & White, 2005); this subsystem deals with 'social sanction' and 'social esteem', and lexicalized judgement is closely related to modality in MOOD (Halliday 1994). Martin and White

(2005: 52) further divided these two groups and clarified their evaluative meanings: SOCIAL SANCTION – VERACITY ('how truthful someone is') and PROPRIETY ('how ethical someone is') and SOCIAL ESTEEM – NORMALITY ('how unusual someone is'), CAPACITY ('how capable they are') and TENACITY ('how resolute they are'). APPRECIATION constructs our evaluation of 'natural phenomena, and semiosis (as either product or process)' connecting to aesthetics (Martin & White, 2005: 36). According to Martin and White (2005), JUDGEMENT and APPRECIATION can be seen as institutionalized feelings which not only refer to common sense but are also linked to shared community values. APPRECIATION can be evaluation on anything but human beings, which is what differs from JUDGEMENT. The three categories of APPRECIATION are 1) REACTION comprises two subcategories: IMPACT and QUALITY – human's reaction to things and phenomena in terms of how the impact and quality of the entity could grab people's attention; 2) COMPOSITION contains COMPLEXITY and BALANCE – human's opinion on the complexity of the compositions of things and phenomena and also how the composition comes together; 3) VALUATION – human's evaluation of the value of the things and phenomena.

ENGAGEMENT

According to Martin and White (2005: 36), the system of ENGAGEMENT includes resources such as projection, modality, polarity, concession and various comment adverbials that function to underpin the views and values of the speaker / writer – by 'quoting or reporting, acknowledging a possibility, denying, countering, affirming and so on.' ENGAGEMENT, being the second domain of APPRAISAL, can be presented in two ways – monogloss and heterogloss (Martin & White, 2005). By definition, monogloss means there is no dialogic resources for negotiation, whereas heterogloss indicates a dialogic expectation. Heterogloss can be divided into two broad categories: 'EXPAND – dialogical expansion' and 'CONTRACT – dialogical contraction'. The former invites dialogic alternatives while the latter allows for less chance. EXPAND can be diversified by ENTERTAIN, which represents individual subjectivity and ATTRIBUTE with an indication of an external voice. According to Martin and White (2005: 98), ENTERTAIN represents a personal proposition having a range of possible contingencies so as to entertain

dialogic alternatives; in other words, these propositions indicate an internal subjectivity. ATTRIBUTE, in comparison with ENTERTAIN, foregrounds subjectivity from an external voice (Martin & White, 2005: 98), also being contingent for allowing alternative possibilities. ATTRIBUTE can then be further divided into ACKNOWLEDGE and DISTANCE, with the former engaging interactively with a neutral voice and position whereas the latter explicitly separating the internal authorial voice from external cited voices using typically *claim* as a reporting word (Martin & White, 2005:112-113). CONTRACT is realised by DISCLAIM and PROCLAIM; these two subsystems rule out alternative voices rather than opening up a dialogical space. DISCLAIM is to express either a rejection using DENY devices or a contrary position using COUNTER. PROCLAIM, however, is to make an assertion that one proposition is being highly warrantable therefore it must be agreed or accepted (Martin & White, 2005: 98), including subcategories such as CONCUR (*'of course, obviously'*), PRONOUNCE (*'I contend, there can be no doubt that...'*) and ENDORSE (*'X has demonstrated that ...; As X has shown ... etc.'*).

GRADUATION

The last domain of APPRAISAL is GRADUATION in this current study. Martin & White (2005) refer to the semantics of GRADUATION as the central to the APPRAISAL system, since it 'deals with the way in which the speaker strengthens or weakens what he says' (Banks 2019: 89). There are two dimensions of GRADUATION: FORCE and FOCUS. FORCE intensifies process, quality and modality attitudinally, in some cases, quantifies an entity (Martin and White, 2005; Hood, 2010). FOCUS, on the other hand, adjusts the sharpness of categorical boundaries. As to FORCE, it can be assessed based on different degrees of intensity and amount. There are three modes of intensification in FORCE: Isolating, Infusion and Repetition. 'Isolating' is realised by an individual item in the discourse which can function solely to set the intensity. However, if there is only one aspect of the individual item conveying the intensity (Martin & White, 2005); the item in this context will be assigned to 'Infusion'. In this case, we can display a sequence of semantically related terms which can express different degrees of intensity. It is obvious that 'Repetition' intensifies the degree by repeating, either the same item or

a list of synonyms. Assessments of amount, however, as the name indicates, relate to features of an entity rather than to qualities or processes, such as size, weight, distribution and proximity. FOCUS can also be called prototypicality which belongs to a particular category with a clear boundary, however, the margins of these boundaries can be softened or sharpened according to different semantic conditions. Since both FORCE and FOCUS can be used to modulate the scale of evaluative meanings, with the former concerning intensity and amount and the latter relating to the sharpness of a categorisation, they can both be used to express gradable features of the evaluative language in use.

The subsystems of FORCE can be further divided into two major categories: INTENSIFICATION and QUANTIFICATION. According to Martin and White (2005: 140-141), INTENSIFICATION refers to 1) the degree of some quality, 2) the modulation of a verbal process or 3) modalities of likelihood, usuality, inclination and obligation. QUANTIFICATION is then in relation to evaluative language that can be measured such as 1) number for a distance, and 2) mass of an entity as in size, weight, distribution and proximity. INTENSIFICATION includes QUALITY and PROCESS. The former relates to evaluative language items containing gradable degrees of a quality, such as *quite notorious* and *a little bit difficult*; the latter concerns the scaling of a verbal process such as *go faster* and *say it clearly*. There are three main categories within QUANTIFICATION: NUMBER, MASS and EXTENT. NUMBER covers language items quantifies an entity such as *many*, *some* and *a lot of*. MASS is associated with the presence of the entity such as appearance of weight and size (*huge arcades* and *little book*). EXTENT relates to either the proximity of time and space (*contemporary* or *ancient*) or the distribution of time and space (*global* or *local*, *sometimes* or *all day*). According to Martin and White (2005), lexical intensification and quantification can be both attitudinal and non-attitudinal. However, Hood (2004) argues that even if GRADUATION can be used to express objective meanings, such as factual information of quantity and location, the meaning can still be expressed incorporating a personal tone. GRADUATION devices, therefore, can be used to describe these objective and

factual information where the evaluative meanings can also be coded in these graduation expressions.

2.4.3.2 Critique on the APPRAISAL framework

According to Martin and White (2005), the appraisal resource is concerned with how writers / speakers adopt stance in the texts they present (in writing or speaking), or in their communication with other people. The stances they take signal their attitudes and decide their evaluation towards people, events or any other entity. Thompson (2014b: 49) indicates that one utterance can have different layers of evaluative meanings, with each layer taking a specific role to interact with other layers, and all of these different layers work together to form the appraisal system of an utterance – this linguistic phenomenon is proposed as the ‘Russian doll’ dilemma. Also, using APPRAISAL to analyse evaluative meanings should also consider different viewpoints or positions of voicing, such as evaluations from personal viewpoints or from official and authorial texts, and evaluations that are discipline-oriented which might attract scholarly attention or are discourse oriented that focuses on the linguistic features of the discourse itself (Myskow, 2018b). Furthermore, Coffin and O’Halloran (2006) explain that the APPRAISAL framework can capture not only overt evaluative meanings but also covert / indirect meanings of evaluation. However, they also point out that the APPRAISAL analysis is only carried out by the analyst whose attitude may not resemble that of every reader, even target readers. The APPRAISAL analysis must therefore consider diverse stance and ‘be sensitive to the potential for different readings or ‘hearings’ of attitudinal meanings’ (Eggins & Slade, 1997: 126). Hyland (2005) also argues that the appraisal resources Martin and White refer to can be further explored in terms of particular registers, and it is difficult to decide the effectiveness of conflating core semantic features in a given context using APPRAISAL. Therefore, according to Bednarek (2009: 167), appraisal analysis should take into consideration both ‘the type of lexis used’ and the ‘the entity that is evaluated’ to classify various attitudinal recourses. Concerning linguistic features, Márquez (2017)

suggests that the APPRAISAL approach is lexically based as opposed to targeted towards broader grammatical resources such as syntactic values and rhetoric resources.

Concerning the system of ATTITUDE, Hyland (2005: 174) writes that the subsystems of AFFECT, JUDGEMENT, and APPRECIATION are roughly equivalent to the definitions of emotion, moral assessments, and aesthetic values respectively. As Hunston and Su (2019) point out 'Evaluation' can refer to any attitude towards an entity, such as person, object, proposition, or situation. They say there must be a cause or a target for any forms of evaluation except the expression of affect. Affect, in their opinion, is a personal emotion, not an evaluation of a particular entity. However, in Márquez (2017)'s study, evidence shows that AFFECT and JUDGEMENT can interrelate with each other, in which AFFECT works as a graduation tool to convey meanings of JUDGEMENT. This can be seen as a response to Thompson (2014b)'s 'Russian doll' dilemma where AFFECT and JUDGEMENT serve as different layers of the same utterance. As to ENGAGEMENT, Huan (2015) considers APPRAISAL research as a static investigation into personal attitudinal feelings in general, with one exception being the ENGAGEMENT resource which can be seen as a dynamic process highlighting meaning negotiation between participants. Hyland (2005) emphasizes the importance of engagement as well and regards it as the tool for alignment where writers can acknowledge and connect to others. As to the system of GRADUATION, Hyland (2005) explains that the APPRAISAL framework can be used to broadly characterizes people's attitudes and how these attitudinal meanings are graded for intensity.

In terms of written language, APPRAISAL can be adopted as an analytical tool to explain how writers construct their evaluative stance towards knowledge and what strategies they use to form different generic structures and disciplinary contexts (Hood, 2010). As to spoken language, Page (2003) indicates that APPRAISAL analysis emphasizes meanings instead of structural features of a language with an examination of the speaker's opinion and argues that such subjectivity cannot be positioned without considering contextual factors. Thus, evaluation, in Page's words (2003: 212), should

be a reflection of 'a dynamic inter-relationship between speaker/writer and audience'. Considering audience, White (2020: 17) proposes another sub-set for the APPRAISAL framework - dialogistic positioning for construing the putative audience and creating what he refers to as writer/reader or speaker/addressee likemindedness. By dialogistic positioning, White suggests that writers or speakers should first presuppose a given proposition even if it is entirely monoglossic and categorically asserted without any supporting justifications. The expected likemindedness occurs when the participants make use of adjuncts such as 'of course', 'obviously' and 'admittedly'.

2.4.3.3 Using APPRAISAL in ELF academic lectures

According to the system of APPRAISAL (Martin & White, 2005), teachers can express their evaluations through inscribed attitudes or invoked attitudes, and such attitude signals in the classroom discourse reflect teacher's individual understanding and opinions about the knowledge itself and their pedagogical goals, as well as their valuations formalized in the context of their institutions. As indicated earlier in the literature review, ATTITUDE, ENGAGEMENT and GRADUATION are three major systems in APPRAISAL. The first system can be adopted to map out feelings from a semantic perspective and the second one explores the dialogistic positioning of attitudes with the last system defining the intensity or amount of all the appraisal resources. Teacher's evaluative resources are worth researching, because teachers are expected to deal with complex emotional classroom transactions (Schutz & Lee, 2014). Firstly, when teachers interact with students in class, their emotional dispositions can be analysed through the system of ATTITUDE. Teacher's attitude signals, whether they are happy or angry, confident or anxious, interested or bored appear in the classroom discourse and will certainly have influence on their students. Taking JUDGEMENT as an example, through the analysis of modality in educational discourse, a teacher's judgement on his students can be observed. The judgement itself, as well as the linguistic choice to realize the judgement can have intense impact on students. As to the system of ENGAGEMENT, the voice and word choice of the teacher will act

semantically to encourage / discourage students' interests and participation. For example, different reporting verbs will function as engagement signals to invoke students' attention. In order to engage the students and maintain a positive institutional role, the classroom discourse is preferred to be both instructional and engaging. The grading techniques of GRADUATION, above all, can help teachers to modulate the appraisal meanings concerning both systems of ATTITUDE and ENGAGEMENT according to different expectations of interactions. For example, if we use GRADUATION as a semantic tool to measure the evaluative meanings lying in the discourse, we can then grade the degree of each category under ATTITUDE and ENGAGEMENT strategically.

The evaluative language this study refers to are appraisal signals used in the context of ELF academic lectures, which is, therefore, the situation of context on which this current study will focus (Edwards & Westgate, 1994; Van Dijk, 2009). Therefore, the classroom context will be carefully considered when situating APPRAISAL in the lecture discourse for data analysis, for instance, the teacher's use of emphasis in speech, elicitation for student engagement, or correction of student response (Walsh, 2003). As discussed in the introductory chapter, the ELF academic context highlights both disciplinary-specific and ELF-specific discourse features of the evaluative language used in ELF classrooms. Thus, the verbal context or the co-text is to identify how ELF lecturers generate their evaluative language using academic ELF for their disciplinary content teaching where clarity and effectiveness should be highly valued in the ELF communication (Mauranen, 2003; Mauranen et al., 2010a). These expressions embedded in the lecture discourse can be regarded as discourse signals to an understanding of a lecturer's attitude and stance in the verbal context or the given situations of the academic lectures, discourse signals such as attitude signals, engagement signals or graduation signals related to the modulation of the evaluative meanings that the lecturer intended. These appraisal expressions are mechanisms of the teacher's spoken language, the use of which directly influences the classroom interactions and thereby the overall classroom context as well as the effectiveness of the classroom teaching activities.

2.4.3.4 Application of APPRAISAL to empirical studies

The APPRAISAL analysis has been widely adopted as the theoretical framework in previous studies on various discourses in different domains such as advertising, medical discourse, media and academic settings. For instance, Beangstrom and Adendorff (2013) adopted this theory to analyse the language of real estate advertisements, and they indicate that there may be no JUDGEMENT evaluation in an advertisement and that this is a possible means of projecting professional distance between the agent and the buyers, and also keeps the advertisements more factual. Gallardo and Ferrari (2010), from a different angle, conducted an APPRAISAL analysis on doctors' medical discourse of how they view their own health and professional practice. They proved that APPRAISAL analysis can be a useful tool to determine how a certain professional group perceives their profession. For discourse in the media, Chen (2014) utilized ATTITUDE and ENGAGEMENT in APPRAISAL to investigate how linguistic resources mediate attitudinal stance in the press. In the educational domain, Morton and Llinares (2018) held a four-year longitudinal study to explore how L2 students make use of evaluative language to talk and write in their history class, for which they needed to take a stance and evaluate people, actions, events and processes.

APPRAISAL analyses interpersonal meanings enacted in a text; therefore, it reveals the interactive nature of discourse in both written and spoken forms (Martin & Rose, 2007). Concerning the use of APPRAISAL on spoken language, Hood and Forey (2008) conducted an analytical research in call centres in the Philippines also using APPRAISAL analysis. One of their findings was those concessive contractors such as *just*, *already*, *once*, *yet* and *actually*, as well as moments of silence can manage the emotive intensity. This finding makes a straightforward contribution to the professional training of the industry. In another study carried out by Hood and Forey (2005), they explored the means by which speakers construe a relationship of solidarity or rapport with their audience at the initial stage of academic conferences. They employed the framework

of APPRAISAL to analyse their participants' attitudes while considering their use of gestures as a rhetorical strategy when they speak. Their study concludes that gestures play an important role in working together with language to ease tension in speaking for positive interpersonal relationships between speakers and their audience.

The system of ATTITUDE in APPRAISAL has aroused great scholarly interest. Liu (2013) analysed high- and low-rated English essays and found some patterns of differences and similarities in the use of evaluative language. She noticed that high-rated essays construct strong persuasion by successfully employing appraisal values to foreground authorial voice and position the reader. She also concludes that less AFFECT and JUDGEMENT means less personal emotion, and this can also be used to avoid direct ethical or moral evaluations. Hommerberg and Don (2015: 168) testified the validity and usefulness of the ATTITUDE system in analysing wine criticism and they adapted the original APPRECIATION subsystem to describe aesthetic delicacy of sensory perception. The original subsystems under APPRECIATION are REACTION, COMPOSITION and VALUATION; each of these three subsystems has been extended into more subcategories to cater for the highly field-specific texts of wine review. Their modified APPRECIATION contains: 1) REACTION to Quality (*'delicious, exquisite'*), Impact (*'stunning, uninspiring'*) and Association (*'sexy, charmless'*); 2) COMPOSITION in terms of Complexity (*'bouquet of road tar, blackberries, cassis'*), Balance (*'equilibrium'*), Intensity (*'explosive, superficial'*), Persistence (*'long finish, fades quickly in the finish'*), Maturity (*'ripe, closed'*); and 3) VALUATION of Uniqueness (*'original, unusual'*), Typicality (*'classic'*), Naturalness (*'13%+ natural alcohol'*), Dependability (*'consistently high quality'*), Affordability (*'value pick'*), Location (*'backwater appellation'*), Durability (*'ageworthy, shortlived'*), Potential to develop (*'compelling, potential'*) and Miscellaneous (*'challenging, vintage'*). The new APPRECIATION terms emerged in their study cover the evaluative language highly specific to winespeak, for instance, Maturity and Naturalness. They named one category as Underspecified (*'rich, pure, little depth and substance'*) to include the expressions that are not suitable to the subcategories they have identified. Hu and Choo (2016) analysed 84 teacher's evaluative reports and

examine how teachers from hard sciences and humanities use evaluative language in ATTITUDE to provide effective teacher feedback. They found that teachers from both hard and soft disciplines made similar use of evaluative language when giving positive or negative feedback concerning judgements of individual capacity and inclination, and aesthetic evaluations on things and phenomenon; but their language use when expressing affective meanings is significantly different as teachers in the hard sciences do not usually use expressions concerning their personal satisfaction in the feedback construction.

As to empirical studies concerning ENGAGEMENT, Huan (2015) held a corpus-based study on ENGAGEMENT patterns in relation to different social-cultural contexts in Chinese and Australian news reports. In Huan's study, dialogical expansion has been found in Chinese news sources when associated with ordinary citizens whereas dialogical contraction often exists in the elite sources. Australian journalists, however, would engage more with elite sources in terms of both expanding and contradicting. According to Huan, such ENGAGEMENT differences are due to the power relations between journalists and news sources in the different contexts of these two countries. With the system of ENGAGEMENT, Geng and Wharton (2019: 14) conducted a qualitative analysis of the use of evaluative language when writers integrate previous literature with their own research results and discussions in their academic writing. First, they discovered that writers often merge DISTANCE and PRONOUNCE when they have to disalign themselves with the literature but wish to align with their readers. Second, they also found a merger between ENDORSE and ENTERTAIN when writers agree with existing literature and would then discuss their findings in a dialogic expansive voice. Third, when writers use ACKNOWLEDGE to express a neutral positioning towards previous literature, they often adopt the devices of bare assertion or ENTERTAIN to clarify the connection between the literature and their own findings.

Previous empirical studies using APPRAISAL systems tend to engage GRADUATION as an additional device to help reinforce the ATTITUDE and ENGAGEMENT meanings (Hood &

Forey, 2005; Engelbrecht, 2020), with the former being the most favourable. Some other studies solely use the system of ATTITUDE (Hommerberg & Don, 2015; Hu & Choo, 2016; Vinagre & Esteban, 2018) or the system of ENGAGEMENT (Geng & Wharton, 2019) and rarely attach particular attention to the system of GRADUATION (Hood & Zhang, 2020). In the call-centre study mentioned in the above paragraph, Hood and Forey (2008: 395) used a combination of ATTITUDE and GRADUATION to analyse their spoken data. They made some adaptations of the original GRADUATION system and used it to track how the interactions were carried out with attitudes of differing degrees of explicitness and intensity. With QUANTIFICATION, they removed MASS with FREQUENCY, which includes phrases such as *every time* and *very often*; they also narrowed down the range of EXTENT to time rather than time and space. Additionally, they made some modifications to FOCUS which has been further divided into SPECIFICITY and FULFILMENT. The former emphasizes degrees of specific categorisations of an entity which echoes the original FOCUS whereas the latter contains two subgroups, 'the degree of fulfilment of a process (*trying to reach*)' and 'the degree of actualization of a proposition (*actually*)'. They concluded that concessive contractors such as '*just, already, once, yet and actually*' play a significant role in adjusting various degrees of intensified attitudes. McKinley (2018: 34) also states that GRADUATION is vital in raising interpersonal impact, including FORCE expressions such as '*even, not even, just, only, strongly, just because*'.

2.4.4 Understanding evaluative language in ELF academic lectures using a modified APPRAISAL

The interpretation of evaluative meanings using APPRAISAL can be subjective (Miller & Johnson, 2013); specific or frequently-used language patterns or lexis are worth-researching so that some clarifications on specific language forms can be attached to the evaluative language, especially when a particular context is involved. As reviewed at the beginning of this chapter, meanings are realised through the lexicogrammatical systems, and such realizations contribute to the interpersonal functions of the

language in use (Halliday & Hasan, 1976; Halliday, 1994). According to Biber (2006), nouns, adjectives and prepositions appear constantly in academic registers. As reviewed earlier about the forms of evaluative language (Section 2.4.1), first of all, quantifiers used in package nouns such as *'groups of students, a bit of time, two types of bacteria'* and compound pronouns *'everyone, something, anybody and nobody'* can be closely associated with vagueness and the assertiveness of a speaker's attitudes (Biber et al., 2002: 60; 100). As to verbs, reporting verbs such as *I think, I know, and I guess* and all of the semi-modals and modal verbs provide overt signals of evaluative meanings. Adjectives and adverbs are both commonly used as evaluative expressions, for instance for expressing an attitude towards a quality, a process or some particular circumstance. These lexical classifications can shape the evaluative meanings and help materialise the APPRAISAL system with appraisal expressions, especially those frequently used communicative common-core expressions. Hence, a form-based perspective of the APPRAISAL framework can enhance the understanding of using evaluative language.

APPRAISAL always possesses a semantic or rhetorical orientation in the analysis of evaluative meanings whereas Hyland's framework concentrates more on the grammatical and lexical mechanisms – therefore, these two major frameworks can be complementary in the study of evaluative language. As mentioned in the earlier sections of this chapter, Hyland (2005) investigates interaction from two major perspectives: Stance (Hedge, Booster, Attitude markers and Self-mention) and Engagement (Reader pronouns, Directives, Questions, Shared knowledge, and Personal asides). All of the resources in Stance except Attitudes markers together with all of the Engagement resources can all be included into the system of GRADUATION and ENGAGEMENT in APPRAISAL as they share their focus on attitudinal utterance and different degrees of value positions, specifically on how a stance is positioned so as to connect to a respondent. For example, Self-mention (Hyland, 2005) relates to the use of first-person pronouns and possessive adjectives, and Reader pronouns (Hyland, 2005) contain words such as *you, your*, and inclusive *we*; these lexical items are not specified

in APPRAISAL, but they are closely and explicitly related to attitudinal meanings. Also, Questions in Hyland's framework is a dialogic strategy to invite engagement; they can be clausal and lexical. Again, the function of questions as an evaluative / altitudinal unit is not included in the framework of APPRAISAL because its characteristic of being a lexis-based approach. Attitude markers, however, considers writer's affective attitudes, which could overlap with AFFECT in the system of ATTITUDE in APPRAISAL.

Two aspects need to be considered when using the system of ATTITUDE for the analysis of appraisal language in the lecture context: 1) the highlights of positive and negative evaluation according to various referents in the classroom context and 2) the classification of SOCIAL SANCTION and SOCIAL ESTEEM in the subsystem of JUDGEMENT. For the first aspect, as discussed above, teachers very often give out positive or negative evaluations in class, especially for making an evaluation on students' responses (Cullen, 2002; Hellermann, 2003; Weninger, 2020). Teachers' positive / negative attitudes in classrooms may be advantageous for their students but can also directly result in adverse effect. The system of ATTITUDE in APPRAISAL contains all of the attitudinal resources concerning positive / negative evaluations; this pole of being either positive or negative should be clearly identified taking into consideration evaluations in relation to different referents in the classroom interactions. As to the second aspect, JUDGEMENT focuses on people and human behaviour which can be further divided into SOCIAL SANCTION and SOCIAL ESTEEM. According to Martin and White (2005), SOCIAL SANCTION tackles serious problems that sometimes even concerns with regulations and law through which could result in penalties and punishments; it often appears in written language. SOCIAL ESTEEM is, however, associated with social conduct within some circles of shared networks such as family, friends and colleagues; it abounds in oral presentation (Eggins & Slade 1997; Martin & White, 2005). There is a resemblance between sub-categories of JUDGEMENT (Martin & White, 2005) and Halliday's (1994) system of Modality. Probability and Obligation in Modality are related to SOCIAL SANCTION whereas Usuality and Inclination relate to SOCIAL ESTEEM. However, Probability may consist of modal words such as *certainly, could, might, just* simply to indicate a

certain degree of truth or possibility, which may hardly concern violation of regulations or law. The categories of SOCIAL SANCTION and SOCIAL ESTEEM (Martin & White, 2005) should be removed as they may not be suitable for the analysis of lecture discourse.

According to Martin and White (2005), there are two major groups in ENGAGEMENT: Monoglossic which indicates no dialogistic recognition or involvement; Heteroglossic which, on the contrary, invites or require other voices. EXPAND and CONTRACT, therefore, be the subgroups of Heteroglossic alone. However, when Martin and White explain the concept of ENGAGEMENT, they quote Stubbs (1996: 197) that all utterances, no matter written or spoken, are all somehow coded with attitudinal meanings and stances of the writer/speaker. They explain that these attitudinal positions are not only self-expressive but also 'simultaneously invite others' (Martin & White, 2005: 95). However, the so-called Monoglossic is what they regard as bare assertions which is not supposed to involve other voices and viewpoints. Having the contrast of Monoglossic and Heteroglossic for the investigation of ENGAGEMENT meanings is not so convincing especially in the study of spoken language as Halliday (1985:46) describes that 'spontaneous conversation as the characteristic form of spoken language'. For instance, in classroom settings, Navaz completed his PhD thesis in 2012 on lecturer-student interaction in English-medium science lectures at a Sri Lankan university. He found that there was a clear lack of dialogic interactions in his observed lectures and the teaching delivery was both highly and mostly monologic. Since monoglossic is also coded with attitudinal meanings, classroom discourse, being an extended sample of spoken language (Fairclough, 1992: 3) should also contain a dialogic nature colored with a stance. Therefore, the grouping of Monoglossic and Heteroglossic can be removed according to the interactional features of lecture discourse.

As discussed earlier in this section, the use of personal pronouns and questions is closely associated with personal stance and dialogical engagement. Personal pronouns such as *I*, *we*, *you* are useful engagement devices in classroom

communication (Rounds, 1987; Young, 1990; Fortanet, 2004) and they appear frequently in lecture discourse (Morell, 2004), even though the first-person pronoun *I* may often have the connotation of distancing (Fortanet, 2004). Pronouns are key evaluative language for expressing personal viewpoints and this is particularly important in the classroom context as lecture discourse is regarded as being informative since teachers possess the dominant and authoritative role in the imparting of knowledge. Moreover, pronouns as engagement devices are coded with dialogic functions that could help establish solidarity with others (Hyland, 2005). Therefore, it is undeniable that the study of evaluative language in academic lectures should also consider the use of pronouns as they provide ample attitude resources for classroom communication (Biber, 2006). Questions, on the other hand, should really be analysed using syntactic approaches whereas APPRAISAL has been regarded as a lexis-based approach (Márquez, 2017). However, as evaluative language can be multitudinous without any restrictions to any particular language form (Martin & White, 2005; Hunston, 2011), the amendments to the theoretical framework should be encouraged to better understand the actual language use in a specific register (Hyland, 2005). The use of questions can be regarded as an effective dialogic strategy in academic lectures considering both forms and functions of its language use: 1) they are discourse markers that could work efficiently as elicitation markers in the lecture discourse for a communicative classroom context (Morell, 2004) and 2) they are dialogic devices that could express explicit engagement meanings (Hyland, 2005). These language features of pronouns and questions are closely related to the subsystem of EXPAND under the system of ENGAGEMENT in APPRAISAL, as EXPAND not only indicates an authorial voice but also opens up a dialogic space for alternative viewpoints.

When using GRADUATION to analyse the lecture discourse, three major dimensions of the evaluative language should be emphasized: 1) graduation expressions can be used to express evaluative meanings without being attached to expressions in ATTITUDE or ENGAGEMENT; 2) the gradability of evaluative meanings concerns all three APPRAISAL

systems; and 3) the evaluative language containing different layers of appraisal meanings is well worth researching. For the first dimension, graduation expressions are useful devices for the description of objective meanings, such as those relating to time and space or factual information concerning quantification; the vagueness and assertiveness embedded in the graduation choices also signal appraisal meanings in the evaluative language, therefore, GRADUATION alone can also enact an evaluation. For the second dimension, all the appraisal meanings can be graded; in other words, the intensity of feelings in the utterances (ATTITUDE), the degree of how much one party would allow other voices (ENGAGEMENT) and the assertion and vagueness coded in the evaluative meanings (GRADUATION) can all be analysed using GRADUATION as a measurement tool. The increase and decrease of an intensity and the sharpness of a semantic categorisation reveal gradable features of such appraisal language. For the third dimension, the three APPRAISAL systems and all the subsystems in the whole framework, i.e., each of the subsystems of ATTITUDE, ENGAGEMENT and GRADUATION can overlap with one another to contribute layers of evaluative meanings to one utterance, or even to one appraisal expression. This 'Russian doll' dilemma (Thompson, 2014b) of the appraisal expressions construes semantically complex attitudes and stances coded in the lecture discourse where one layer of evaluative meanings is laid over another.

2.4.5 Summary

The aim of this section was to illustrate the theoretical framework of this research – APPRAISAL. This part of the literature review began with an introduction of interpersonal meanings and some elaborations on forms of evaluative language. It then presented different frameworks focusing on functions of evaluative language, followed by a subsection comparing some strengths and weakness of these introductory frameworks. Whereafter, this section dived deep into the framework of APPRAISAL providing the basis for each system of this framework with some critique and empirical

studies. Finally, this section has concluded with some suggestions of modifying APPRAISAL in relation to specific features of lecture discourse.

2.5 Summary of the literature review

As stated in Chapter 1, this current research will adopt APPRAISAL as the theoretical framework to analyse the use of evaluative language in the lecture discourse of ELF academic lectures by lecturers having various L1 backgrounds. The research focus therefore covers three major topics concerning the following three major research questions:

RQ1: How are appraisal signals embedded in the lecture discourse of ELF academic lectures?

RQ2: What are the disciplinary-specific features of the appraisal signals in ELF academic lectures between soft sciences and hard sciences?

RQ3: What are the ELF-specific features of the appraisal signals in ELF academic lectures between lecturers of different L1 backgrounds?

Responding to the aim and research questions reviewed above, the literature review chapter has then been devised to explain simultaneously these three major topics: Section 2.2 Understanding lecture discourse, Section 2.3 Understanding academic ELF, and Section 2.4 Understanding interpersonal meanings using APPRAISAL. The first section engaged with fundamental theories in the domain of classroom discourse. This section first had a brief review on classroom context, including co-text of classroom discourse and context of situation within classroom interactions before addressing the importance of evaluative language in classroom communications. Subsequently, attentions have been paid specifically to the importance of academic lectures, mainly on linguistic forms and functions of lecture discourse such as discourse markers and metadiscourse, together with some empirical studies concerning these topics. To this end, the review turned to academic lectures of specific disciplines between social

sciences and hard sciences, with a particular focus on the forms and functions of disciplinary discourse analysis. The second section of the literature review has identified the importance of academic ELF, with EMI university being a typical ELF community and EMI academics being ELF lecturers. This section started by introducing different understandings of the ELF concept and some ELF-related communication strategies; it then detailed some linguistic forms and functions of academic ELF followed by some empirical studies. The subsequent review of this part specialized in academic ELF in the EMI context, arguing perhaps English-medium-instruction can be reconsidered as ELF-medium-instruction. The third section in this chapter has established the theoretical foundation of the framework used in the current study, i.e., APPRAISAL in SFL. This section began with introductions of forms of evaluative language being a vital research focus in understanding interpersonal meanings in the spoken language; it then explored major frameworks from noted scholars in the field of SFL before extensive review on the framework of APPRAISAL. After the review of the three major topics, the chapter finally led to the argument for modifications of APPRASIAL focusing particularly on how appraisal signals can be understood in the classroom context of academic lectures. All in all, this chapter has reinforced the importance of using APPRAISAL to the study of academic ELF in the spoken discourse with academic lecture of disciplinary content courses being a typical interpersonal register.

Chapter 3 Research design

3.1 Introduction

This chapter outlines the research design of this current study. Section 3.2 first provides a brief introduction of the research site, indicating features of the EMI university and the academic lectures of different disciplines where the data were collected. Section 3.3 then offers the information of the academic participants, covering personal backgrounds such as area of expertise, nationality and first language. Moving into a more specific introduction to the research design, descriptions of the data collection procedures and the research instruments are laid out in detail in Section 3.4. Along with clarifications on the spoken data and its transcription process, Section 3.5 classifies the research data in relation to the research questions. Section 3.6 then reports on the data analysis of the current study, specifying the five major steps of the whole qualitative analysis. Section 3.7 is a pilot study prior to the main research for illustrating the whole coding process before suggesting modifications to the original framework.

3.2 Research site

The data of this research was collected from ELF classrooms at a Sino-foreign EMI university located in Southeast China. This EMI university adopts the British education model and offers degrees both in its own right as well as from the parent university in the U.K. The university uses English as the medium of instruction for almost all courses and employs faculty members from all over the world, who either have a sufficiently good command of English and are able to deliver courses in English or are English native speakers. As discussed in the Introduction, EMI academics are also ELF lecturers conducting academic ELF communication in the EMI context where teachers need to mediate between the language they use in their ordinary teaching and interactions with their students and the linguistic demands of the university curriculum. Hence,

this current study highlights the role of discourse in the study of academic lectures, especially the lecture discourse for ordinary teaching and learning activities in ELF academic lectures.

The research was carried out in the ELF classrooms where university lecturers were lecturing on content courses in humanities and sciences. Linguistic studies in the classroom are to follow teachers' and students' actions with an aim to 'identify and explore how spoken and written language, alongside other semiotic resources, were used to generate a particular set of opportunities for participating in classroom events and learning activities' (Leung & Street, 2017: 195). The subjects in humanities included: Translation and Interpreting, English Literature, Applied Linguistics, as well as Media and Communication; subjects in sciences were Health and Environmental Sciences and Biological Sciences. These lectures were selected due to the lecturers' voluntary participation in this current research project. All academic lectures were delivered in subject-specific classroom settings where disciplinary differences of the lecture discourse can be explored.

3.3 Participants

The participants in this study were lecturers working at this EMI university, being ELF speakers or NSs. The ELF lecturers included a majority of academics from mainland China with Chinese as their first language (C-ELF lecturers) and a minor group of academics from other countries (NC-ELF lecturers) where English was not their first language, countries such as Holland, Italy and Romania. NSs were from the U.K. and the U.S.A. where English was, of course, the first language. It is worth mentioning that NSs were also conducting ELF communications in the ELF academic lectures as their students were mainly ELF users. Strictly speaking, the NS lecturers in this current study were NS-ELF users in the ELF community. All the participants were PhD holders in their fields and were proficient in teaching courses and carrying out related activities in English. Altogether 12 ELF lecturers participated in this research, 6 teaching courses in

the hard sciences and the other 6 in the division of humanities. Table 3-1 below displays some background details of the participants.

Table 3-1 Participant background information

Participant	Discipline	ELF groups	First language
Participant 1	Humanities	C-ELF	Chinese
Participant 2	Humanities	C-ELF	Chinese
Participant 3	Humanities	NC-ELF	Italian
Participant 4	Humanities	NC-ELF	Dutch
Participant 5	Humanities	NS	English
Participant 6	Humanities	NS	English
Participant 7	Sciences	C-ELF	Chinese
Participant 8	Sciences	C-ELF	Chinese
Participant 9	Sciences	NC-ELF	Dutch
Participant 10	Sciences	NC-ELF	Romanian
Participant 11	Sciences	NS	English
Participant 12	Sciences	NS	English

3.4 Data collection

The data collection of this research was slightly delayed due to the pandemic outbreak of COVID-19. Since the coronavirus pandemic broke out around the beginning of 2020, universities all over the world had to adapt from the traditional classroom environment to online teaching using platforms such as Zoom, Microsoft Teams, Skype and WeChat. This university, without exception, required all lectures to be delivered online for a whole semester from February 2020 to September 2020. Fortunately, most teaching activities were to a large extent able to return to normal after September 2020, using a mixed method of recording live videos for students who had had no option but to attend lectures online and classroom teaching was resumed for those being able to return to campus. Since the lecturers had already been making videos as part of their normal teaching, they appeared to be comfortable with the idea of their lectures being recorded for research purposes. The lecturers' willing acceptance of the researcher's involvement – particularly in permitting the recording

of their lectures – greatly facilitated the data collection of this research. Some of the participants preferred to share their online teaching videos directly with the researcher rather than having someone record the classroom lecture. However, as all such videos were recordings of live classroom lectures and not mere online-delivered lectures, these recordings were valid spoken data for the purpose of this research, albeit that the researcher was denied the opportunity of observing any classroom interaction with the students that may have added to a fuller understanding.

Access to these lectures was approved by the university ethics committee before individual consent was given by each participating lecturer. The recordings of the lectures were collected either by the researcher's being present in the classroom with a recorder or by viewing an online video. These recordings were made without any intentional interruptions to the natural flow of the classroom teaching, but it cannot be denied that having a stranger sitting in the classroom may have had a slight impact on some students and possibly on some of the lectures although all of the latter had readily agreed to and were happy with joining the research. Five recordings were collected from the classroom by the researcher of this current study and one recording was made by the lecturer of that recorded course without the researcher being present; the other six recordings were directly downloaded from the university's online teaching platform.

Questionnaires were administered at the very beginning to collect participants' background information, and this decided the grouping of the participants, as well as the classification of relevant research data. The questionnaire commenced with two short paragraphs briefly introducing the aim of the current research and the descriptions of the intended research data, together with an expression of appreciation for participation and, importantly, the essential assurance of confidentiality. The contact information of the researcher was also appended to the questionnaire in case participants might have any questions, concerns or complaints regarding this research. The questionnaire contained four questions which were fairly

straightforward, collecting two types of background information of the participants: personal details of nationalities, first language and educational background; area of academic expertise, either in humanities or hard sciences. All of the background information was considered and discussed together with the analysis of the linguistic data.

3.5 The spoken data

The linguistic data of this research is real-time lectures recorded from 12 university lecturers teaching content courses and were collected from November 2020 to November 2021. 6 lectures were directly recorded in the classrooms and 6 were live lectures recorded by teaching platforms and accessed online. Each recorded lecture is about 50 minutes long with some having a slightly longer duration. Altogether, a minimum of 600-minute spoken data from ELF classrooms was recorded and transcribed into a corpus file of 65,346 words covering 12 academic lectures (details see Table 3-2 below). It is worth noting that this study is exclusively participant-oriented, and the data was collected in a naturally occurring classroom context indicating an authentic representation of the spoken discourse of the participants.

Table 3-2 The length of each lecture and lecture transcript

Participant	C-ELF/NC-ELF/NS	Length of each lecture (by minute)	Length of each lecture transcript (by word count)
Participant 1	C-ELF	50.39	3801
Participant 2	C-ELF	42.29	4855
Participant 3	NC-ELF	60.15	8456
Participant 4	NC-ELF	54.25	5554
Participant 5	NS	51.23	6018
Participant 6	NS	49.51	4626
Participant 7	C-ELF	60.17	5245
Participant 8	C-ELF	47.48	4958
Participant 9	NC-ELF	60.04	6718
Participant 10	NC-ELF	53.37	5937
Participant 11	NS	53.57	5295

Participant 12	NS	46.35	3883
4 Participants in total	C-ELF	200.33	18859
4 participants in total	NC-ELF	222.05	26665
4 participants in total	NS	200.66	19822
12 participants in total	C-ELF/NC-ELF/NS	623.04	65346

After data collection, the study moved on to the process of transcribing. The data of this research was transcribed clause by clause. In traditional grammar, a clause is a unit that contains the elements of Subject, Verb, Complement, Object and Adverbial (Palmer, 1971). In SFL, however, Halliday (1994:16) regards clause as ‘the grammatical unit of the highest rank on the lexicogrammatical rank scale’, followed by group/phrase, word and morpheme. Each of these ranks possesses its own function and is realized by the rank below. Halliday and Matthiessen (2014) say that all written language is originally parasitic on the spoken word, i.e., a text is often presented and preserved in a written form even though it is derived from the spoken word. This will have two drawbacks as Halliday and Matthiessen (2014) indicate: omission of intonation and rhythm as well as being converted and composed to accord with writing norms. Transcribing spoken data into written form will certainly harm the value of spontaneous speech, but it is an effective way of making the data accessible for analysis. However, there are no absolute standards for the transcription of spoken data as paralinguistic and nonverbal features might also be presented due to different research needs (Cameron, 2001).

For this study, all of the spoken data was first imported into a transcribing platform, ‘i FLYTEK’ (website: <https://global.xfyun.cn/>) which roughly transcribed the voice data into written form, but such transcribed texts are not readily comprehensible for data analysis. The researcher then carefully reviewed each classroom recording and double-checked all of the machined-transcribed texts. The transcribing process continued as the researcher reviewed the recordings and transcriptions again after three months to ensure the reliability of the transcription; this time the researcher

checked three transcripts at a time while performing data analysis of the same scripts before examining the others.

3.6 The analytical procedures of using APPRAISAL in the current study

All the appraisal expressions identified in this current study have been defined as appraisal signals, i.e., attitude signal, engagement signal and graduation signal. These expressions can be regarded as discourse signals embedded in the lecture discourse and the research focus of this current study is to describe how ELF lecturers use appraisal expressions to signal their evaluative meanings in academic lectures. As to the research questions of the study, the answer to RQ1 was based on detailed descriptions of the semantic choices of evaluative language embedded in the lectures given by all of the 12 ELF lecturers. The evaluative language being analysed in the current study was divided into three dimensions to generate answers to RQ1: evaluative language when 1) expressing their attitudinal feelings in their lecture discourse, 2) engaging other voices in their lecture discourse, and 3) adjusting degrees of an evaluation in their lecture discourse. RQ2 aimed to uncover the disciplinary differences of the evaluative language being used by ELF lecturers teaching subjects in the soft sciences and hard sciences. RQ3 then sought to understand the differences of the evaluative language being used by these ELF lecturers according to their various L1s (12 C-ELF speakers / 4 NC-ELF speakers / 4 NSs). Table 3-3 explains how the participants were distributed in relation to the research questions of this study.

Table 3-3 Participant distribution in relation to the research questions

Participants	Number of participants	Research questions
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All participants	12	RQ1: How are appraisal signals embedded in the lecture discourse of ELF academic lectures? The answer to the first overarching research question will be based on detailed descriptions of interpersonal semantic choices of the ELF lecturers when they are: RQ1a signaling their attitudinal feelings in their lecture discourse? RQ1b signaling engagement meanings in their lecture discourse? RQ1c signaling the intensity of evaluation in their lecture discourse?
Lecturers in humanities	6	RQ2: What are the disciplinary-specific features of the appraisal signals in ELF academic lectures between soft sciences and hard sciences?
Lecturers in sciences	6	
C-ELF lecturers	4	RQ3: What are the ELF-specific features of the appraisal signals in ELF academic lectures between lecturers of different L1 backgrounds?
NC-ELF lecturers	4	
NS lecturers	4	

This section explains the major analytical procedures of how the spoken data were analysed; some justifications have been provided in the literature review and a detailed coding process will be presented later in this chapter with a pilot study. For data analysis, all the reviewed data are imported to NVivo (2020) for categorizing and annotating. This present study completed the coding process entirely dependent on intra-coder reliability. Reliability is a central concept in qualitative research – it ‘refers to the degree of consistency with which instances are assigned to the same category by different observers or by the same observer on different occasions’ (Hammersley, 1992: 67). The data of this current research are spontaneous spoken data which have been transcribed into written texts for data analysis, therefore the reliability of coding these transcribed texts is crucial for the research. There are two major methodologies to assure the reliability of the coding: 1) inter-coder reliability and intra-coder reliability. For the first, as Silverman (2014) explains that inter-coder reliability is achieved through standardized and consistent categories when analysing a text that can be applied with consistency by any researcher; this methodology attempts to have the same text coded by a number of different coders using the same coding scheme. However, the more abstract the coding categories are, the more likely it is that

different coders may come up with dissimilar results (Franzosi, 2004: 187). In contrast, intra-coder reliability is achieved by only one coder rather than several, but over a period of time; in other words, the coder carries out the coding process more than once at different times to assess and ensure the consistency of his/her own coding (Chen & Krauss, 2004: 525). This current study completed the coding process relying on intra-coder reliability: the researcher manually added codes to three transcripts at a time using the software of NVivo; this coding process was repeated after three months with the same three transcripts of plain texts. All of the twelve transcripts were coded in the same way and the date of coding each transcript was carefully recorded.

All of the transcribed spoken data of this research were coded using the framework of APPRASAL in SFL, following five major analytical steps. For the first main step, as mentioned above, the data were first analysed clause by clause using all three systems in the APPRAISAL framework, namely ATTITUDE, ENGAGEMENT and GRADUATION. In this process, the researcher first coded three lecture transcripts and collected a list of discourse signals that have frequently appeared in all three of these lectures. The researcher then coded three transcripts at a time, the coding of each transcript starting with the key-word search of these frequent signals before their own clause-by-clause coding. All the additional frequently occurring appraisal signals have been added to the list every time when the coding of a transcript was completed. After the coding of every three lecture transcripts, the previously coded transcripts were reviewed with a key-word search for the newly-added appraisal signals. This procedure was repeated until the coding of all of the twelve transcripts were completed.

Firstly, for ATTITUDE, the spoken data was categorised with reference to AFFECT, JUDGEMENT (VERACITY / PROPRIETY / NORMALITY / CAPACITY / TENACITY) and APPRECIATION (REACTION / COMPOSITION / VALUATION). These attitude signals have also been annotated as being either positive or negative in the given co-text when differentiating their

evaluative meanings according to various referents. As to ENGAGEMENT, distinctions were first made between two subsystems of CONTRACT and EXPAND, and then the data was further divided considering these four categories – ENTERTAIN, ATTRIBUTE, PROCLAIM and DISCLAIM. With regard to GRADUATION, the coding process started with the system of FORCE, identifying intensification signals in PROCESS and QUALITY before locating quantification signals in the subsystems of NUMBER, MASS and EXTENT, and finally ended with the classification of discourse signals in FOCUS. During the coding process of the graduation signals, special attention has also been paid to the gradability of these appraisal expressions, i.e., the evaluative meanings measured by both FORCE and FOCUS regarding their no-scale, up-scale and down-scale discourse features when adjusting an intensity or sharpening a categorisation. A brief introduction to the main categories of these three systems has first been laid out in Table 3-4 with examples extracted from the lecture discourse presented below (emphasis highlighted in bold).

Extracts of lecture discourse from Participant 1 (hereinafter referred to as 'P1'):

- a. So if you are **interested in functional theories**, you can have some further readings about these two scholars.
- b. So the language for children, **we should** use some simple words or child-like expressions...
- c. So the third Skopos, we are going to create a translation **suitable** for inclusion in a school textbook.
- d. So we had a very initial idea about Skopos theory and **I think** Skopos theory is a little bit abstract and vague.
- e. But we should probably omit some paragraphs because **we cannot** put the long pages of the UN Security Council Resolution in our text book...
- f. So in our course we can see Vermeer's theories **are largely influenced by** Katharina Reiss.
- g. We can have terminology, post-editing, reviewing, desktop publishing, or project management, or even some professor leaders in **certain kind of profession**.

Table 3-4 Systems in APPRAISAL with examples from lecture discourse of P1

APPRAISAL sub-systems		Examples of appraisal signals
ATTITUDE	AFFECT – concerning emotional reactions	<i>interested in...</i>
	JUDGEMENT – judgmental attitudes in terms of social norms	<i>we should</i>
	APPRECIATION – appreciative attitudes towards things and phenomenon	<i>suitable translation</i>
ENGAGEMENT	EXPAND – allow other voices	<i>I think</i>
	CONTRACT – reject other voices	<i>we cannot</i>
GRADUATION	FORCE – increase / decrease intensity and amount	<i>are largely influenced</i>
	FOCUS – sharpen / soften a margin	<i>certain kind of profession</i>

Table 3-4 above illustrates the three systems of APPRAISAL and their major subsystems. Firstly for ATTITUDE, AFFECT concerns emotional reactions as in the example *being interested in...* (Extract a) expresses a positive emotion. JUDGEMENT, as the name indicates, can be judgmental attitudes towards human behaviour. The word *should* exemplifies what is appropriate and what is not according to the speaker's judgements (Extract b). APPRECIATION, in comparison to JUDGEMENT, is the appraisal attitude towards things and phenomena rather than human behaviour, such as in the example, *a suitable translation is needed for the textbook* (Extract c). Secondly, examples for EXPAND and CONTRACT in ENGAGEMENT were given: appraisal signal *I think* (Extract d) is used to express a speaker's own opinion but with a soft tone to allow for other voices; the example of *cannot* (Extract e), however, conveys an attitude of negation. GRADUATION is the last APPRAISAL system in this current study composed of two categories – FORCE and FOCUS. The former intensifies an upscale / downscale of some quality or process, as the word *largely* in Extract f emphasizes the process of *being influenced*. The latter sharpens or softens a clear margin, as the word *certain* moderates *kind* in the example of *certain kind of profession* in Extract g.

After the first step of following the framework of APPRAISAL, the second main step is to calculate and summarize the frequency of all the identified appraisal signals in each

APPRAISAL subsystem. From Section 4.2 to Section 4.4 in Chapter 4, calculations of the raw frequencies of the appraisal signals in each subsystem within the three major APPRAISAL systems have been presented, i.e., token counts within the systems of ATTITUDE, ENGAGEMENT and GRADUATION. These raw frequencies of the occurrence of appraisal signals were then normalized per 1000 words in the comparisons among the 12 lectures in consideration of their different durations. For ATTITUDE, all the subcategories in AFFECT have been merged and the classification of SOCIAL SANCTION and SOCIAL ESTEEM has been removed. For ENGAGEMENT, modifications include: 1) all the engagement signals have been identified as heteroglossic in the lecture discourse; and 2) engagement signals have been coded according to the four main subsystems without further division into smaller categories, i.e., ENTERTAIN, ATTRIBUTE, PROCLAIM and DISCLAIM. For GRADUATION, there is a large number of tokens, particularly force signals. Modifications concerning all three systems to the original APPRAISAL framework have then been made according to the emerging features of the discourse data. For GRADUATION, 1) all the graduation signals have been classified into three major groups – INTENSIFICATION, QUANTIFICATION and FOCUS rather than the original FORCE and FOCUS and 2) gradable features of no-scale, up-scale and down-scale can be measured by both FORCE and FOCUS with the former differentiating intensity and amount and the latter concerning the sharpness of a categorisation. Table 3-5 below presents the modified APPRAISAL framework used for the data analysis of this current study. Examples of the appraisal signal for each subsystem extracted from the lecture discourse of P1 have also been given.

Table 3-5 the modified APPRAISAL framework with examples of appraisal signals from lecture discourse of P1

APPRAISAL		Examples of appraisal signals	
ATTITUDE	AFFECT	<i>interested, aware</i>	
	JUDGEMENT	NORMALITY	<i>always</i>
		CAPACITY	<i>can, professional</i>
		TENACITY	<i>would like to, be going to</i>
		VERACITY	<i>could, may, probably</i>

		PROPRIETY	<i>need to, should</i>
	APPRECIATION	REACTION	<i>correct, difficult, easily</i>
		COMPOSITION	<i>simple, colloquial, clear</i>
		VALUATION	<i>important, pioneering, useful</i>
ENGAGEMENT	EXPAND	ENTERTAIN	<i>I remember, I think, suppose</i>
		ATTRIBUTE	<i>some of you mentioned, my, scholars think</i>
	CONTRACT	PROCLAIM	<i>is proposed by, called</i>
		DISCLAIM	<i>can't, but</i>
GRADUATION no-scale up-scale down-scale	INTENSIFICATION	PROCESS	<i>are largely influenced, easily understand</i>
		QUALITY	<i>very brief, a little bit difficult</i>
	QUANTIFICATION	EXTENT	<i>such a short time, around six</i>
		MASS	<i>little</i>
		NUMBER	<i>some, many, any</i>
	FOCUS		

The data analysis then came to the third main step – collecting graduation signals that have been used to modify attitude and engagement signals. More specifically, special attention was paid to the evaluative language not only concerning ATTITUDE and ENGAGEMENT but also containing a linguistic item that modulated the density of an evaluation; in other words, evidence was provided on how GRADUATION interrelated with the other two systems presenting gradable features of the evaluative meanings in the lecture discourse. The fourth main step of the data analysis was to identify appraisal signals having different layers of evaluative meaning. For the completion of this major step, firstly, in the coding process of attitude signals, the integration of attitude meaning with either engagement or graduation meaning was considered. Next, when coding engagement signals, if graduation meaning can be detected in the same discourse signal of one particular utterance, this signal has been marked as having different layers of evaluative meaning in both ENGAGEMENT and GRADUATION.

The last main step of the data analysis was to categorise the identified appraisal signals according to word groups, such as nominal, verbal, adjective, adverb, prepositional, quantifiers and conjunctions. As APPRAISAL explores the interpersonal meanings behind grammatical structures in the ELF lecture discourse, analysis of both the form and function of the lecture discourse can enhance an understanding of the interactivity

therein. Words and phrases included in nominal, verbal, adverbial and prepositional groups can all be found in classroom discourse (Sinclair & Coulthard, 1992), among which nominal groups and prepositional groups appear to a large extent (Biber et al., 2004). According to what has been reviewed in Section 2.4.1 in Chapter 2 and the data analysis of the lecture discourse from this current study, evaluative meanings can be realised by a range of lexical units. This study, therefore, has divided the appraisal signals into word groups such as nominal, verbal, adjective, adverb and prepositional. Quantifiers are associated with words in the nominal group (Biber et al., 2002); but, because of the numerous occurrences of this group in the lecture discourse, this current study has singled it out as a special word group for the classification of the appraisal signals identified in the study.

3.7 The pilot study of using APPRAISAL

A pilot study has first been carried out for three fundamental reasons: 1) to present a sample of the spoken data this current research has collected from academic lectures, 2) to showcase the application of the APPRAISAL framework in analysing the lecture discourse and give a step-by-step presentation of the whole coding process, and 3) to elaborate how evaluative meanings are embedded at discourse level in ELF academic lectures. Statistical results will first be presented, followed by examples of specific appraisal signals extracted from the lecture discourse of P1. P1 is a C-ELF (Chinese ELF speaker) lecturer teaching the subject of translation in the domain of humanities and social sciences. The classroom spoken data collected from P1 is a 50-minute lecture using English as the medium of instruction together with a few sentence translations in Chinese. This sample text was analysed and coded using the original APPRAISAL framework, specifically the systems of ATTITUDE, ENGAGEMENT and GRADUATION.

Figure 3-1 presents the number of appraisal signals used by participant 1 according to each major APPRAISAL subsystem. The raw frequencies of these occurrences have been calculated and normalized per 1000 words to be consistent to other lectures which

may have a different duration. As can be seen from Figure 3-1 below, appraisal signals in each APPRAISAL subsystem have emerged within the 50 minutes of this lecture. Firstly, with ATTITUDE, the amount of attitude signals used in the subsystems of JUDGEMENT (32.1 occurrences per 1000 words) and APPRECIATION (27.6) is overwhelmingly larger than that in AFFECT (1.8) which barely occurs in the lecture discourse. Secondly, for engagement signals, the use of expand signals is prevalent (51.8) with only a small number of contract signals (3.9). Finally, for graduation signals, there is a distinction between the subsystems of FORCE and FOCUS, with FOCUS appearing less frequently (19.7) and FORCE (51.8) being the dominant device which can be further divided into INTENSIFICATION and QUANTIFICATION. It is worth mentioning that the number of expressions shown in all of the figures and tables in this pilot study is the sum of the appraisal signals used in each category, including repeated words and phrases.

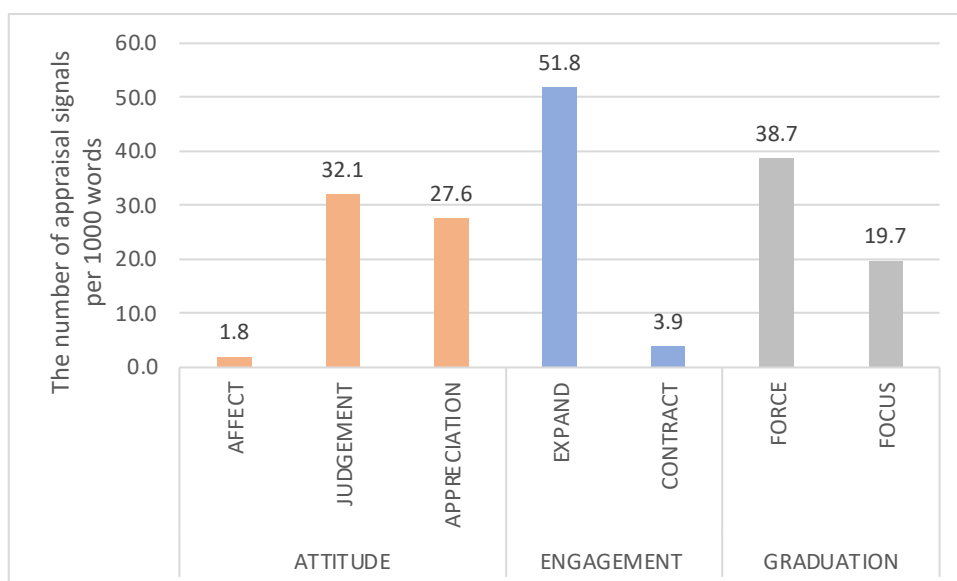


Figure 3-1 The number of appraisal signals in ATTITUDE, ENGAGEMENT and GRADUATION from lecture discourse of P1

Figure 3-2 further divides the identified appraisal signals into the subcategories of each of the major subsystems presented above. First, as for attitude signals, judgement signals in VERACITY (15.8) and appreciation signals in VALUATION (13.9) and COMPOSITION (11.3) appear frequently in the lecture discourse of P1. Other attitude

signals, such as tenacity (6.8) and capacity (5.5) signals are also common whereas signals such as propriety (3.2), reaction (2.4), affect (1.8) and normality (0.8) are rare. Second, as for engagement signals, results show that expand signals in ENTERTAIN (28.9) and ATTRIBUTE (22.9) clearly outnumber contract signals in PROCLAIM (1.3) and DISCLAIM (2.6). Finally, regarding graduation signals, there are five subcategories under the system of FORCE, including intensification signals in PROCESS (3.9) and QUALITY (8.2) as well as quantification signals in EXTENT (7.6), MASS (0.8) and NUMBER (18.2).

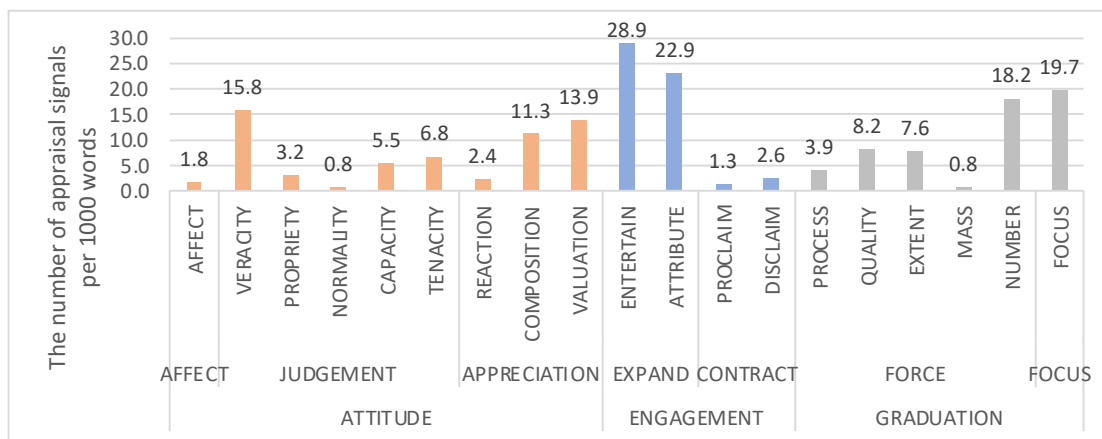


Figure 3-2 The number of appraisal signals in each APPRAISAL subsystem from lecture discourse of P1

A full display of appraisal signals being coded for all of the categories in each system has been presented in Table 3-6 below. The appraisal signals displayed in this table will be discussed in the following paragraphs, with elaborations of how their evaluative meanings have been identified in the lecture discourse.

Table 3-6 Examples of appraisal signals from lecture discourse of P1

APPRAISAL		Examples of appraisal signals highlighted in some lecture extracts	
ATTITUDE	JUDGEMENT	AFFECT	<i>So if you are interested in functional theories, you can have some further readings about these two scholars.</i>
		VERACITY	<i>We don't know who they are. They could be many.</i>
		PROPRIETY	<i>But we should also pay attention to some pitfalls of Translatorial Action.</i>
		NORMALITY	<i>So with Skopos theory, we always focus on the target text.</i>
		CAPACITY	<i>So in this way children can easily understand the content of the Bible.</i>
	TENACITY	<i>I would like to summarize and give further comments about the Skopos theory.</i>	
	APPRECIATION	REACTION	<i>Very good. And we can see from the table. Here is an example... and Yes, very good. Very good.</i>
COMPOSITION		<i>a translation suitable for inclusion in a school textbook...</i>	
VALUATION		<i>...I think this theory is very pioneering back in 1970s.</i>	
ENGAGEMENT	EXPAND	ENTERTAIN	<i>So suppose now we are going to translate Bible into two versions...</i>
		ATTRIBUTE	<i>All the examples from my own experience.</i>
	CONTRACT	PROCLAIM	<i>And this theory is proposed by another German functional theorist, Hans. J. Vermeer.</i>
		DISCLAIM	<i>...we cannot overlook the importance of the source text.</i>
GRADUATION	FORCE	INTENSIFICATION	PROCESS <i>So in this way children can easily understand the content of the Bible.</i>
		QUALITY	<i>I think this assignment is a little bit difficult for you to think about in such a short time.</i>
	QUANTIFICATION	EXTENT	<i>After, maybe around six? Or before six. Ok?</i>
		MASS	<i>I am translating a little book.</i>
		NUMBER	<i>...and many other scholars think Skopos theory is only valid for non-literary texts.</i>
FOCUS	<i>So many scholars thought this kind of jargons are too complicated to understand.</i>		

3.7.1 ATTITUDE

For the identification of the attitude signals, the coding process started with judgement and appreciation signals before searching for signals in AFFECT. The reason for this coding sequence is because judgement and appreciation signals are often grounded on particular referents whereas the trigger for affect signals in the lecture discourse can be difficult to define. Judgement signals have been identified if the evaluative meaning was associated with the lecturers themselves, the students or some human behaviour relating to the content of lectures, whereas appreciation signals have been coded if there were evaluations concerning the teaching materials, students' assignments and, sometimes, specific objects in the classroom setting. For example, *should* as in *But we **should** also pay attention to some pitfalls of Translatorial Action* conveys judgement meanings to the students and an obligation that they ought to fulfil when applying the translation theory. For appreciation signals, expressions such as *more colloquial*, *more formal* and *more within the setting* have been identified

as in *the first one he thinks it is **more colloquial**, and the second one is **more formal** and is **more within the setting*** when the lecturer was evaluating some translation texts.

There are five subcategories of judgement signals in the APPRAISAL framework, the majority of them being modal verbs and modal adjuncts, and all have been carefully reviewed in the coding process of JUDGEMENT. Such judgement signals are closely related to Halliday's Modality system: veracity signals indicating probability (e.g., *We don't know who they are. They **could** be many.*), normality signals dealing with usuality (e.g., *So with Skopos theory, we **always** focus on the target text.*), propriety signals concerning obligation (*But we **should** also pay attention to some pitfalls of Translational Action.*), and tenacity signals similar to inclination (e.g., *I **would like** to summarize and give further comments about the Skopos theory.*). The first two types of discourse signals regard modality as 'likely or unlikely' whereas the last two as 'desirable or undesirable' (Halliday, 2014: 144). Capacity signals, as the name indicates, refer to people's abilities and constraints on an ability (*So in this way children **can** easily understand the content of the Bible.*). However, according to APPRAISAL, judgement meaning is construed whenever an evaluation is made assessing human behaviours, thus, judgement signals can include words other than modal verbs and modal adjuncts. There is only a very small portion of such discourse signals in the lecture discourse of P1, mainly adjectives of capacity signals having human behaviours as referents in the verbal context. For example, *professional* as in *She is a translator, a translation scholar, theorist, and **professional** translation trainer* has been labelled as a capacity signal introducing the translator as skilled and well-trained.

There are a few examples for the identification of appreciation signals as P1 frequently expressed the evaluative meanings based on students' responses as well as on objects and concepts. Firstly, reaction signals frequently occurred in teacher feedback, especially positive comments praising students' responses, such as *very good* as in ***Very good.** And we can see from the table. Here is an example...* and *Yes, **very good.***

Very good. That's right. Reaction signals have been identified if the evaluative meanings were based on a referent that could attract lecturers' attention and win their affirmation. Secondly, for composition signals, for example, the lecturer said '*a translation **suitable** for inclusion in a school textbook*'. The adjective *suitable* can be included into the category of COMPOSITION as it indicates the lecturer's perception of whether a translation should be chosen for a textbook based on its textual relevance. Therefore, a composition signal has been labelled if the evaluative meanings are associated with the composition and organisation of a text rather than with a general entity. Two more examples for composition signals relating to textual features: '*Skopos theory is **a little bit abstract and vague***.' – The lecturer's evaluation on the Skopos theory which is considered as '*a little bit abstract and vague*'. '*so there are some **basic underlying** rules of Skopos theory I put it here*.' – the word *basic* and *underlying* describe some rule in the Skopos theory. Thirdly, P1 also made frequent use of valuation signals in APPRECIATION; they were identified if the evaluative meaning was indicative of the value and importance of the referents in the particular context. For example, the word *pioneering* in '*...I think this theory is very **pioneering** back in 1970s*.' conveys a message of how valuable the theory is in a certain period of time in history. Another example of VALUATION: '*So in this case the most **important** factor is the purpose*.' – The lecture is making an evaluation of the importance of a factor.

The recognition of an affect signal can be problematic; it can contain comprehensively any kind of attitudinal resources that may occur and can decode attitude meanings that could overlap with both judgement and appreciation meanings. One example for affect signals, which has been mentioned before, P1 said '*So if you are **interested** in functional theories, you can have some further readings about these two scholars*.'; the word *interested* implies a positive emotion which might encourage some students into more reading whilst others may take their own stance and choose not to read further. Therefore, the word *interested* construes AFFECT meanings, but it does not necessarily indicate an emotional feeling of the lecturer. In a further example of an affect signal – *And Skopos theory makes us **aware** of the purpose we are translating*.

– the word *aware* has been labelled as an affect signal as it was used by the lecturer to reflect a feeling of understanding and accomplishment. However, the word *aware* can also indicate a slight cline of judgement meaning as it is related to people's perception and discernment. Additionally, reaction signals in APPRECIATION discussed above, such as *very good* as in *Yes, **very good. Very good. That's right.*** can also be perceived as an affect signal indicating the lecturer's satisfaction with the student's answer. The identification of affect signals is then determined by the emotive dimension of the evaluative meanings coded in the lecture discourse; more specifically, lecturers use affect signals to express personal feelings and there is usually an emotional trigger manifest in the verbal context which could invoke either positive or negative affective emotions in the lecturer or the students. To reconsider the previous two examples of affect signals discussed in this paragraph: 1) the word *aware* has been labelled as an affect signal rather than a capacity signal, because the object of using this word is to express a personal opinion of the theory and not to be judgemental of people's ability. 2) the expression *very good* has been coded as a reaction signal rather than an affect signal, because the purpose of using this expression in this context was to confirm and comment on the correctness of the students' answer rather than to express personal feelings.

Since gradation signals can be used to adjust the degree of attitude meanings, therefore, attitude signals overlaid with gradable features have also been considered. Additionally, attitude signals having different layers of appraisal meanings also emerged in the coding process. Such attitude signals have all been specifically analysed. Two examples are given to show how gradation signals can be identified as indicators of the gradable features of attitude meanings. To look again at the example: *I think this assignment is **a little bit difficult** for you.*, *A little bit* has been coded as a down-scale quality signal in the system of GRADUATION modifying the reaction signal *difficult* in the system of ATTITUDE. Again, in this example: *the first one he thinks it is **more colloquial**, and the second one is **more formal** and is **more within the setting***; the word *more* has been labelled as an up-scale quality signal intensifying

the evaluative meanings of the composition signals in ATTITUDE. There are also two examples of how attitude meanings can overlap with graduation and engagement meanings. In this example of graduation meanings in ATTITUDE: *So in this way children can **easily** understand the content of the Bible.*, the graduation signal *easily* intensifies the process of understanding which is also labelled as a reaction signal suggesting appreciation meanings of the complexity of the verbal process. As to the overlap of attitude and engagement meanings, for example, the lecturer said *'The source text, the producer **could be** writers, **could be** the translation department, er agents, **could be** policy-makers, **could be** some material-starters.'* The lecturer was explaining to the students what different possible roles a text producer could adopt. *Could be* can be classified as a veracity signal in ATTITUDE which underpins various possible duties of a profession. However, *could be* also indicates a range of possibilities and, as suggested by the lecturer, there is more than one role for a source text. In this case, *could be* can be included within the category of ENTERTAIN under ENGAGEMENT which has the potential for inviting other voices to give more examples of what a source text can be.

3.7.2 ENGAGEMENT

The coding process for ENGAGEMENT began with expand signals. As the name indicates, the difference between expand and contract signals lies in the degree of possibilities on whether to expand a conversation or to close it up. For example, *I remember* as in ***I remember** we had a very brief question and answer about are there any factors other than text type also important, yes?* has been identified as an expand signal, as it indicates what P1 has said is based on her memory which actually allows students to decide whether they should take it for granted or maybe they would add some other information from their own. Contract signals, however, gives out more warrantable statements which limits the chance of alternative voices. For example, the word *call* has been labelled as a contract signal as in *Skopos theory, we also **call** it in Chinese, Mu Di Lun*. When locating expand signal, particular attention has first been paid to the use of pronoun and question in the lecture discourse, as they both have a substantial

presence in the lecture discourse and can be effective engagement signals to enhance classroom communication. For pronouns however, the first-person pronoun *I* cannot always be classed as an engagement signal owing to its frequent effect of distancing the hearer from the speaker (Fortanet, 2004), and therefore a careful consideration of its co-text is necessary to determine if it is functioning as an engagement device. Specific discourse patterns containing first- and second-person pronouns have then been considered as they also emerged in the data analysis, and demonstrations of the pronoun patterns will be presented in the following finding chapters. As to questions, all of the questions that occurred in the lecture discourse have been included as entertain signals under EXPAND owing to their dialogic nature of expressing engagement meanings (Hyland, 2005) and their communicative effectiveness in classroom communication (Thompson, 1998; Morell, 2004). Questions as expand signals in this current study include all of the interrogative clauses identified in the lecture discourse, being divided into questions with a pronoun and those that do not contain one, such as *Do you want to say something?* – a question containing the pronoun *you* and *what is Skopos theory?* – a question without a pronoun.

When analysing expand signals, according to the original APPRAISAL framework, the key to distinguishing ENTERTAIN and ATTRIBUTE is to establish where the sources of the content come from, and whether it is an internal or external voice (Martin & White, 2005). As the example in the paragraph above – ***I remember** we had a very brief question and answer about are there any factors other than text type also important, yes?* As previously discussed, the source of the information the lecturer provides comes from her memory, i.e., an internal voice; therefore, *I remember* can be regarded as an entertain signal. Also see an example for attribute signals: *And **some of you mentioned** purpose, **some of you mentioned** readers, so today we are going to find out what are they.* In this utterance, the lecture was acknowledging some student's opinions –indicating external voices. However, attribution to external voices in the lecture discourse only occasionally occurred compared with the large number of entertain signals, which results in an abstract and indistinct grouping of all the

expand signals. Additionally, entertain signals can serve to indicate where the lecturer's authoritative voice is ameliorated with a degree of tentativeness.

Therefore, the division between ENTERTAIN and ATTRIBUTE has been modified from the original framework. Entertain signals in the lecture discourse should project the lecturer's subjective voice or suggest the probability of one of a range of possible positions while leaving a dialogical space for allowing or inviting students' responses. For example, the entertain signal *suppose* as in *So **suppose** now we are going to translate Bible into two versions*, P1 was assigning a hypothetical task – not by giving out the assignment directly, but rather by raising a dialogic tone when actually asking students to complete a translation task. The word *suppose* carries a possible position that seems to allow something else to happen. Attribute signals, however, can be used to emphasize the source of information or to express belonging to either the lecturer or the students using first- or second- person possessive determiners such as *my*, *our* and *your*. In such cases, attribute signals can be used to signal both internal and external voices, but it does not guarantee that the source is always specific and absolutely reliable. For example, attribute signals from external voice – *think* as in *other scholars **think** Skopos theory is only valid for non-literary texts...* Here the external voice is also based on the subjectivity of the resource. Also, one example of attribute signals indicating personal possession is *my*, as in *All the examples from **my** own experience*.

As to contract signals, the possibility of inviting other voices is toned down compared to expand signals even though a dialogistic backdrop still exists in the context. Firstly, one example for proclaim signals: *'And this theory **is proposed by** another German functional theorist, Hans. J. Vermeer.'*; this is a reliable statement giving out some valid information about the source of a theory, the name of the theorist and the nationality. Proclaim signals represents a rather valid and reliable voice from either internal or external resources. It can be seen again in this example – *Skopos theory, we also **call** it in Chinese, Mu Di Lun*. Therefore, the identification of proclaim signals is dependent

on how the authorial voice positions itself in the lecture discourse and how compelling the proposition is. In the classroom context, a proclaim signal can also be used to invoke a follow-up action, such as *I want* as in ***I want*** *you to give some explanations of these legal terms.*

For disclaim signals, however, particular attention has been paid to negations and counter expectations in the lecture discourse. Take *cannot* in this example, *So although Skopos theory considers more about the target text, we **cannot** overlook the importance of the source text.*; the teacher emphasized the importance of the source text which should not be overlooked without any doubt and reservation. The same utterance occurred as in *'we **cannot** change the original layout, so exactly the same as the English version...'*. Here the disclaim signal *cannot* rejects any possibilities of changing the original layout of a text.

As with attitude signals, the interaction and overlap between the systems of GRADUATION and ENGAGEMENT have also been considered in the coding process of engagement signals. More specifically, when locating and reviewing all the engagement signals, if there was a graduation signal in the verbal context, or a cline of graduation meaning coded in the same engagement signal, the discourse signal has been recorded as either indicating a gradable feature or having different layers of appraisal meanings. Firstly, one example of how a graduation signal can modify an engagement signal: *Just mentioned* as in *She **just mentioned** when we translate Bible for Children, we need to use a tone of storytelling...* The word *mentioned* belongs to the category of ATTRIBUTE under ENGAGEMENT and the word *just*, being a graduation signal, intensifies the process of mentioning which changes the scaling of the original word *mentioned*. Secondly, to give an example concerning layers of graduation and engagement meanings in one discourse signal, such as *sometimes* as in *And **sometimes** we cannot decide only according to the micro principle.*, the word *sometimes* is not only an entertain signal in ENGAGEMENT but also an extent signal in

GRADUATION, indicating that the actual translation process can occasionally be contingent upon different situations.

3.7.3 GRADUATION

Finally, for graduation signals, the coding process started with the subsystems of INTENSIFICATION and QUANTIFICATION under the system of FORCE, followed by the system of FOCUS. First, there are examples of how intensification signals in PROCESS and QUALITY have been identified. For process signals, all of the verbal processes in each clause of the lecture discourse have been reviewed and particular attention has first been paid to the use of adverbs. Adverbs are very closely related to verbs since ‘they typically describe circumstances relating to actions and processes’ (Biber et al., 2002: 23). For example, the adverb *easily* as in *So in this way children can **easily** understand the content of the Bible.* is a process signal illustrating the complexity of a verbal process – *can understand*; the degree of the complexity provided by the process signal then denotes a gradient feature that has been applied to the verbal process. Apart from adverbs, process signals such as prepositional phrase (e.g., *at least*) also appeared when reviewing the verbal process of each clause.

For the identification of quality signals, the first step was to locate all the adjectives in the lecture discourse before collecting quality signals that have been used to increase or decrease the degree of a quality, as adjectives are commonly used to ‘describe the qualities of people, things and abstractions’ at the semantic level (Biber et al., 2002: 22). An example for quality signal: *‘I think this assignment is **a little bit** difficult for you to think about in such a short time. A little bit* operates over the word of *difficult* which modifies the degree of the original quality of the adjective *difficult*.

Quantification signals in EXTENT, MASS and NUMBER are coded in the descriptions of entities, often associated with information such as time and space, weight and size, as well as quantity. Special attention has then been paid to these concrete details when

searching for language items that have been used to specify the objective meanings of these entities. For extent signals for example, *around six* and *before six* as in *I will send it out today. After, maybe **around six**? Or **before six**. Ok?* are two extent signals concerning an approximate time when the lecturer would send out the assignment. One example of mass signals is the word *little*, as in *I am translating a **little** book.*, which describes the actual size or maybe the length of a book that the lecturer was translating. For number signals, words such as *some* and *many* have been selected as they are used to provide a measure of quantification information as in *...we should probably omit **some** paragraphs and **many** other scholars think Skopos theory is only valid for non-literary texts...* The quantification information is not specific, and the vagueness embedded in the lecture discourse reveals the lecturer's evaluative meaning towards what is being described.

As to focus signals, they typically establish a clear boundary of a category – *only* as in *'Skopos theory is **only** valid for non-literary texts.'*; in other words, Skopos theory should not be applied to literary texts. Therefore, focus signals are identified if they are used to justify or adjust a semantic boundary, in which case a noun is usually involved referring to a specific entity or a topic based on shared knowledge. For example, the word *about* as in *Some groups discuss **about** the title, some groups discuss **about** the content.* The discussion topics of each group (the common nouns: title and content) were confirmed by the lecturer and *about* can be regarded as the focus signal indicating these confirmations. As with the word *about*, *kind of* as in *So many scholars thought this **kind of** jargons are too complicated to understand.* is also a focus signal specifying a semantic boundary for *jargons*. However, focus signals can also be applied to a blurred semantic categorisation. For example, *something* as in ***Something** wrong with the screen.* is also a focus signal indicating a vague categorisation of a technical issue. The screen in the classroom was not working properly, even though the actual problem of the screen was not clear, but *something* signals to the students a semantic focus based on a shared experience between the lecturer and her students.

When analysing graduation signals, gradable features often appeared for adjusting the degree of an evaluation. The identification of the gradient features, i.e., the no-scale, up-scale and down-scale features of the graduation signals, was carried out simultaneously with categorizing them into the six GRADUATION subsystems presented in the above paragraphs. In other words, each of the graduation signals identified in the lecture discourse has been labelled with one scale feature, and the usage frequency of the no-scale, up-scale and down-scale features can be calculated according to the token counts of the graduation signals in each of these three categories. An up-scale intensification, for example, that the word *largely* (which was discussed earlier as in *Vermeer's theories are largely influenced by Katharina Reiss*) was identified as an up-scale process signal because the verbal process *influenced* has been graded up by the discourse signal *largely*. The expression *at least* as in *We can at least translate the source text into the target one.* has been labelled as a down-scale process signal as it decreased the force of an action. As to the no-scale feature of the graduation signals, it appeared particularly common in the data analysis of quantification signals. The extent signals of *around six* and *before six* given in the previous paragraphs (*I will send it out today. After, maybe around six? Or before six. Ok?*) were regarded as no-scale extent signals indicating the lecturer's evaluation of an approximate time but without indicating any gradability of the evaluative meanings being delivered. Therefore, graduation signals without an up-scale or down-scale gradient feature have all been labelled as no-scale signals.

FOCUS, being different from FORCE, indicates a clear categorisation rather than being scalable to adjust a degree. It can also be called prototypicality which specifies a particular category with a clear boundary. However, the margins of these boundaries can be up-scaled or down-scaled according to different semantic conditions. Hence, both the degrees of intensification in FORCE and the sharpness of a FOCUS can be blurred or adjusted. For example, the three focus signals given in previous paragraphs, *about*, *this kind of* and *some things* are no-scale focus signals as they are indicators of a focus

without modulating the sharpness of a boundary. For up-scale and down-scale focus signals, however, the modulation of a semantic boundary occurs. For example, *any* as in *Are there **any** factors other than text type also important?* is coded as an up-scale focus signal whereas *certain* as in *We can have terminology, post-editing, reviewing, desktop publishing, or project management, or even some professor leaders in **certain** kind of profession.* is labelled as a down-scale signal. The former expands the categorisation of the factors that might affect the translating process without any specification for the purpose of encouraging students' response whereas the latter softens the semantic boundary of a specialized profession.

3.7.4 Summary of the pilot study

This pilot study made a start on the analysis of lecture discourse directly using the framework of APPRAISAL, with an attempt to cover all of the original subsystems and to demonstrate how they can be applied for the data analysis. According to the results of this pilot study, first of all, it seems that emphasis should be placed upon the analysis of the frequently used appraisal signals embedded in the lecture discourse, such as APPRECIATION in ATTITUDE, EXPAND in ENGAGEMENT, and those belong to the systems of FORCE in GRADUATION. Secondly, modifications of the original APPRAISAL framework can be made in terms of removing and combining some subcategories. For instance, AFFECT can be modified since there was very limited use of the evaluative language in this category in the lecture discourse. Thirdly, as the discussion of the data analysis continues, there can be at least three interesting dimensions to an understanding of the evaluative meanings of the lecture discourse: 1) the co-text of the appraisal signals in terms of what is being evaluated in a specific lecture discourse, 2) understanding the gradable features of the appraisal signals using the system of GRADUATION, and 3) understanding different layers of the evaluative meanings through integrating different APPRAISAL subsystems.

3.8 Summary of the chapter

This chapter served to explicate the research design of this present study. Information on research site and participants has first been provided along with descriptions of data collection procedures. Particular attention has then been paid to the demonstration of the spoken data and has also considered its validity in the transcription process. Next, this chapter provided a detailed methodological review of the analytical procedures of using the theoretical framework of APPRAISAL in the whole qualitative analysis process of the research. The APPRAISAL system has then been introduced together with some modifications beyond the original framework. A pilot study of the research project has been conducted, presenting a step-by-step coding process of how APPRASAL has be applied and refined in the current study. Definitions of each APPRAISAL subsystem have been acknowledged for some basic discussions of the data involved.

Chapter 4 Appraisal signals in ELF academic lectures

4.1 Introduction

This chapter describes how appraisal signals are embedded in the lecture discourse of ELF academic lectures, exploring answers to RQ 1 of this current study. Section 4.2 starts with the findings of the forms and functions of the attitude signals collected from the 12 ELF academic lectures of this current study. It then moves on to how attitude signals can be used to express positive and negative meanings concerning various referents being referred to in the classroom setting. Next, Section 4.3 sets out to present the engagement signals identified in this study. Findings of the forms and functions of the engagement signals are also provided, followed by the illustrations of three pronoun patterns emerged in the ENGAGEMENT analysis. Section 4.4 focuses on the evaluative language in the system of GRADUATION. The findings concerning the forms and functions of the graduation signals are provided, followed by a detailed demonstration on the gradability of the graduation meanings embedded in the lecture discourse with a subsection focusing on vagueness of the gradable features. Following this, the chapter then reports on the gradable features of both attitude and engagement signals. Finally, Section 4.5 closes with some investigations into different layers of appraisal meanings integrating all three types of appraisal signals.

4.2 Attitude signals in ELF academic lectures

Table 4-1 below first shows the raw frequency of the token count of all the attitude signals extracted from the 12 academic lectures of the study. It then presents the normalized occurrences of those attitude signals distributed by the major ATTITUDE systems, i.e., AFFECT, JUDGEMENT and APPRECIATION, and their subsystems. As shown in Table 4-1, judgement signals (30.8 occurrences per 1000 words) took the dominant role in the use of ATTITUDE devices at these ELF lectures. The number of appreciation signals (26.6) ranks second. In contrast, it is noticeable that affect signals (2.2 in total,

with expressions such as *sorry, care* and *like*) are considerably less frequently used than judgement and appreciation signals, indicating a marginal interest to the lecturers when expressing evaluative meanings and thereby making no further divisions due to its limited use in the lecture discourse.

As we can also see from Table 4-1 below, the number of attitude signals have been further divided into eight subsystems, including five categories in JUDGEMENT and three in APPRECIATION. Veracity signals (13.4, with expressions such as *maybe, would* and *could*) occurred far more frequently than all the other judgement signals, followed by capacity signals (8.3, with expressions such as *can, be able to* and *good at*) having a relatively higher frequency than the use of other subsystems, i.e., PROPRIETY (3.2, with expressions such as *need, should* and *have to*), TENACITY (3.0, with expressions such as *will, going to* and *gonna*) and NORMALITY (2.8, with expressions such as *always, often* and *usually*). For the use of appreciation signals, the results show that the number of valuation signals (16.6, with expressions such as *important, better* and *problem*) are overwhelmingly greater than the signals in the other two subsystems – REACTION (5.4, with expressions such as *difficult, simple* and *interesting*) and COMPOSITION (4.6, with expressions such as *coherent, abstract* and *basic*).

Table 4-1 Raw frequencies of attitude signals in each ATTITUDE subcategory

System		Raw frequency	Per 1000 words	Attitude signals from the lecture discourse
JUDGEMENT	VERACITY	877	13.4	<i>maybe, would, could</i>
	CAPACITY	545	8.3	<i>can, be able to, good at</i>
	PROPRIETY	2012	30.8	<i>need, should, have to</i>
	TENACITY	199	3.0	<i>will, going to, gonna</i>
	NORMALITY	183	2.8	<i>always, often, usually</i>
APPRECIATION	VALUATION	1087	16.6	<i>important, better, problem</i>
	REACTION	1741	26.6	<i>difficult, simple, interesting</i>
	COMPOSITION	303	4.6	<i>coherent, abstract, basic</i>
AFFECT	142	2.2	<i>sorry, care, like</i>	

4.2.1 Forms of attitude signals in ELF academic lectures

Figure 4-1 demonstrates the overall distribution of the lexical items (words and phrases) of all the attitude signals identified in the 12 lectures. According to the results, more than 50% of the attitude signals are realised by adjectives, including words such as *disappointed*, *capable* and *important*. The number of attitude signals expressed by verbs and verbal phrases ranks second, accounting for 38% of the total instances with expressions such as *like*, *upset* and modals (*could*, *should* and *have to*). Attitude signals in the forms of adverb (*always*, *briefly* and *successfully*) and noun (*achievement*, *complaint* and *problem*) occupy 6% and 4% of the total number, while the occurrences of prepositional phrases (such as *at high risk* and *in common*) are the least of all (0.3%).

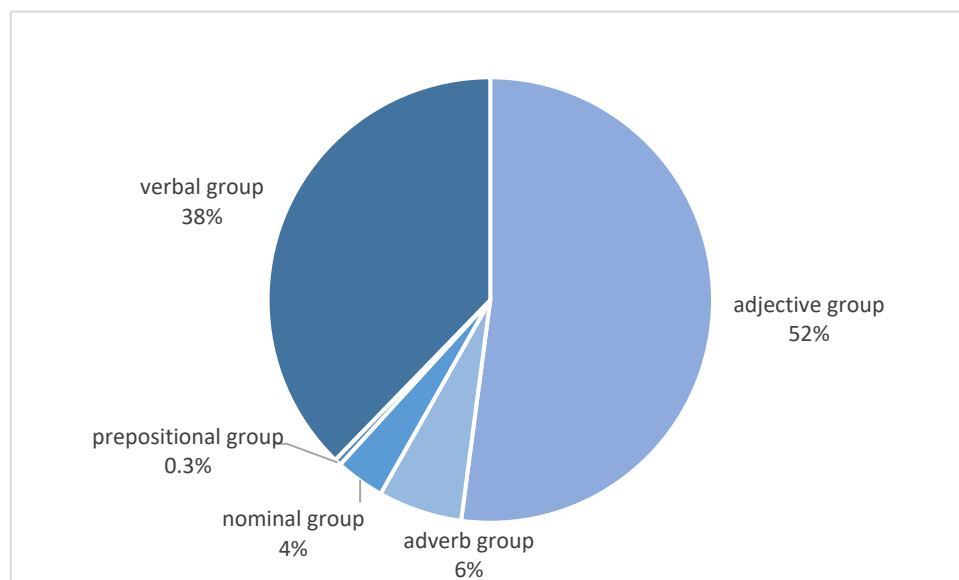


Figure 4-1 The overall form distribution of attitude signals

Figure 4-2 provides the lexical forms of all the attitude signals according to each ATTITUDE subcategory. Almost all the attitude signals can be expressed by adjectives except tenacity signals, with valuation signals in the form of an adjective (14.7) being the most common. Adjectives also occur frequently as the attitude devices in REACTION (4.9), COMPOSITION (3.9) and CAPACITY (3.2) but are less commonly used in AFFECT (1.1), NORMALITY (1.3), PROPRIETY (1.2), and VERACITY (0.8). As is evident from the data, attitude signals realised by verbs and verbal phrases are substantial in the lecture discourse as

well, with veracity signals (12.0) taking a leading position, followed by capacity (4.7), tenacity (3.0), propriety (1.9) and affect (0.8) signals. In contrast, attitude signals have a much lesser frequency in the use of lexical items from adverb, nominal and prepositional groups. Normality (1.4) and veracity (0.7) signals using adverbs and valuation signals (1.2) in the use of a noun occur relatively more frequently than attitude signals realised by other word groups.

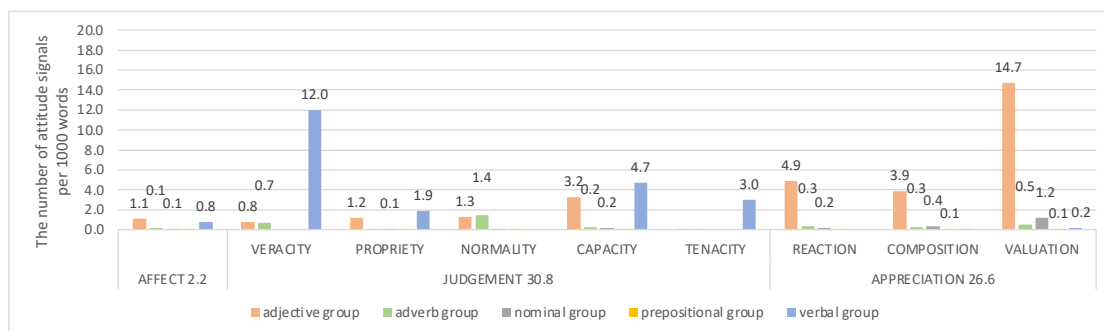


Figure 4-2 The form distribution of attitude signals in each subcategory

Table 4-2 below presents the function and forms of all the attitude signals identified in the 12 ELF academic lectures and the demonstration of the coding process can be found in Section 3.7.1 in Chapter 3.

Table 4-2 Function and forms of attitude signals in ELF academic lectures

Function	Forms	Token counts	Appraisal signals in the lecture discourse	
AFFECT	adjective group	52.2%	I'm more comfortable to use the hmm degree only format. Mythology, sorry , I I I, many of you know the word, I just want to make it clear about the spelling.	
	verbal group	35.5%	I used to be a journalist so I care about titles, outlines. This really upsets John's wife.	
	adverb group	6.3%	Sometimes they bring us closer that makes us feel emotionally involved in the novel. Luckily , by the time we went to the third tutorial, one of you pointed out to me that this was incorrect.	
	nominal group	3.5%	So in a way, it's not a matter of freedom of speech.	
JUDGEMENT	VERACITY	verbal group	89.5%	So we can just post a reaction to the video, to the forum. you don't need to record anything, any track.
		adjective group	5.7%	And to be honest , this is one of the things I noticed when I first moved to China, I was like, why is everyone looks like Korean pop stars.
		adverb group	4.9%	You probably also know that water buffer temperatures much more than the air. Just feel confident to apply, very likely you can get admission in the end.
	PROPRIETY	verbal group	58.8%	the lesson should start at ten, so you must be seated at 9:59. you mislead somebody so that makes it wrong.
		adjective group	36.8%	She can be petty-minded and even hypocritical . I don't want to sound too feminist , that it's an interesting topic of my opinion to be explored.
		nominal group	2.9%	They are now prisoners of their hmm name, very colorful and engaging, visual engaging persona.
	NORMALITY	adverb group	51.4%	let's think about context as we always do. one woman is chased by two handsome, smart, and fabulously wealthy men.
		adjective group	45.9%	...in the past, not that long ago, people who showed unusual behaviors. even if they're poor , it's a weird ideological function where everyone thinks that they are middle class.
	CAPACITY	verbal group	56.4%	For whatever you did, always check whether you are able to pay for it. I cannot give you a better answer than that.
		adjective group	38.7%	Skopos theory make us aware of the purpose we are translating. Are you familiar with the term hybrid?
		adverb group	3.0%	humans can think rationally . You need properly define who you are and try to break your boundary.
		nominal group	2.2%	But I can see there myself as a a data-analysis guy . You have 100% freedom .
	TENACI	verbal group	99.0%	So I will give you five to ten minutes to discuss, and I will ask some groups to present. we need to consider the reader's expectations and the market needs.
APPRECIATION	REACTION	adjective group	89.8%	I think vaccine is better . This paper was pretty general . This paper is too dense .
		adverb group	6.0%	there was a scene in the original movie, which was a highly and, I would say disturbingly stereotypical and diminishing of Asianness.
		nominal group	3.4%	That's the author's fault who should have explained better.
	COMPOSITION	adjective group	83.8%	Ok. that's a brief summary of what we did on Tuesday. So in this rule, a target text must be coherent with the source text.
		adverb group	8.0%	But I'll go through it more systematically next week. the translation follow closely of the original text.
		nominal group	6.3%	But thesis is an argument . Right? we'll know a lot of background information.
		prepositional group	2.3%	So in a way, we can see it as having things in common with the scientific report.
	VALUATION	adjective group	88.7%	Should be clear by now that nitrogen is important in water. some kind of maladaptive, dysfunctional state of chemical balance in the brain.
		nominal group	7.1%	Casual gaming has become a thing because anybody can play video games. Technology does something similar. Right? It will have pros and cons .
		adverb group	3.0%	so and I'm glad that whatever little issue there was, was positively settled.
		verbal group	1.0%	As if it's all about the economy, nothing else matters , right.
		prepositional group	0.5%	And malnourished children are at higher risk for complications.

Affect signals have first been listed; they are mainly realised by the lexical forms of adjective and verb, with the former taking up 52.2% of all the affect signals and the latter accounting for 35.5%. These percentages were generated from the number of

adjectives and verbs as fractions of the total amount of all the affect signals. The coloured bar charts indicate the contrast of the number of affect signals in each of the four word groups, i.e., adjectives, verbs, adverbs and nominals. As we can see from the lecture extracts in Table 4-2, words such as *comfortable* have been used to reveal the lecturer's positive feeling of being at ease in using the 'degree only' format of a device. The word *sorry* (*Mythology, **sorry**, I I I, many of you know the word, I just want to make it clear about the spelling.*), however, is an adjective indicating a negative feeling of the lecturer apologizing to the students that maybe it was unnecessary for him to have written down the word '*mythology*' on the white board since many of the students are likely to be familiar with the word. Examples of affect signals realised by words in the verbal group have also been given, including phrases and words such as *care about* when one lecturer expressed his mind directly and said *I care about titles, outlines.* and *upset* (*This really **upsets** John's wife.*), when another lecturer was explaining the emotional state of a character in a novel so as to activate his own evaluative stance to the character. The realisation of affect signals can also involve words and phrases in the adverb group (6.3%). The example, *feel emotionally involved*, demonstrates how certain literary techniques can aid what is happening in the novel to resonate with the reader. Nominal affect signals (3.5%) are rare in the lecture discourse; for example, one lecturer was introducing to the students how people use social media to express their personal views and in the lecturer's opinion – not always ***a matter of freedom of speech.***

For the five different types of judgement signals, the forms and functions have also been laid out in Table 4-2 with examples extracted from the lectures. Firstly, 89.5% of the veracity signals are concerned with the realisation of lexical choices in the verbal group, modals (*can*) and semi-modals (*need*) to be specific; as in the examples, the function of such signals is to suggest a possible action – *post a reaction to the video* or *record any track*. Adjectives (5.7%) and adverbs (4.9%) are also used as veracity signals, such as *to be honest* (indicating how truthful the lecturer believes his following

statement to be) and words such as *probably* and *very likely* signaling the probability of a particular situation.

For propriety signals, verbs (58.8%) are also the most used judgement signals to evaluate a behaviour, the majority of which are modal verbs *should* and semi-modals *have to* and *need*. However, verbs such as *mislead* also appeared occasionally in the lecture discourse which suggests a behaviour that might be condemned (*you **mislead** somebody so that makes it wrong.*). Propriety signals realised by adjectives (36.8%) are also common in the lectures; words such as *petty-minded*, *hypocritical* and *feminist* have been used to make a judgement on certain human characteristics. Propriety signals appeared with a much lower frequency in the use of a noun (2.9%); as in the example, the lecturer used the noun *prisoner* to describe people like Lady Gaga who cannot readily change their public persona (*They are now **prisoners** of their name...*).

As to normality signals, they are mainly adverbs (51.4%) and adjectives (45.9%). Adverbs such as *always*, *often* and *usually* are the most common normality signals; occasionally, words such as *frequently*, *fabulously*, and *famously* also occur to illustrate how unusual someone or some behaviour can be. By contrast, there is a wide range of adjectives used as normality signals, words such as *unusual*, *poor* and *weird* as shown in the examples and others such as *charming*, *handsome*, *famous*, *crazy* and *reclusive*.

As to capacity signals, similarly to propriety signals, they are mainly expressed by verbs (56.4%) and adjectives (38.7%). For example, semi-modals of *be able to* and modals of *can* are commonly used as capacity signals. There is also a large number of word choices in the adjective group for capacity signals, words such as *aware* (***aware** of the purpose*) and *familiar* (***familiar** with the term*) listed in the lecture extracts below and others such as *active*, *capable*, *educated* and *professional*. By contrast, capacity signals realised by lexical items in the adverb (3.0%, *think **rationally*** and ***properly** define*) and

nominal (2.2%, see myself as **a data-analysis guy** and you have **100% freedom**.) groups are not often seen in the lecture discourse.

Finally, as to tenacity signals, the last judgement signal, nearly all of them are using lexical devices in the verbal group (99.0%), the most common word choices being *will*, *being going to*, *gonna*, *need*, *would* and *would like*.

Next, appreciation signals of reaction, composition and valuation are introduced in Table 4-2. As we can see from the coloured bar charts, these three types of signals are mainly realised by adjectives: 89.8% for REACTION, 83.8% for COMPOSITION and 88.7% for VALUATION. For reaction signals, there are examples drawn from two lectures listed below. One lecturer gave his opinion of the use of vaccines compared with natural immunity – *I think vaccine is **better***, whilst the other, in evaluating the quality of two papers in class, said *This paper was pretty **general**. This paper is too **dense***. For composition signal, words such as *brief* and *coherent* are used to assess how certain types of texts are organised. For valuation signals, adjectives such as *important* have been used most frequently to indicate how worthwhile something can be and other words such as *maladaptive* and *dysfunctional* can also be seen to describe valuations of a consequence.

Words and phrases in adverb and nominal groups also occurred in the lecture discourse for all these three types of appreciation signal: 6.0% (***disturbingly** stereotypical*) and 3.4% (*That's the author's **fault**...*) for reaction signals, 8.0% (*go through it more **systematically***) and 6.3% (*thesis is an **argument***.) for composition signals, and 3.0% (*...glad that whatever little issue there was, was **positively** settled.*) and 7.1% (*Casual gaming has become **a thing***.) for valuation signals. Apart from the word groups discussed above, composition signals can also be realised by prepositional phrases (2.3%, such as the phrase ***in common with** the scientific report*) and valuation signals can very rarely use verbs (1.0%, such as *matter* as in *...**nothing else matters***.) or prepositions (0.5%, such as the phrase *at high risk*).

4.2.2 Positive and negative meanings of attitude signals concerning their referents

Figure 4-3 below illustrates the contrast between positive and negative meanings coded in the attitude signals that have been identified from the lecture discourse of this current study; in other words, lecturers' word choice for attitude signals can encompass either a positive or negative value. For affect signals, the number of expressions carrying positive (such as *happy* and *embrace*) and negative (such as *uncomfortable* and *offended*) meanings is very close, with the former having 1.2 instances per 1000 words and the latter, 1.0. For judgement and appreciation signals, however, lecturers mainly used positive attitude signals and only occasionally made use of a negative signal. There are 28.6 instances of positive judgement signals (such as *one of the **best** students*) and 2.2 of negative (such as *...her intellectual capacity is **dwindling, diminishing**...*), and 22.8 instances of positive appreciation signals (e.g., *appealing*) and 3.8 of negative (e.g., *daunting*).

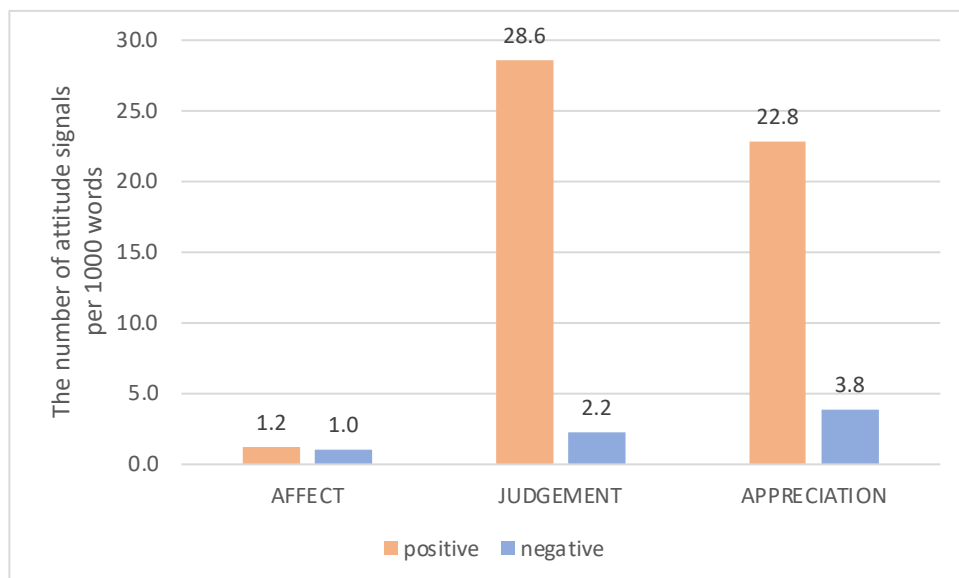


Figure 4-3 Positive and negative meanings of attitude signals

The differentiation between positive and negative meanings of an attitude signal is not always straightforward; it requires a more refined analysis of these discourse signals with reference to what is being referred to in the lecture discourse. According to Martin and White (2005), the system of JUDGEMENT concerns evaluative language being used to assess human behaviour while APPRECIATION, on the other hand, relates to evaluative language for the appraisal of things and phenomena. Therefore, the contextual factors differentiate these two major systems; in other words, the referent that is being appraised determines what attitude signals can be or should be used. Furthermore, when such attitudinal resources appeared in a specific context, such as in this current study, the context of ELF academic lectures, judgement signals usually refer to students' behaviour such as being able to give a good answer in class or submitting an assignment on time. Appreciation signals in the lecture discourse, for example, very often refer to some form of a text, such as a novel, a translation sample text, a scientific report or an essay brief. In one example of a lecture containing judgement signals, the lecturer said *I can see there myself as a data-analysis guy*. The positive meaning of the judgement signal (*a data-analysis guy*) emerged with the lecturer referring to himself as a data-analysis guy and wishing to use his own experience to encourage his students to take advantage of their own interest in the subject when studying biological sciences. Thus, the evaluative meaning coded in the attitude signals is activated by the connection between the referent (the lecturer himself) and the lecturer's choice of the signal (*a data-analysis guy*). The discourse signals alone do not always provide sufficient information for the understanding of lecturers' use of positive and negative signals without further analysis of the referent that is being appraised.

For affect signals, the related referent can be any entity that lecturers may refer to when talking about their own positive or negative feelings and values. As listed in Table 4-3 below, the entity can be an argument that had been discussed in class as the lecturer thought that it may elicit feelings such as *uncomfortable*, *offended*, *angry* or *guilty*; it can be the word count of an essay, that students did not question, which

made the lecturer *happy*. The referent of affect signals can also be a literary technique to involve readers emotionally in a novel or it can be a video game that was described by the lecturer as being a perfect virtual world that could *embrace* and *hug* whoever was playing it. For judgement signals, the referent is very often related to some human capacity and behaviour such as the intellectual capacity of a leading character in a novel, or an institution such as the South Korean government. More commonly, the referents of judgement signals are associated with the lecturers themselves, the class as a whole or an individual student. For appreciation signals, the referents are always closely related to the teaching content of the lectures, such as the teaching materials the class was using, a story or a report, the key concepts and topics of the lectures (training, vaccines, etc.), class or after-class activities, a recent class discussion or a daunting task that had been set.

Furthermore, although some appraisal signals may indicate a neutral attitude rather than taking a positive or negative stance, they are still evidence of an evaluation. The understanding of the evaluative meanings of such signals is also highly dependent on the referents being referred to in the context. For example, as summarised earlier, attitude signals commonly occur in an appreciation of a specific text such as a novel, a translation sample or a scientific report. For instance, the word *different* can be identified as an attitude signal expressing textual features as in *they are very **different** from American dramas in that sense*. when one lecturer was differentiating two types of drama. The lecturer's attitude cannot be labelled as either positive or negative, as the comparison of being different dramas can be elaborated with both the advantages and disadvantages of the two drama types. There is one more example of the word *different* as in *And how can this be done? By engaging in **different** types of exercising..* In this example, the word *different* has been identified as an attitude signal concerning valuation because, in this context, the lecturer was emphasising the effectiveness of government intervention for disaster prevention. The word *different* indicates the lecturer's neutral view, without being judgemental on any of the several possibilities for governmental intervention.

Table 4-3 Positive and negative meanings of attitude signals concerning their referents

System	Attitude signals in the lecture discourse	P/N	Referent
AFFECT	<i>How did these arguments make you feel? Uncomfortable? Offended? Angry? Guilty?</i>	N	arguments
	<i>Happy that I know I have no questions about the word count.</i>	P	word count
	<i>Sometimes they bring us closer that makes us feel emotionally involved in the novel.</i>	P	some literary techniques
	<i>It kinds of embraces you, hugs you. And you become a first a character that can change the destiny of the characters.</i>	P	a video game
JUDGEMENT	<i>I can see there myself as a data-analysis guy.</i>	P?	the lecturer
	<i>Skopos theory makes us aware of the purpose we are translating.</i>	P	lecturer and students
	<i>You need to check their curriculum very carefully.</i>	P	all students
	<i>she used to be, she was one of the best students in this program.</i>	P	a student
	<i>There are signs that her intellectual capacity is dwindling, diminishing.</i>	N	a character in a novel
	<i>So the South Korean government has worked very hard to make Korean media do well globally.</i>	P	the South Korean government
APPRECIATION	<i>why this story is so appealing, it's because it's Shakespeare.</i>	P	this story
	<i>it is not like an academic report. It is very brief, very concise.</i>	P	a report
	<i>So these are the two reasons why training is very important.</i>	P	some training
	<i>The vaccines is no longer available because it's no longer necessary.</i>	P	some vaccine
	<i>isn't this contradictory to what you just said?</i>	N	a discussion
	<i>But when you take into consideration of the variations, and that is a very daunting task</i>	N	a task
	<i>they are very different from American dramas in that sense. And how can this be done? By engaging in different types of exercising.</i>	?	different

In summary, Section 4.2 made an investigation into the use of attitude signals identified in the lecture discourse of the 12 ELF academic lectures of this current study. According to the results, attitude signals concerning judgements of human behaviour have been used most frequently in the lecture discourse, among which discourse signals indicating veracity (such as *maybe, would* and *could*) and capacity (such as *can, be able to* and *good at*) were the most common. Attitude signals expressing appreciation of things and phenomenon also frequently occurred, especially those describing the valuation of a situation or an entity (such as *important, better* and

problem). By contrast, attitude signals regarding personal affect only occasionally occurred (such as *sorry*, *care* and *like*). Regarding these interpersonal functions of the attitude signals, they mainly appeared as instances of either an adjective or a verb (mainly modal and semi-modal verbs). The positive and negative meanings of the attitude signals have also been discussed in relation to the various referents occurring in the lecture discourse. Results show that ELF lecturers mainly used positive attitude signals rather than negative, and that these signals usually revolved around either students' behaviours, such as being able to provide a good answer, or some teaching material, particularly a written text such as a novel or a scientific report. The findings concerning attitude signals highlight the importance of the co-text when analysing lecturer's attitudinal resources in the lecture discourse. ELF academic lecturers tend to give their personal opinions using positive discourse signals and their attitudes are closely related to the context of the situation in the classrooms rather than to their personal emotions.

4.3 Engagement signals in ELF academic lectures

This section focuses on the linguistic features of engagement signals identified from the ELF academic lectures of this current study. Table 4-4 shows the raw frequency of these signals identified from the lecture discourse divided by each ENGAGEMENT system, i.e., ENTERTAIN and ATTRIBUTE under EXPAND, as well as PROCLAIM and DISCLAIM under CONTRACT. According to the data, expand signals (79.0) are approximately five times more than contract signals (14.7).

Table 4-4 further divides the engagement signals into the four subsystems mentioned above, with entertain signals (53.4, with expressions such as *if you*, *you can* and *I think*) being used most frequently by the ELF lecturers, followed by attribute signals (25.6, with expressions such as *I said*, *we* and *your*). Disclaim signals (12.5, with expressions such as *don't*, *no* and *cannot*) also appeared fairly frequently in the lecture discourse

whereas occurrences of proclaim signals (2.2, with expressions such as *of course*, *obviously* and *sure*) can be found only occasionally.

Table 4-4 Raw frequencies of engagement signals in each ENGAGEMENT subcategory

System		Raw frequency		Per 1000 words	Attitude signals from the lecture discourse	
EXPAND	ENTERTAIN	5164	3490	79.0	53.4	<i>if you, you can, I think</i>
	ATTRIBUTE		1674		25.6	<i>I said, we, your</i>
CONTRACT	DISCLAIM	962	815	14.7	12.5	<i>don't, no, cannot</i>
	PROCLAIM		147		2.2	<i>of course, obviously, sure</i>

4.3.1 Forms of engagement signals in ELF academic lectures

Figure 4-4 summarises the statistical results of engagement signals according to word groups that emerged in the appraisal analysis of this current study. As can be seen from the results, 58% of all the engagement signals are realised by word choices associated with pronouns. The number of lexical items in the adverb group accounts for 17% of the total counts of the engagement signals with words such as *almost*, *probably* and *never*. Expressions in verbal (*call*, *mention* and *suggest*) and prepositional groups (*at least*, *in a way* and *to some degree*) occupy 7% and 5% of the total distribution, followed by the number of questions (*Everybody agrees?* and *What's your name again?*) taking up about 4%. The percentage of the following word groups is lower than the previous ones, including adjectives (3%, *certain* and *possible*), quantifiers (3%, *a little* and *some sort of*), nouns (2%, *anybody* and *thing*) and conjunctions (1%, *even if* and *but*).

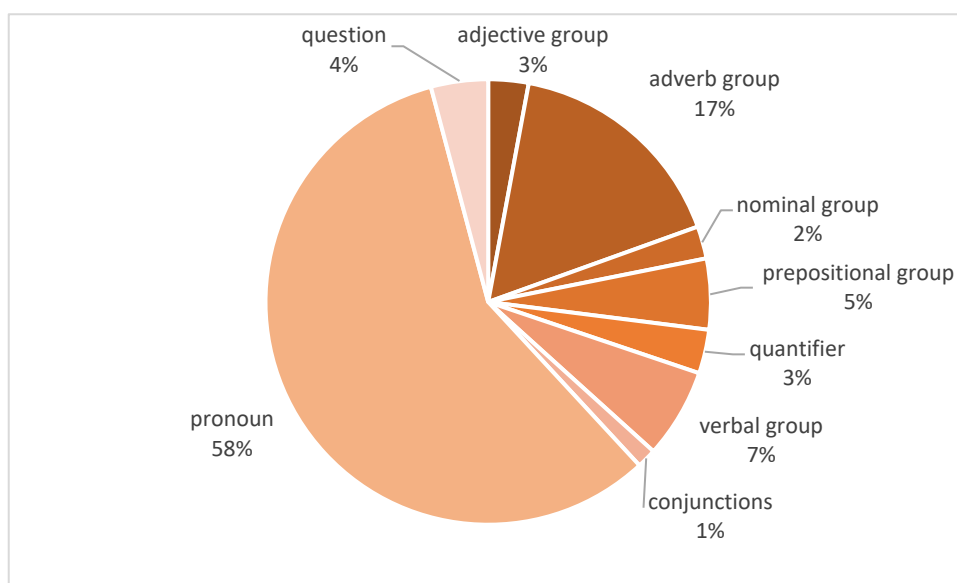


Figure 4-4 The overall form distribution of engagement signals

Figure 4-5 presents the linguistic form of all the engagement signals according to the four subsystems, i.e., ENTERTAIN, ATTRIBUTE, PROCLAIM and DISCLAIM. As we can see from the results, the forms of entertain signals are the most diversified compared to appraisal signals in other ENGAGEMENT subsystems, with pronouns (26.9) being used most frequently, followed by adverbs (9.3). Entertain signals can also be realised by questions as they directly invite students' engagement in the classroom communication and results show that such signals (3.9) often occurred in the lecture discourse. For other entertain signals, prepositional phrases (4.0) have been used relatively more frequently than others such as entertain signals expressed by quantifiers (3.0), nouns (2.1), verbs (2.0) and adjectives (1.4). Attribute signals appeared mainly in the use of a pronoun (23.5) and very occasionally using words and phrases in verbal (2.0) and prepositional (0.1) groups. For proclaim signals, the use of prepositions (0.6) and pronouns (0.6) are the most common, very closely followed by verbs (0.5) and adverbs (0.4), with adjectives being very rare (0.1). Finally, for the realisation of disclaims signals, lexes of adverbs (5.9) and pronouns (3.1) often occurred whereas the use of other word groups such as verbs (1.6), adjectives (1.2), conjunctions (0.5), prepositions (0.1) and nouns (0.1) are rare.

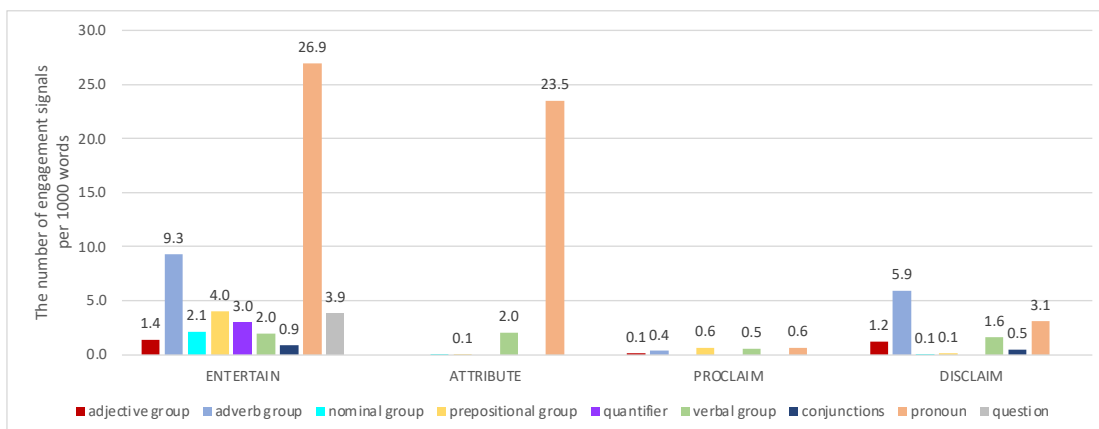


Figure 4-5 The form distribution of engagement signals in each subcategory

Table 4-5 presents the function and forms of all the engagement signals identified in the 12 lectures along with lecture extracts of how these appraisal signals have been used. The coding process of the engagement signals has been presented in Section 3.7.2 in Chapter 3.

Table 4-5 Function and forms of engagement signals in ELF academic lectures

Function	Forms	Token counts	Appraisal signals in the lecture discourse	
EXPAND	ENTERTAIN	pronoun	50.4%	<i>In the novel, he can make us feel somehow complicit.</i>
		adverb group	17.4%	<i>so you're almost right.</i>
		prepositional group	7.5%	<i>So in a way, it's not a matter of freedom of speech.</i>
		question	7.3%	<i>Does that sound like somebody you just mentioned?</i>
		quantifier	5.6%	<i>Possibly some of you will try something like that in the research essay.</i>
		nominal group	3.9%	<i>It's kind of the same thing here, right?</i>
		verbal group	3.7%	<i>Sometimes they don't seem to make sense.</i>
		adjective group	2.6%	<i>As if it's all about the economy, nothing else matters, right.</i>
		conjunctions	1.6%	<i>Perhaps to certain kinds of stress or certain kinds of environmental influence.</i>
		ATTRIBUTE		pronoun
verbal group	7.8%			<i>So the China Daily wants the students to translate business news for them.</i>
prepositional group	0.4%			<i>According to Mänttari, she thought a target text user is different.</i>
CONTRACT	PROCLAIM	pronoun	27.8%	<i>Then I want to see 16 uploads, not 8.</i>
		prepositional group	27.8%	<i>Of course I'm not looking for 100 references.</i>
		verbal group	24.3%	<i>In China, it called that a pond city these days.</i>
		adverb group	16.0%	<i>She's basically saying that Elizabeth's ideas are crazy.</i>
		adjective group	6.3%	<i>what I want to want you guys achieve is that 5 credit hours, okay, that is sure.</i>
	DISCLAIM	adverb group	47.4%	<i>You can never be inside the story.</i>
		pronoun	24.6%	<i>Everybody has a paper, speak up a bit. I can't hear you.</i>
		verbal group	12.9%	<i>They didn't have facebook back then.</i>
		adjective group	9.7%	<i>There are no bad questions or bad answers.</i>
		conjunctions	3.8%	<i>So that is for adults. But for children, that is quite different.</i>
prepositional group	1.0%	<i>Otherwise, there would be a secure intervention rather than a comprehensive one.</i>		
nominal group	0.5%	<i>It's already there. There's nothing I could do about it.</i>		

For entertain signals, as we can see from the coloured bar charts, the use of pronoun occupies up to 50.4% of all the tokens found in this form category; in other words, more than half of the entertain signals are related to pronouns in this current study. For example, the *us* pronoun as in *In the novel, he can make **us** feel somehow complicit.* is an entertain signal the lecturer was using to align himself with the students, creating a possible shared feeling. Entertain signals have also been frequently found in the realisation of adverbs (17.4%) such as *almost* as in *so you're **almost** right.* Questions (7.3%) often appeared as entertain signals as well and one example of a yes / no question has been given when one lecturer was seeking the students' response to a particular character in a novel: ***Does that sound like somebody you just mentioned?*** Entertain signals in the use of preposition phrases (7.5%, such as *in a way* as in *So **in a way**, it's not a matter of freedom of speech.*), quantifiers (5.6%, such as the quantifier *some* as in *Possibly **some** of you will try...*), nouns (3.9%, such as the noun phrase *kind of the same thing*) and verbs (3.7%, such as *seem* as in *Sometimes they don't **seem** to make sense.*) are much less frequent, with each taking up a small portion of the total token counts. These expressions in the lectures function as entertain signals that could open up a dialogic space for alternative viewpoints from the students. Two other word groups also appeared but with rare occurrences: adjectives and conjunction each holding a very small proportion of 2.6% and 1.6%. For example, the adjective *certain* as in *Perhaps to **certain** kinds of stress or **certain** kinds of environmental influence* and the conjunction *as if* as in ***As if** it's all about the economy...* both suggest a possible interpretation of a piece of information discussed in the lecture which dialogically allows alternative positions and voices to be raised.

The form category of the expand signal in ATTRIBUTE is not as diversified as the entertain signals described above. Attribute signals are primarily realised by pronouns (91.8%); for example, the pronoun *you* as in *Two of **you** have mentioned a GPS, which is quite good.*, has been used by one lecturer acknowledging two students who provided relevant information in a class activity. Lexes in verbal (7.8%) and prepositional (0.4%)

groups have also been used for attribute signals when lecturers acknowledge an external voice. For example, the verb *want* and the preposition phrase *According to* as in *So the China Daily **wants** the students to translate business news for them.* and ***According to** Mänttari, she thought a target text user is different.*

For proclaim signals in the system of CONTRACT, three groups of expression have been used almost evenly – pronouns (27.8%), prepositions (27.8%) and verbs (24.3%), followed by the adverb group (16.0%). For example, the pronoun phrase *I want to* as in ***I want to** see 16 uploads, not 8.* and the verb *called* as in *In China, it **called** that a pond city these days.* are also proclaim signals, because the information provided should not be arguable, such as the assignment requirement in the first example and the nickname of a city in the second. The preposition phrase *of course* as in ***Of course** I'm not looking for 100 references.* and the adverb *basically* as in *She's **basically** saying that Elizabeth's ideas are crazy.* are proclaim signals occurring in two statements, which should be justifiable, even though students could always interrupt if they have some ideas or questions in mind. Proclaim signals can also be realised by adjectives (6.3 %) even though the usage frequency is much lower than the other lexical forms just described, such as *sure* as in *What I want to want you guys achieve is that 5 credit hours, okay, that is **sure**.* The adjective *sure* restricts dialogical space and probably does not allow the students to take an alternative position or at least discourages them from doing so.

For disclaim signals, adverbs (47.4%) have been used most frequently, such as *never* as in *You can **never** be inside the story.* The use of pronouns (24.6%) is also common, such as the phrase *I can't* as in ***I can't** hear you.* Another two groups such as verbs (12.9%) and adjectives (9.7%) often occurred as well, such as *didn't have* as in *They **didn't have** Facebook back then.* and *no* as in *There are **no** bad questions...* By contrast, the form categories of conjunctions (3.8%, such as *but* as in ***But** for children, that is quite different.*), prepositions (1.0%, such as *rather than* as in *a secure intervention **rather than** a comprehensive one.*) and nouns (0.3%, such as the compound pronoun

nothing as in *There's **nothing** I could do about it.*) are not so common. These disclaim signals lead straight to the point of rejection and allow very limited possibility for other voices.

4.3.2 Pronoun patterns as engagement signals in ELF academic lectures

Figure 4-6 presents the distribution of engagement signals in nominal groups, mainly pronouns and a very small portion of common nouns such as *disagreement* and *opinion*. As Biber (2006) states, the use of pronouns significantly contributes to the interactivity of classroom communication and, therefore, they are also important resources for the understanding of evaluative meanings embedded in the lecture discourse. According to the results of this current study, pronouns constantly occurred as engagement signals in the lecture discourse. There are seven personal pronouns (*you, we, us, me, ourselves, yourself* and *yourselves*) and five possessive pronouns (*my, our, your, ours* and *yours*), which have all been identified as attribute signals with the former having 17.4 occurrences and the latter 4.5. As Hyland (2005) explains, self-mention is an effective way for addressers to project themselves. Some compound pronouns also appeared and labelled as either entertain (3.3) or disclaim (0.5) signals, such as *nobody, nothing, somebody* and *something*. The use of the first-person pronoun *I*, however, has only been regarded as an instance of an entertain signal if it collocates with a modal verb or those that Biber would refer to as stance verbs such as *think, know* and *believe* (2006: 90). Three pronoun patterns have emerged in the data analysis of engagement signals: *first- and second-person pronoun and modals* pattern (10.2 instances for entertain signals, 0.6 for proclaim and 0.9 for disclaim), *first- and second-person pronoun and verbs* pattern (8.9 for entertain signals, 1.6 for attribute and 1.7 for disclaim), as well as *pronoun in questions* pattern (6.2 for entertain signals only). These three patterns have been successively abbreviated to 1st2ndpronM, 1st2ndpronV and 1st2nd pron_Q, and examples will be provided in the following paragraphs to illustrate how they have been employed in the lecture discourse.

The usage frequency of these three patterns have also been presented in Figure 4-6 below. First of all, for entertain signals, all three pronoun patterns have been used with a high frequency in all of the lectures. More specifically, first- and second-pronouns occurred more frequently in the pattern of 1st2nd pronM (10.2) than 1st2nd pronV (8.9). In other words, for entertain signals, first- and second- pronoun such as *I*, *we*, and *you* are more frequently used to co-occur with modal verbs rather than regular verbs, including those stance verbs such as *think*, *know* and *believe* (Biber, 2006: 90). The third pattern 1st2nd pron_Q, having 6.1 occurrences per 1000 words, appeared with the least frequency for entertain signals compared with the other two patterns described above. This pattern, comprising an individual first- or second-pronoun such as the nominative *I*, *we* and *you*, accusative *me*, *us* and *you* or possessive pronouns *my*, *our* and *your* appeared in a question. Interestingly, for attribute signals, only the pattern of 1st2nd pronV (1.6) has emerged whereas for proclaim signals, only the pattern of 1st2nd pronM (0.6). As to disclaim signals, both of these two patterns have been used – 1st2nd pronV (1.7) and 1st2nd pronM (0.9).

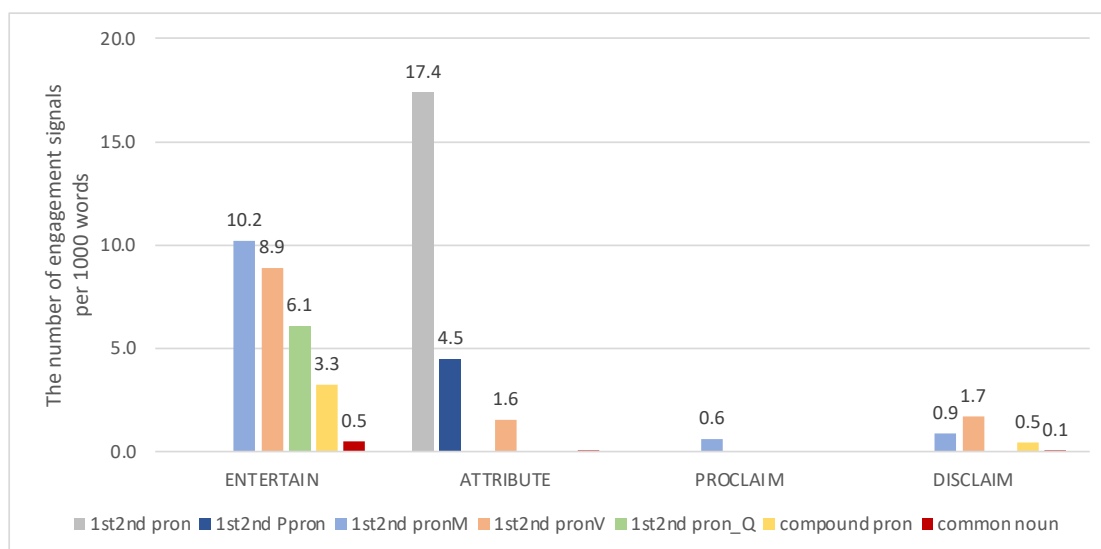


Figure 4-6 The distribution of engagement signals in nominal groups

The three pronoun patterns of engagement signals described above (1st2nd pronM, 1st2nd pronV and 1st2nd pron_Q) have been laid out in Table 4-6 below with usage frequency of each pattern and relevant examples of how they appeared in the lectures. For example, *I would like* is the specified entertain signal in ***I would like*** to share two things might be interesting. using 1st2ndpronM; *I think* as in ***I think*** it's meaning a sense of what is right and what is wrong. and *are you* as in ***Are you*** familiar with the term hybrid? are the occurrences of 1st2ndpronV and 1st2nd pron_Q. The three pronoun patterns emerged not only from the constant use of pronouns in academic lectures (Rounds, 1987; Young, 1990; Fortanet, 2004) and their role of indicating interactivity in the lecture discourse (Morell, 2004), but more importantly, from their interrelations with other interactive resources such as the use of modality (Biber, 2006) and question (Tsui, 1996; Morell, 2004; Chang, 2012) in the process of understanding the engagement meanings coded in the spoken discourse of academic lecturers. The compounding use of these highly interactive linguistic resources can be regarded as effective engagement signals in the lecture discourse; therefore, lecturers' usage frequency of these patterns and their choice of specific engagement signals are of crucial importance in understanding the evaluative language used in academic lectures.

As to lecturers' choice of specific engagement signals in the use of these three patterns, Table 4-6 below provides examples of lecture extracts containing instances of these signals in relation to ENTERTAIN, PROCLAIM and DISCLAIM. For entertain signals, as discussed above, all three pronoun patterns constantly occurred in the lecture discourse. For the 1st2nd pronM pattern, expressions such as *I would like*, *we may*, *you need to*, *you want to*, and *you can* have been listed in Table 4-6 below. The two 1st pronM patterns, *I would like* as in ***I would like*** to share two things might be interesting. and *we may* as in ***We may*** have different ways to translate. are entertain signals where the lecturers were sharing some news, which might be of some interest, and suggesting various ways for making translation. The compounding use of first-person pronoun and modality such as *I would like* and *we may* can be seen as fixed appraisal

expressions functioning as entertain signals in class when lecturers need to give their own opinions of some subjects whilst indicating there can be other possible perceptions and interpretations. The other three 2nd pronM patterns – *you need to*, *you want to* and *you can* – are also fixed patterns of entertain signals as in ***you need to think about it.***, ***you want to go from Spain to Finland,*** ***you can probably do it.*** The appraisal signals of these 2nd pronM patterns present a dialogic nature as the lecturers were addressing the students with the second-person pronoun *you* while suggesting their possible follow-up actions. The interpersonal function of these entertain signals therefore helps to facilitate the face-to-face classroom communications and make it more engaging.

For the 1st2ndpronV pattern, the structure of 1st person pronoun and stance verb (such as *I think* and *I assume*) are common where lecturers can overtly express their personal views, as Biber (2006) has already explained. However, other 1st2ndpronV instances such as *let's say* and *if you* followed by a regular verb have constantly occurred as entertain signals in the lectures as well when lecturers were making suggestions as in ***Let's say that the assumption was that...*** and ***if you choose this question...*** One other common entertain signal of 1st2ndpronV is *as you know* as in ***But clearly as you know, you will also have...***, when one lecturer was making clarifications of the deadline for an assignment; *as you know* is an entertain signal coded with a dialogic tone in the lecture discourse.

For 1st2nd pron_Q, all of the questions containing a first- or second- person pronoun have been included as entertain signals in this category, such as yes / no questions ***Are you familiar with the term hybrid?*** and ***Can you follow the paper?***, *wh-* questions ***What's your opinion at this stage?*** and questions without question word order ***We're on the same page?*** or ***So now my question is...*** These questions functioning as entertain signals directly invite students' participation so as to expand the teacher-student communication. Tag questions such as *right?* and *ok?* have also been categorised as entertains signals of 1st2nd pron_Q if a first- or second- person pronoun

appeared in the main clause, such as *it starts by telling us what this document is, right?* The main clause is about an introduction of a document and the lecturer flagged the statement with an engaging perspective by using an inclusive pronoun *us*; in doing so, the lecturer aligned himself with the students as if they all needed to understand the content of the document.

As to the other three subsystems, 1st2nd pronV only occurred as attribute signals and 1st2nd pronM as proclaim signals; disclaim signals, however, have instances of both patterns. For attribute signals, expressions such as *I mentioned*, *we explained* and *we said* are signals indicating the sources of the information which are based either on the lecturers themselves or on what has previously been discussed in class.

For proclaim signals, the word choice can be limited, such as *I want* when lecturers were giving a direct instruction and expecting students' corresponding actions as in *I wanted you to observe these examples and then tell me what goes wrong with each case*. In such cases students were expected to follow the lecturer's requirement without taking any contrary positions even though they could make enquiries if there is any confusion. The proclaim signal *we want* has similar functions to *I want* but perhaps with more politeness and a little less insistence, as in *Some explanations of these legal terms because we want students to understand the content*; the inclusive *we* could just refer to the lecturer himself when he was giving the reason for elucidating some of the legal terms as well as encouraging the students to put some effort into an understanding of the content. The other proclaim signal, *we will* as in *So we will talk about this referencing system in the next lecture*. was used when a lecturer was telling the students what has already been planned for the next lecture (and probably not changeable) while designating himself and the students inclusively with the pronoun *we*.

For disclaim signals, a negation would emerge in the lecture discourse with both 1st2nd pronM and 1st2nd pronV patterns, using expressions such as *can't* for the former as in

We cannot change the original layout., and *don't* + a verb for the latter as in **You don't think, you don't exist**. The propositional content of the statements that the lecturers were giving were not arguable and the lecturers probably have no intention of allowing any denials and arguments.

Table 4-6 Three pronoun patterns of engagement signals

System	Pronoun patterns	Engagement signals in the lecture discourse
EXPAND ENTERTAIN	1st2nd pronM	<p>I would like to share two things might be interesting.</p> <p>we may have different ways to translate.</p> <p>...just some questions you need to think about it.</p> <p>if you have a boat, you want to go from Spain to Finland, you can probably do it these days.</p>
	1st2nd pronV	<p>I think it's meaning a sense of what is right and what is wrong.</p> <p>I assume that all of you submitted the essay number two on time.</p> <p>Let's say that the assumption was that people would be non-compliant.</p> <p>if you choose this question, you can actually choose any academic work within reason that provides a definition of ethics.</p> <p>But clearly as you know, you will also have a time, five more working days in case of delay.</p>
	1st2nd pron_Q	<p>Are you familiar with the term hybrid?</p> <p>Can you follow the paper? Is it understandable?</p> <p>What's your opinion at this stage?</p> <p>We're on the same page?</p> <p>So now my question is what about aquatic systems?</p> <p>Well, it starts by telling us what this document is, right?</p>
EXPAND ATTRIBUTE	1st2nd pronV	<p>But I mentioned earlier when I discussed about planning, that planning is dynamic.</p> <p>As we explained, they can be one person.</p> <p>...earlier on we said, similar words, either similar in meaning or similar in form.</p>
CONTRACT PROCLAIM	1st2nd pronM	<p>I wanted you to observe these examples and then tell me what goes wrong with each case.</p> <p>Some explanations of these legal terms because we want students to understand the content.</p> <p>So we will talk about this referencing system in the next lecture.</p>
CONTRACT DISCLAIM	1st2nd pronM	<p>I don't want to sound too feminist.</p> <p>We cannot change the original layout.</p>
	1st2nd pronV	<p>I haven't seen this movie.</p> <p>You don't think, you don't exist.</p>

In summary, this section of the chapter focused on the interpersonal functions of the engagement signals collected from the lecture discourse. As can be seen from the results, engagement signals concerning entertain meanings such as inviting other voices have been used most frequently, followed by expand signals indicating sources of information. Contract signals occurred much less frequently, with those conveying negation and counterargument being relatively common and those expressing proclaims being rather rare. It is noticeable that the use of pronouns is prevalent for engagement signals and three pronoun patterns have been identified: 1st2nd pronM (such as *I would like...*, *we may...* and *you need...*), 1st2nd pronV (*I think...*, *I mentioned...*, and *if you choose...*) and 1st2nd pron_Q (*Are you...*, *Can you...*, and *What's your opinion...*). According to the substantial evidence of the occurrence of expand signals in the lecture discourse, especially the use of personal pronouns, lecture discourse can be seen as highly engaging from a discourse level rather than didactic. Lecturers made abundant use of expand signals to invite student voices and prompt their participation.

4.4 Graduation signals in ELF academic lectures

This section begins with the raw frequencies of all the graduation signals extracted from the 12 ELF academic lectures (see Table 4-7 below). It then presents the distribution of the normalized occurrences of those signals according to the major GRADUATION systems and their subsystems. First of all, as is evident from the results, the number of tokens of graduation signals in FORCE (56.2) is overwhelmingly higher than that in FOCUS (29.1). The system of FORCE has then been divided into its two subsystems: INTENSIFICATION (16.6) and QUANTIFICATION (39.6), with the token of the latter more than twice as much as the former. It is apparent from these results that the graduation signals in QUANTIFICATION occur to the largest amount in the lecture discourse, followed by those in the system of FOCUS with INTENSIFICATION signals taking a small portion. The research, therefore, will classify the data based on three major systems in GRADUATION

rather than the original FORCE and FOCUS contrast, i.e., INTENSIFICATION, QUANTIFICATION and FOCUS.

The number of graduation signals in INTENSIFICATION and QUANTIFICATION have then been further divided into five subsystems, including PROCESS and QUALITY within INTENSIFICATION and three others – EXTENT, MASS and NUMBER under QUANTIFICATION. As also shown in Table 4-7 below, graduation signals have a high frequency successively in the subsystems of NUMBER (21.1, with expressions such as *some, all and more*), EXTENT (17.4, with expressions such as *in* prepositional phrase, *now* and *already*) and QUALITY (10.1, with expressions such as *very, more* and *most*). In comparison, the subsystems of PROCESS (6.5, with expressions such as *just, actually* and *really*) and MASS (1.1, with expressions such as *little* and *big*) have been used less commonly, particularly the latter with only 1 token per 1000 words in the lecture discourse.

Table 4-7 Raw frequencies of graduation signals in each GRADUATION subcategory

System		Raw frequency		Per 1000 words	Attitude signals from the lecture discourse		
FORCE	INTENSIFICATION	QUALITY	658	16.6	10.1	<i>very, more, most</i>	
		PROCESS	424		6.5	<i>just, actually, really</i>	
	QUANTIFICATION	3671	NUMBER	1376	56.2	21.1	<i>some, all, more</i>
	EXTENT		2589	1140	39.6	17.4	<i>In-phrase, now, already</i>
	MASS		73	1.1	<i>little, big</i>		
FOCUS		1904		29.1	<i>about, other, kind of, something</i>		

4.4.1 Forms of graduation signals in ELF academic lectures

Figure 4-7 illustrates the lexical forms of the graduation signals that have been identified from the data. Graduation signals realised by adverbs (*very, often* and *completely*) and quantifiers (*a lot, many* and *some*) are the most common, taking up 33% and 21% of the total number of occurrences. The percentages of adjectives (*big, more* and *particular*), prepositions (*in China, before the deadline* and *to some extent*) and nouns (*everybody* and *something*) are very close, being 17%, 15% and 14%

receptively. The occurrence of graduation signals in the verbal group is rare, occupying only 0.1% of the total distribution (*generally speaking*).

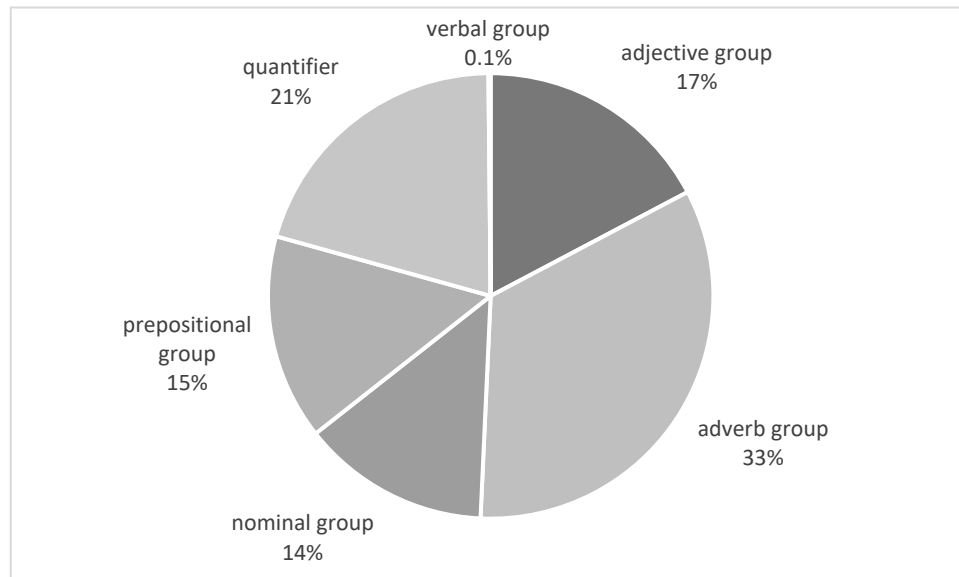


Figure 4-7 The overall form distribution of graduation signals

Figure 4-8 illustrates the lexical forms of the graduation signals according to each subsystem of the GRADUATION system. Adjectives can be found in each GRADUATION subsystem except for PROCESS, with those used as focus (5.8) and number (4.6) signals being the most common. Adverbs appear in each GRADUATION subsystem as well, except the subsystem of MASS. Within PROCESS (6.2) and QUALITY (7.9), the number of adverbs is overwhelmingly higher than the number of other lexical items. Adverbs also occur fairly frequently as either extent (7.1) or focus (6.4) signals in all of the lecture discourses. Appraisal signals realised by nouns are mainly focus signals (8.6) with a small portion of occurrences being extent (2.3) or number (0.6) signals. Prepositional devices are commonly used as extent (6.0) and focus (6.1) signals but only very rarely as process (0.2) and number (0.3) signals. The realisation of quantifiers prevails in the usage of NUMBER (14.7), occasionally being used as FOCUS (2.1) and QUALITY (0.6) devices. Finally, graduation signals very rarely appeared in the verbal group, with only 0.1 occurrences in terms of FOCUS. The following three paragraphs will illustrate the forms of these signals with examples drawn from the lectures of this current study.

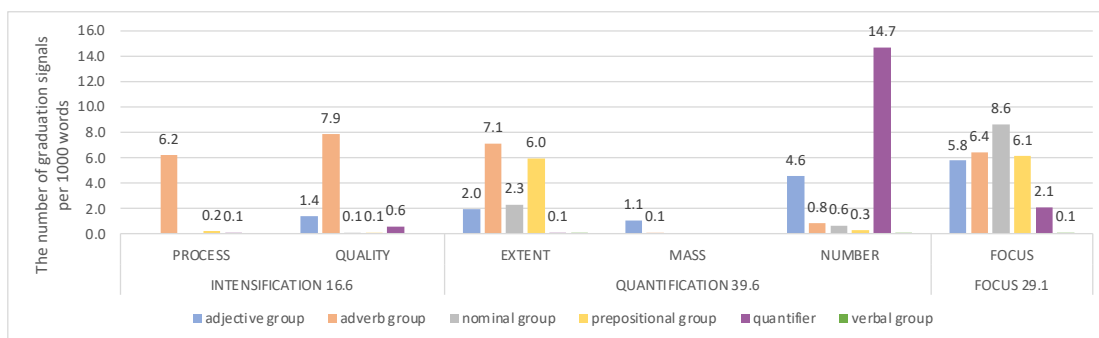


Figure 4-8 The form distribution of graduation signals in each subcategory

Table 4-8 below summaries all the function and forms of the graduation signals extracted from the 12 ELF lectures with their coding process being demonstrated in Section 3.7.3 in Chapter 3.

Table 4-8 Function and forms of graduation signals in ELF academic lectures

Function		Forms	Token counts	Appraisal signals in the lecture discourse	
FORCE	INTENSIFICATION	PROCESS	adverb group	95.4%	<i>We looked briefly at a bit of history.</i> <i>We even lack other plays in the translating process.</i>
			prepositional group	3.5%	<i>we can then in a way recognize the root of the myths.</i> <i>you have probably seen a or at least heard recently about Freddie Mercury.</i>
			quantifier	0.9%	<i>Can you speak up a bit?</i> <i>I'm gonna modify it a bit.</i>
		QUALITY	adverb group	78.2%	<i>so you're almost right.</i> <i>So planning is extremely important to reduce the number of casualties.</i>
			adjective group	13.8%	<i>What a bigger impact on that is much less water flow to them.</i> <i>You can be the dumbest of the dumbest like me.</i>
			quantifier	5.8%	<i>say it again, a little louder.</i> <i>you can photosynthesize a lot better.</i>
			prepositional group	1.2%	<i>a public presentation that becomes, in a way overwhelming.</i> <i>...actions are right in proportion as they tend to promote happiness.</i>
			nominal group	0.8%	<i>So it's all in black lines then kind of mixed up.</i> <i>She can come across didactic, very sort of strict.</i>
	QUANTIFICATION	EXTENT	adverb group	40.8%	<i>You guys already are very good programmer.</i> <i>If you make concrete everywhere, everything runs off immediately.</i>
			prepositional group	34.3%	<i>So the floods spreads out more and doesn't get this big all at once.</i> <i>What's the most productive aquatic system in the world?</i>
			nominal group	13.3%	<i>an average of 40 days</i> <i>I have moved the deadline to today at 8:00 pm</i>
			adjective group	11.3%	<i>So what is the current situation right now?</i> <i>these are the two general schools of thought in Western 'Camps'.</i>
			quantifier	0.4%	<i>We'll come back to that issue a little bit later.</i> <i>Let's move a little bit one decayed.</i>
		MASS	adjective group	96.0%	<i>There are a bunch of big rivers</i> <i>the little sticks on a fork; the smallest level of the individual brain cell.</i>
			adverb group	5.6%	<i>So the Korean government has built a very large film center.</i>
		NUMBER	quantifier	69.7%	<i>This is just a few examples.</i> <i>You saw a piece of fruit on the table.</i>
			adjective group	21.6%	<i>schizophrenia associated with high levels of dopamine</i> <i>They want to sell more media abroad.</i>
			adverb group	4.0%	<i>The overall prevalence of schizophrenia is around about half or 1% of the population.</i> <i>I decided to give you quite some time.</i>
			nominal group	3.0%	<i>a drastic increase in foreign tourists to Korea</i> <i>Quickly, just 1 or 2 minutes review.</i>
			prepositional group	1.4%	<i>You all read at least some of it.</i> <i>Tropical lakes always too warm, all the temperatures by 4 degree.</i>
			FOCUS	nominal group	29.7%
adverb group	22.1%	<i>But actually, these are human beings in these wagons.</i> <i>so exactly the same version of the English one</i>			
prepositional group	21.0%	<i>What do you think of the paper in general?</i> <i>Real living beings are inevitably flawed to some extent.</i>			
adjective group	19.8%	<i>So remember you've got to know certain factoids.</i> <i>It's an absolute moral obligation...</i>			
quantifier	7.2%	<i>any concern or any suggestions, any feedback?</i> <i>They involve some biological problem.</i>			
verbal group	0.4%	<i>But generally speaking, the worldwide demand was very low.</i>			

Graduation signals in the subsystem of PROCESS and QUALITY have first been introduced in the table and they are closely related to the force of an intensity. As shown in Table 4-8, the linguistic form of process signal can be adverbs, prepositional phrases and quantifiers whereas that of quality signal can be more diversified by also including nominal and adjective choices. Over 95% of the process signals are realised by the adverb groups describing the intensity of a verbal process; for instance, the word *briefly* illustrates the intensity of how the contents of history have been covered previously and the word *even* intensifies the verbal process of *lack* signalling the lecturer's attitude of, say, surprise or disagreement. Prepositional phrases (3.5%) and

Quantifiers (0.9%) are not commonly used for PROCESS in the lecture discourse. The two prepositional phrases in Table 4-8, *in a way* and *at least*, grade down the meanings of the two verbal processes, to *in a way recognise* and to *at least heard*. A typical example of Quantifiers would be *a bit* which adds a slight degree of intensity to the verbal process being described.

For QUALITY, the use of adverb groups (78.2% of all quality signals) prevails among the other word groups when describing a quality, an adverb such as *extremely* grades up the intensity of the adjective *important* whereas *almost* decrease the assertion of being correct. The adjective group accounts for 13.8% of the quality signals. As we can see from the examples given in Table 4-8, the comparative and superlative forms of adjectives present the up-scale intensity of the words as shown in the examples *bigger* as opposed to *big* and *dumbest* to the word *dumb* without inflection. Quantifiers (5.8%) have also been used to describe the intensity of a quality, such as *a little* louder and *a lot* better. Examples are also given for word choices concerning prepositions (1.2%) and nouns (0.8%). The two graduation signals *in a way* and *in proportion*, which are the only tokens found in the prepositional groups, typically grade down the intensity of a quality. For nominal group, *kind of* and *sort of* are the two typical phrases which have been used to operate over a quality.

Graduation expressions in the subsystems of EXTENT, MASS and NUMBER signal quantification information in relation to time, space, size and number. According to Table 4-8, the word choice of extent signals can be found in all of the six word groups, with occurrences in the adverb (40.8%), prepositional (34.3%), and nominal groups (13.3%) being the most common. As to extent signals of adjectives (11.3%), they can provide information concerning both time and space, such as *current*, *contemporary* and *ancient* or *western*, *international* and *local*. There is only one extent signal realised by a quantifier (0.4%) – *a little bit* – that has been used a few times modulating the extent relating to time.

The linguistic form of mass signals is typically expressed through adjective groups (96.0%), such as the frequent use of *big*, *little* and *small* illustrating the extent of a size. One typical example of mass signal in the adverb groups (5.6%) is also given which is the word *very* being used to upgrade the size of a film centre as *very large*.

Number signals, however, can be applied using a range of different linguistic forms, such as a quantifier (69.7%, *a few*, *a piece of*), an adjective (21.6%, *high*, *more*), an adverb (4.0%, *around*, *quite*), a noun (*increase*) or a noun phrase (*1 or 2 minutes*) in the nominal group (3.0%), or a prepositional phrase (1.4%, *at least*, *by 4 degree*).

Graduation signals in FOCUS specify information with reference to categorisation of different entities. As we can see from Table 4-8, all six word groups can be used to signal FOCUS meanings, even including verbal groups (0.4%) which rarely appeared in the lecture discourse to express evaluative meanings except for one instance of *used to be* as an extent signal described earlier. The verbal phrase identified as a focus device is the phrase *generally speaking*, which signals to the students a general situation, overall picture or approximation of the event being described. Nominal groups (29.7%) have been used most frequently as focus signals, among which compound pronouns such as *anybody*, *everything*, *something*, *anything* and *anyone* appeared fairly frequently in the lecture discourse. The word *things* has also been used with a high frequency especially when lecturers providing descriptions based on the shared knowledge between them and the students such as *it's too cold*, *things can't photosynthesize*. These nominal word choices are also vague expressions indicating a fuzzy boundary of a categorisation. Adverb (22.1%) and adjective (19.8%) groups have also been used frequently as focus signals, including adverbs such as *actually*, *exactly*, *completely* and *definitely* and adjectives such as *certain*, *absolute*, *specific* and *particular*. Two examples of graduation signals realised by prepositional phrases (21.0%) have been provided: *in general* and *to some extent*. They occur constantly in the lecture discourse. As to quantifiers (7.2%), the words *any* and *some* have been used fairly frequently. Both of these focus signals are vague expressions, but the

former expands a category boundary whereas the latter closes down the possibilities of including a wide range of categories.

4.4.2 The gradable features of graduation signals in ELF academic lectures

The gradable features of the three GRADUATION systems, i.e., INTENSIFICATION, QUANTIFICATION and FOCUS, and their subsystems have been presented in Figure 4-9 below. As explained in the Research Design chapter of Section 3.7.3, the usage frequencies of the no-scale, up-scale and down-scale features are the total token counts of the graduation signals in each of these three categories since each graduation signal contains one of these three scale features. Firstly, for INTENSIFICATION, the no-scale features did not appear in QUALITY and there were only 0.3 occurrences in PROCESS. Also, both process (5.6) and quality (8.9) signals have been frequently used as up-scale devices in the lecture discourse; by contrast, the down-scale function are not often applied to these two types of signal (0.6 for PROCESS and 1.2 for QUALITY). For QUANTIFICATION, no-scale signals have a rather high frequency in EXTENT (13.4), and we can also see that both no-scale (10.9) and up-scale (9.7) signals are prevalent in NUMBER. As to other quantification signals however, their usage frequency of the gradable features is much lower, with 3.3 and 0.3 for up-scale extent and mass signals, as well as 0.7 and 0.5 for down-scale extent and number signals. For FOCUS, no-scale signals (17.5) have a substantial presence in the lecture discourse, noticeably more frequent than all the other graduation signals. Up-scale focus signals (10.3) have also been used fairly frequently in the lectures whereas down-scale focus signals (1.3) rarely appeared. The three gradable features will be elaborated in the following paragraphs using graduation signals selected from the frequently used GRADUATION subsystems presented in Figure 4-9 below.

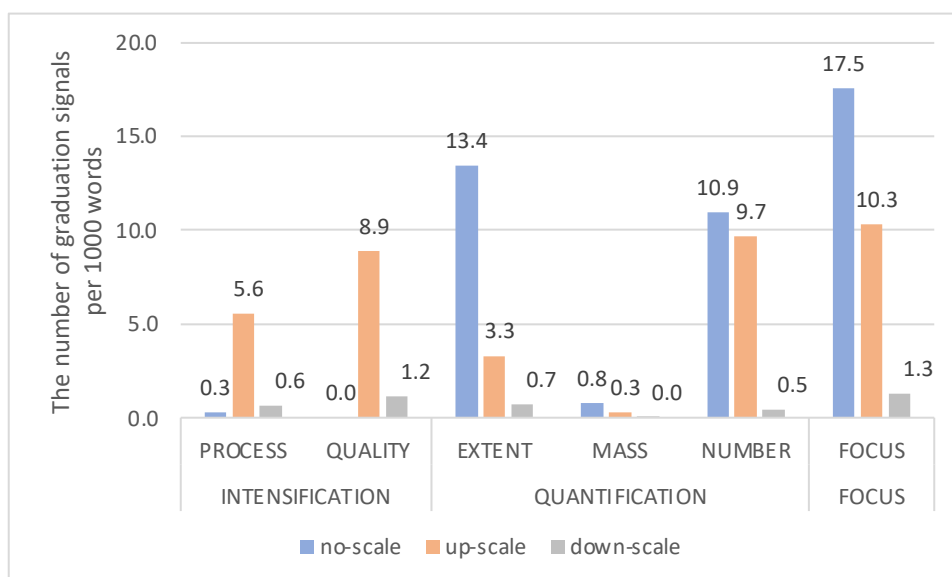


Figure 4-9 Gradable features of the graduation signals

4.4.4.1 Gradable features relating to no-scale, up-scale and down-scale

For no-scale features, graduation signals in FOCUS, EXTENT And NUMBER have been used most frequently in all of the academic lectures. For no-scale focus signals, as presented in Table 4-9 below, expressions such as *about*, *other*, *kind of*, *something* and *things* appeared constantly in the lecture discourse. The raw frequency of these graduation signals has also been normalized per 1000 words to allow for the different duration of the 12 lectures analysed in this current study. The word *about* is a preposition signaling to students a piece of key information that they would need to know. The word *other* helps categorise the information in the lecture discourse which could help students to process the information more logically. Graduation signals such as *kind of*, *something* and *things* are vague expressions in the nominal group providing a fuzzy categorisation or a blurred focus that students could easily follow without the need for more specific information.

For no-scale extent signals, *in* prepositional phrases have been used most frequently such as *in the 90s* and *in 2016* indicating a specific period of time *or in Beijing* and *in eastern Europe* concerning information of an area. Other extent signals such as *now*, *already*, *today*, *later* and *before* also constantly occurred. The signal *now* relates to

extent of time, meaning at the current time or from this moment, and it has been used fairly frequently in lecture discourse to indicate boundaries between different exchanges in class (Sinclair & Coulthard, 1992), and the extent signal *today* has often been used to announce a topic (Thompson, 1994). As to examples of the other extent signals, the signal *already* emphasises the fact that one process has already been fulfilled whereas *later* and *before* may refer to a future action.

For no-scale signals of NUMBER, the usage frequency of *some* (such as *some of the specific requirements*) ranks the highest, followed by *one of* (*one of the biological parents*) and *another* (*another class*). Three other no-scale number signals often occurred as well – *each* (*each circle represents a certain elevation*), *a little bit* (*a little bit confidence*) and *both* (*both functions*). The quantification information being delivered with these number signals reveals the force of vagueness or assertiveness embedded in the lecture discourse.

As to the up-scale features, the graduation signals of focus, number, quality and process constantly occur in the lecture discourse. For up-scale focus signals, the two signals – *any* and *anything* – open up a wide range of choices that students can make without limitation to any specific categorisation, such as *any* as in *I guess you can pick any society you want* and *anything* as in *Anything surprising of this figure for you*. The signals *just*, *only* and *actually* are adverbs being used to sharpen semantic boundaries of the entities mentioned in the lecture discourse – *It's just mechanics*, *The document only attends to...* and *This is actually observed real speech*. For up-scale number signals, words such as *all* (*all the readings*), *more* (*more moisture*), *many* (*many dry areas*), *a lot of* (*a lot of people*) and *most* (*most of the bookstores*) have been commonly used.

For up-scale quality signals, the adverb *very* is prevalent in the lecture discourse intensifying some particular quality, as in *very significant economic effect*. The signals *more* and *most* have also been commonly applied as up-scale quality signals as in *more difficult* and *the most productive*; *more* and *most* here are degree adverbs constructing

a comparative and superlative forms of an adjective. The word *better*, being a comparative form of the adjective *good*, as in *tiny bit **better** than the other one* is also an up-scale quality signal, and it appeared fairly frequently in the lectures. As with the signal *very*, the adverb *quite* constantly occurred as an up-scale quality signal as well, such as *quite* as in *...her theory is **quite** practical*. Adverbs of *just*, *still*, *actually* and *really* occurred fairly frequently as process signals intensifying a verbal process, such as ***just** can't recall how it is pronounced, I can **still** restrict the scope, to **actually** make progress, and so it can **really** record anything for you*.

Finally, for down-scale features, focus and quality signals have a relatively higher usage frequency in the lecture discourse. For down-scale focus, the phrase *at least* is in the prepositional group constantly being used to soften the semantic boundary of an entity (*billionaires or millionaires **at least***). The expression *kind of* is also very common in the lecture discourse and has a similar focus function as in the example *It's **kind of** the same thing here*. The sharpness of these semantic boundaries reveals the lecturer's opinions and evaluations on these entities which will then influence the students' interpretation of the information provided in the lecture discourse. As to down-scale quality, two expressions have been given due to their high usage frequency – *a little bit (a little bit strange)* and *a little (a little dramatic)*. They have both been used to weaken a quality or to reduce the intensity of an adjective. These down-scale graduation signals can be regarded as hedges to denote tentativeness in the lecture discourse rather than a full commitment to the information provided in a statement.

Table 4-9 Graduation signals relating to no-scale, up-scale and down-scale
(Frequency – token counts per 1000 words)

System	Graduation signal	freq.	Lecture extract
<i>no-scale graduation signals</i>			
FOCUS	<i>about</i>	5.1	<i>this is about structure of vulnerability.</i>
	<i>other</i>	2.1	<i>Other examples anti-anxiety, valium, the most, probably one of the most prescribed terms for psychological symptoms.</i>

System	Graduation signal	freq.	Lecture extract
	<i>kind of</i>	1.8	Some kind of infection, some kind of virus or some kind of bacteria
	<i>something</i>	1.4	I'll say something about the uh reading for today.
	<i>things</i>	1.1	We looked at yesterday briefly at examples of how genes can determine things .
QUANTIFICATION	<i>In-phrase</i>	2.8	So that was kind of a discussion that was held in the 90s.
EXTENT	<i>now</i>	1.5	That idea is still what medical researchers believe now .
	<i>already</i>	0.9	this example adds something that we have already concluded based on the first example.
	<i>today</i>	0.6	So today , we are going to look at more examples of slips of the tongue.
	<i>later</i>	0.4	We'll come back to this graph later .
	<i>before</i>	0.4	Before doing this one, we need to make groups first.
QUANTIFICATION	<i>some</i>	3.2	these are some of the specific requirements.
NUMBER	<i>one of</i>	1.0	we know that one of the biological parents had schizophrenia
	<i>another</i>	1.0	we're gonna cover those in another class in another class.
	<i>each</i>	0.4	So each circle represents a certain elevation.
	<i>a little bit</i>	0.4	You need to have a little bit confidence.
	<i>both</i>	0.4	so both functions can be working now.
up-scale graduation signals			
FOCUS	<i>any</i>	1.3	I guess you can pick any society you want.
	<i>just</i>	1.1	It's just mechanics.
	<i>only</i>	0.8	The document only attends to the physical vulnerability.
	<i>anything</i>	0.6	Anything surprising of this figure for you?
	<i>actually</i>	0.6	This is actually observed real speech in people's daily life.
QUANTIFICATION	<i>all</i>	2.5	Almost all the readings, at least in some way, engage with technologies.
NUMBER	<i>more</i>	1.7	the air can hold more moisture.
	<i>many</i>	1.2	And China has many dry areas in the northern part of China.
	<i>a lot of</i>	1.0	This is accepted by a lot of people.
	<i>most</i>	0.4	to deal with amazon who's killed most of the bookstores
INTENSIFICATION	<i>very</i>	3.0	it's having a very significant economic effect.
QUALITY	<i>more</i>	0.9	it makes it even more difficult for that person to infect another individual.
	<i>most</i>	0.6	What's the most productive aquatic system in the world?
	<i>better</i>	0.4	a little bit tiny bit better than the other one.
	<i>quite</i>	0.4	So that is why her theory is quite practical.
INTENSIFICATION	<i>just</i>	1.6	you know everything but the form, just can't recall how it is pronounced.
PROCESS	<i>still</i>	0.4	I can still restrict the scope a little bit.
	<i>actually</i>	0.3	There's a medical basis for this and and to actually make progress on understanding a possible biological basis.
	<i>really</i>	0.3	so it can really record anything for you.
down-scale graduation signals			

System	Graduation signal	freq.	Lecture extract
FOCUS	<i>at least</i>	0.3	<i>because they are billionaires or millionaires at least.</i>
	<i>kind of</i>	0.2	<i>It's kind of the same thing here, right?</i>
INTENSIFICATION	<i>a little bit</i>	0.3	<i>the special effects may look to you a little bit strange</i>
QUALITY	<i>relatively</i>	0.2	<i>the content are relatively well-balanced.</i>

4.4.4.2 Vagueness of the gradable features

This part of the section demonstrates the linguistic feature of vagueness of the gradable features that has emerged in the data analysis of graduation signals. As discussed in Section 2.3.2 in Chapter 2, vagueness is prevalent in daily language use. According to the data analysis of this current study, vagueness is closely related to the three scales of the graduation signals introduced above, i.e., no-scale, up-scale and down-scale. More specifically, vagueness is a typical linguistic feature when using graduation signals, and they are encoded in each of these three scales to modulate the gradability of the evaluative meanings. Some findings relating to vagueness will be presented according to the six GRADUATION subsystems, i.e., PROCESS and QUALITY under INTENSIFICATION, EXTENT, MASS and NUMBER under QUANTIFICATION, as well as FOCUS. As we can see from Figure 4-9 above, the use of intensification signals always comprises either an up-scale or a down-scale, whereas quantification and focus signals can appear constantly with or without an apparent gradient feature. Therefore, the use of vagueness has often been detected in these frequently used graduation functions, such as the increase and decrease of intensity and the sharpness of a semantic categorisation. The vagueness feature of the graduation signals will be introduced using examples given in Table 4-10 below.

For process and quality signals, vagueness has often been identified in relation to the up-scale function of the graduation signals. For PROCESS, vagueness often appeared when using adverbs as process signals post-modifying or pre-modifying a verb such as *follow **closely**, **easily** understand and **largely** influenced*. The scaling of the verbal process has been adjusted by these graduation signals but the degree of the fulfilment

of the process is vague. For QUALITY, the quality intensity of the word *pioneering*, for example, has been up-scaled by the word *very*. The adjective *pioneering* is an evaluation the lecturer has given on the theory mentioned in the lecture; the word *very* is an up-scale quality signal describing the degree of intensity but on a scale, containing some ambiguity as to the exact increase or decrease of the intensity of the quality.

As to QUANTIFICATION, vagueness concerns factual information of quantity and location described in the lecture discourse using graduation signals of extent, mass and number. Extent signals relate to either the proximity of time and space (e.g., *contemporary* or *ancient*) or the distribution of time and space (e.g., *global* or *local*, *sometimes* or *all day*). Mass signals are associated with the presence of an entity such as the appearance of weight and size (e.g., *huge arcades* and *little book*). Number signals covering language items quantify an entity such as *many*, *some* and *a lot of*. Therefore, imprecise quantification has been used to describe these referred entities indicating how the lecturer evaluated those entities with a certain degree of vagueness. Examples of the use of these quantification signals have also been given in Table 4-10 below. For extent signals for example, *sometimes* presents a down-scale function which vaguely grades down frequency. For mass signals, a no-scale description of an entity has been provided in a noun phrase – *huge arcades*; and for number signals, an up-scale expression has been used – *quite a lot*, which presents vagueness relating to information of amount.

Finally for focus signals, vagueness also constantly occurred when presenting a scalable cline of an evaluation. One down-scale example has been given in Table 4-10 below – the focus signal of *in the way*. It is a prepositional phrase used to downscale the likeness between different entities (*the new normality in the way*). These focus signals such as *this kind of*, *exactly* and *in the way* contribute to the vagueness of the boundaries between entities to specify different evaluative meanings.

Table 4-10 Graduation signals relating to vagueness

(no-scale, up-scale and down-scale abbreviated as n., u. and d.)

System		Graduation signals	Lecture extract	Scales
INTENSIFICATION	PROCESS	<i>closely</i>	<i>The translation follow closely of the original text.</i>	u.
	QUALITY	<i>very</i>	<i>I think this theory is very pioneering back in 1970s.</i>	u.
QUANTIFICATION	EXTENT	<i>sometimes</i>	<i>Sometimes she loses track of the argument.</i>	d.
	MASS	<i>huge</i>	<i>There are huge arcades in Japan.</i>	n.
	NUMBER	<i>quite a lot</i>	<i>So I'm talking quite a lot about ethics in this session.</i>	u.
FOCUS		<i>in the way</i>	<i>These internet services has become the new normality in the way.</i>	d.

4.4.3 The gradable features of attitude and engagement signals in ELF academic lectures

4.4.3.1 The gradable features of attitude signals in ELF academic lectures

Some attitude signals have been presented in Table 4-11 below for the illustration of their gradable features. The attitude meanings embedded in lecture discourse can be modulated with both up-scale and down-scale graduation signals. For affect signals for example, one lecturer said *I'm **more comfortable** to use the degree only format.*; the word *comfortable* is an affect signal which has been graded up with a graduation device – the comparative construct *more*. Thus, the affect meanings being expressed have been intensified, clearly indicating the lecturer's positive emotion. By contrast, the graduation signal *a little bit* as in *You know I feel **a little bit sad, a little bit disappointed**.* is a down-scale device, decreasing the force of the assertion of the negative emotions being expressed by the lecturer, feeling *sad* or *disappointed*.

For judgement and appreciation signals, up-scale graduation signals appeared more frequently than down-scale; in other words, lecturers tend to intensify the attitudinal meanings being expressed as opposed to decreasing the value position being placed in their spoken discourse whenever they need to adjust the meanings of their attitude. This finding is consistent with those in section 4.4.2 of this current chapter, that up-scale graduation signals have occurred far more frequently than down-scale signals in the lecture discourse. For example, the adverb *actually* is a graduation signal

intensifying the modality of the judgement signal *can* (*People **actually can** trample to death*), and other graduation signals increase the force of a human quality being described by a judgement signal, such as *directly to the point*, *fabulously wealthy* and *inevitably flawed*. In this example –*real living beings are inevitably flawed to some extent.*, however, the expression *to some extent* is a down-scale graduation signal turning down the judgement meaning of *real living beings* being *inevitably flawed*.

As to the appreciation signals presented in Table 4-11 below, expressions such as *a little bit* and *actually* (*the special effects may look to you **a little bit strange**, but **actually visually appealing***) also appeared due to their frequent use in the lecture discourse as discussed previously in this current chapter. In this example, *a little bit* is also a down-scale graduation signal decreasing the attitudinal meaning of the appreciation signal *strange* whereas the word *actually* is an up-scale signal emphasising the positive effects of a video as being *visually appealing*. In one more example of an appreciation signal having an up-scale feature, the composition signal, *basic* has been up-scaled by the graduation signal *too*, as in *Those are just **too basic.***, when the lecturer was discussing an academic paper with his students. The up-scale feature was needed as the lecturer intended to emphasise how basic some of the contents were and was trying to encourage the students to review the paper on their own.

Table 4-11 The gradable features of the attitude signals
(up-scale and down-scale abbreviated as u. and d.)

System	Attitude signals	Lecture extract	Graduation signal	Scales
AFFECT	<i>comfortable</i>	<i>I'm more comfortable to use the hmm degree only format.</i>	<i>more</i>	u.
	<i>sad</i>	<i>You know I feel a little bit sad, a little bit disappointed.</i>	<i>a little bit</i>	d.
	<i>disappointed</i>			
JUDGEMENT	<i>can</i>	<i>People actually can trample to death, trying to get in the stores to get sales.</i>	<i>actually</i>	u.
	<i>to the point</i>	<i>...she's often meandering, goes around the point instead of directly to the point.</i>	<i>directly</i>	u.
	<i>wealthy</i>	<i>one woman is chased by two handsome, smart, and fabulously wealthy men.</i>	<i>fabulously</i>	u.

System	Attitude signals	Lecture extract	Graduation signal	Scales
	<i>flawed</i>	<i>I think it also reminds us that ethics concerns real living beings and real living beings are inevitably flawed to some extent.</i>	<i>inevitably to some extent</i>	u. d.
APPRECIATION	<i>strange</i>	<i>so the special effects may look to you a little bit strange, but</i>	<i>a little bit</i>	d.
	<i>visually appealing</i>	<i>actually visually appealing, I think even for people of your generation.</i>	<i>actually</i>	u.
	<i>basic</i>	<i>Those are just too basic. You guys should go over by yourself.</i>	<i>too</i>	u.

4.4.3.2 The gradable features of engagement signals in ELF academic lectures

Table 4-12 elucidates the gradable features of the engagement signals used in ELF academic lectures. The semantic value of an expand signal can be either up-scaled or down-scaled with a GRADUATION device; in other words, the dialogical space that the lecturers are allowing can be adjusted with both expansive and contractive voices. For entertain signals for example, the graduation signal *clearly* adds value to the dialogistic role of the entertain signal *as you know*, as in *But **clearly as you know**, you will also have a time, five more working days in case of delay*; with the engagement meaning being advanced, the lecturer presented himself as more strongly aligned with his students when specifying the deadline for an assignment. The value position of an entertain signal can also be down-scaled; for example, the graduation signal *at least* softens the semantic boundary of what the entertain signal *something* can refer to, expressing a degree of hesitation and politeness.

For attribute signals, examples of both up- and down-scale features have also been provided in Table 4-12 below. Graduation signals of *especially* and *a little bit* - as in *And here I need to **especially say** that William had done a really good job.* and *So one of the things that **I mentioned a little bit** when I was talking about video games...-* have been used to modify *I say* and *I mentioned* and, thereby, the two propositions indicate different stances, one overtly praising an individual student whilst the other is stepping back from the assertion of the attribution.

Different from the two types of expand signals, the gradable features of the contract signals are not as changeable. Proclaim signals often appeared with an up-scaled graduation device whereas disclaim signals commonly have a down-scaled modulation. Also, adverbs can frequently be found as the graduation devices being used to modulate a contract meaning, corresponding to the findings discussed in section 4.4.1 earlier in this current chapter, in that the use of adverbs for graduation signals is prevalent in most of the GRADUATION subsystems. For proclaim signals, one up-scale example has been given – *I just want to make it clear about the spelling*. The graduation signal *just* intensifies the modality embedded in the proclaim signal *I want to*, giving an emphasis to the lecturer’s statement whilst seeking agreement with the students and with the assumption that the follow-up action will be understandable.

For disclaim signals, by contrast, there are only examples of engagement signals having down-scale features. For example, *doesn’t really have* as in *But this paper basically points out what the issue is at the moment, doesn’t really have any solutions*. is a disclaim signal (*doesn’t have*) having been downscaled by the graduation device *really*. The lecturer was making comments and giving opinions about an academic paper, the negation coded in the lecture discourse indicating the lecturer’s disagreement with some of the contents of the paper. However, the graduation signal *really* tones down the criticism making the denial less confrontational, even though the lecturer’s point was clear that the paper lacks solutions to the issues being presented. One more example for disclaim signal – *not completely sure* as in *I’m not completely sure where the convenience comes in.*, the lecturer was discussing with his students the use of digital money. The graduation signal *completely* has been applied to the contract meaning being expressed and also softens the disalignment being placed by the disclaim signal of *not sure*.

Table 4-12 The gradable features of the engagement signals
(up-scale and down-scale abbreviated as u. and d.)

System	Engagement signals	Lecture extract	Graduation signal	Scales
EXPAND ENTERTAIN	<i>as you know</i>	<i>But clearly as you know, you will also have a time, five more working days in case of delay.</i>	<i>clearly</i>	u.
	<i>something</i>	<i>...at least something that we've seen more here in the United States.</i>	<i>at least</i>	d.
EXPAND ATTRIBUTE	<i>I say</i>	<i>And here I I need to especially say that William had done a really good job.</i>	<i>especially</i>	u.
	<i>I mentioned</i>	<i>So one of the things that I mentioned a little bit when I was talking about video games was the increasing amount of people buying actual physical media games for consoles, right?</i>	<i>a little bit</i>	d.
CONTRACT PROCLAIM	<i>I want to</i>	<i>I just want to make it clear about the spelling.</i>	<i>just</i>	u.
CONTRACT DISCLAIM	<i>doesn't have</i>	<i>But this paper basically points out what the issue is at the moment, doesn't really have any solutions.</i>	<i>really</i>	d.
	<i>not sure</i>	<i>I'm not completely sure where the convenience comes in.</i>	<i>completely</i>	d.

In summary, Section 4.4 concentrated on lecturers' use of graduation signals in the ELF academic lectures of the current study. Based on the findings from this section, graduation signals concerning force of quantification information occurred most frequently, followed by those indicating the focus of a semantic boundary, and finally by force of intensification. The linguistic forms of graduation signals can be rather diversified, ranging from adverbs, quantifiers and adjectives to prepositions, nouns and verbs. The gradability of all the appraisal signals have been intensively discussed according to no-scale, up-scale and down-scale features of the actual discourse signals identified in the lectures, and the most frequently used scale signals have been displayed. Results show that graduation signals concerning force of an intensification are mainly using up-scale signals and hardly any no-scale or down-scale signals. By contrast, graduation signals concerning quantification information and semantic focus can be commonly found with both no-scale and up-scale features. Vagueness was apparent when analysing the gradable features of all types of graduation signals. The gradable features of both attitude and engagement signals have also been analysed; it seems that up-scale graduation signals are more often applied to attitude signals, whereas both up-scale and down-scale signals commonly co-occur with engagement signals. The findings concerning the use of graduation signals uncover how the

evaluative meanings of all the appraisal signals can be and have been modulated for various communicative purposes. The degrees of assertiveness and vagueness concerning no-scale, up-scale and down-scale features of the appraisal signals help to formulate specific and pertinent lecture discourse, so as to establish a balance between the communicativeness of the lecture discourse in use and the lecturers' authority and persuasiveness in their personal evaluations.

4.5 Appraisal signals with different layers of evaluative meanings

4.5.1 ATTITUDE meanings coded in engagement signals of ENTERTAIN

As we can see from the lecture extracts presented in Table 4-13 below, entertain signals have often been used to construe modality when lecturers were expressing judgement meanings. For example, from the JUDGEMENT perspective, *always* can be seen as a normality signal as in *You can **always** find me through my email*; the word *always* implies that students can send an email at any time to which the lecturer would usually respond promptly. From the ENTERTAIN perspective, however, the word *always* denotes engagement meanings in the lecture discourse as the proposition is grounded on contingency and the lecturer's own subjectivity. In other examples of judgement signals given in Table 4-13 below, expressions such as *most likely (...**most likely** you will learn all of this in your curriculum)*, *maybe (**Maybe** if you're part time student...)*, *possibly (some of you...**possibly** have already done this.)*, *may (...any questions that you **may** have)* and *might (you **might** assume that...)* are veracity signals in the system of JUDGEMENT, indicating different levels of probability and uncertainty of an evaluation. Moreover, these judgement signals also contain ENTERTAIN meanings as the judgement values coded in the discourse are based on the lecturers' individual stance while the alternative possibilities open up dialogic space for the students. The modality coded in these evaluative signals invokes students' voices and, if there are subsequent discussions or even arguments, lecturers should be prepared as the uncertainties

embedded in their authoritative statements could invite and should allow students' opinions.

Table 4-13 JUDGEMENT meanings coded in entertain signals

Judgement signals	Lecture extract
<i>always</i>	You can always find me through my email, or if there is some emergency, you can call my cellphone.
<i>most likely</i>	If you take bioinformatics master program, most likely you will learn all of this in your curriculum...
<i>maybe</i>	Maybe if you're part time student, might little bit, but not so much.
<i>possibly</i>	some of you are in the group project and possibly have already done this.
<i>may</i>	I want to get any questions that you may have about the debate.
<i>might</i>	you might assume that it's animals in these wagons.

4.5.2 ATTITUDE meanings coded in graduation signals of INTENSIFICATION

Table 4-14 gives examples of how attitude meanings can be identified in intensification signals in the lecture discourse. For example, the process signals of *very carefully* and *very clearly* intensify the verbal processes of *check* and *see* respectively as in the examples of *You need to check their curriculum **very carefully**.* and *So **very clearly** we can see...* These two graduation signals also display JUDGEMENT meanings as the lecturers' opinions were based on their assessment of human behaviour. More overlap examples have been found for appreciation and intensification signals when lecturers were giving positive or negative aesthetic evaluations on specific entities or matters. For example, comparative and superlative forms of an adjective would contain both attitude and graduation meanings, such as *better* and *best* as in *I cannot give you a **better** answer than that.* and *what we are looking for is the **best** match.* These two words are not only quality signals in the system of GRADUATION as they are concerned with the upscaling of a quality, but are also appreciation signals indicating the lecturers' opinion of a good answer that he could possibly give and the most appropriate words to match a concrete context. Adverbs have been commonly used to function as both appreciation and quality signals, adverbs such as *highly*, *disturbingly* and *reasonably* as presented in Table 4-14 below. The adverb *highly* is an

up-scale quality signal whereas *disturbingly* and *reasonably* can be regarded as down-scale quality signals as they both devalue the qualities being described. Such upscaling and downscaling are also reflections of the lecturers' positive and negative attitudes in APPRECIATION – a scene in a movie being *highly and ...disturbingly stereotypical* and the English language of an academic paper was *reasonably fine*. Adverbs can also be used as both appreciation and process signals, such as the adverb *closely* as in *The translation follow closely of the original text*. The adverb *closely* indicates APPRECIATION meanings as it is the lecturer's evaluation of how coherent a translation needs to be to match the original source text; at the same time, the adverb is also a process signal intensifying the verbal process of *follow*.

Table 4-14 ATTITUDE meanings coded in intensification signals

ATTITUDE	Attitude signals	Lecture extract
JUDGEMENT	<i>very carefully</i>	<i>You need to check their curriculum very carefully.</i>
	<i>very clearly</i>	<i>So very clearly we can see as the genetic, the amount of shared genes increases, the risk of developing schizophrenia also increases.</i>
APPRECIATION	<i>better</i>	<i>I cannot give you a better answer than that.</i>
	<i>best</i>	<i>what we are looking for is the best match.</i>
	<i>highly</i>	<i>...which was a highly and, I would say disturbingly stereotypical...</i>
	<i>disturbingly</i>	
	<i>reasonably</i>	<i>And the English is reasonably fine, I think.</i>
	<i>closely</i>	<i>The translation follow closely of the original text.</i>

4.5.3 ENGAGEMENT meanings coded in down-scale graduation signals

Down-scale graduation signals can very likely project a cline of engagement meaning in ENTERTAIN when the different layers of appraisal meanings coded in the lecture discourse are considered. As discussed in the previous section, an engagement signal can be modulated with either upscaling or downscaling using a separate graduation signal (see examples in Table 4-12 above), such as the two up-scale signals *clearly* and *just* as in *...clearly as you know, you will also have... five more working days in case of delay.* and *I just want to make it clear about the spelling.*, and the two down-scale signals *a little bit* and *completely* as in *I mentioned a little bit when I was talking about video games...*, and *I'm not completely sure where the convenience comes in*. In the

first two examples, the up-scale graduation signals *clearly* and *just* function to increase the assertiveness of the evaluative meanings coded in the lecture discourse which would then reduce the likelihood of involving other voices, as the former presents a stronger alignment with the students and the latter makes a more emphatic statement. As to the last two examples, the down-scale graduation signals *a little bit* and *completely* reveal a stronger degree of vagueness with lecturers downscaling the assertion of their statements, allowing students the possibility of holding a different viewpoint. More specifically, the down-scale graduation signals could also be regarded as entertain signals concerning the dialogistic expansiveness coded in the lecture discourse.

Table 4-15 exemplifies how down-scale focus signals in GRADUATION overlap with entertain signals in ENGAGEMENT to express different layers of evaluative meanings. For intensification signals in PROCESS and QUALITY for example, the two expressions *really* and *in a way* as in *This is not **really** applied to you.* and *These things are more complicated **in a way**.* are hedges to weaken the assertion of the statements given by the lecturers. In such cases, students might be more willing to form their own opinions owing to the tentativeness coded in the lecture discourse. This also applies to quantification signals, especially in the subsystems of EXTENT and NUMBER, since mass signals are not as commonly used as extent and number signals. For example, the extent signal indicated by the word *sometimes* as in *So these techniques **sometimes** move us away from the story.* and the number signal *at least* as in *You should refer to **at least one** work of theory or criticism.* decrease the preciseness of the quantification information provided in the lecture discourse and it is more likely that students would ask for more clarification. For entertain meanings coded in focus signals when a semantic boundary of an entity has been vaguely softened, there will also be more chances of receiving students' responses. For example, the down-scale signal *kind of*, as in *It's **kind of** like double eleven.*, has been used when the lecturer was describing what black Friday was like in the United States. Students could easily join the conversation discussing the similarities and differences between *double eleven in*

China and black Friday in the U.S. as the lecturer was indicating that there might not be a total similarity between the two events.

Table 4-15 ENTERTAIN meanings coded in down-scale graduation signals

	GRADUATION	Down-scale signals	Lecture extract
INTENSIFICATION	PROCESS	<i>really</i>	<i>This is not really applied to you.</i>
	QUALITY	<i>in a way</i>	<i>These things are more complicated in a way.</i>
QUANTIFICATION	EXTENT	<i>sometimes</i>	<i>So these techniques sometimes move us away from the story.</i>
	NUMBER	<i>at least</i>	<i>You should refer to at least one work of theory or criticism.</i>
	FOCUS	<i>kind of</i>	<i>It's kind of like double eleven.</i>

In summary, this part of the chapter revealed how different appraisal signals could interact with each other to enhance the communicativeness of evaluative meanings in ELF academic lectures. According to the findings of Chapter 4, firstly, attitude signals concerning judgements of human behaviours can also function as engagement signals for entertaining others and inviting their opinions, including expressions such as *always, maybe* and *might*. Secondly, graduation signals concerning intensification can sometimes express attitude meanings concerning both judgement of human behaviour (such as *very carefully* and *very clearly*) and appreciation of things and phenomena (*better, best* and *closely*). Thirdly, down-scale graduation signals often have a cline of engagement meanings of entertaining others (*in a way, sometimes, at least* and *kind of*). The flexible use of such signals can help lecturers express their evaluative meanings more explicitly and thereby contributing to the communicativeness of their lecture discourse in use.

4.6 Summary of the chapter

This chapter summarised the discourse features of the appraisal signals identified in the 12 ELF lectures, presenting findings in relation to RQ 1 of this current study. Firstly, the chapter provided the overall findings of the forms and functions of attitude signals before exploring more specifically how positive and negative meanings have been expressed according to various referents in the classroom setting. Next, this chapter

progressed to the discourse features of engagement signals used in the ELF academic lectures of this current study. The chapter made a detailed summary of the forms and functions of these engagement signals and, special attention has been paid to three pronoun patterns that have been identified from the data. This chapter then concentrated on the use of graduation signals identified in the lecture discourse. This part of the chapter started with the findings of the forms and functions of these discourse signals and continued with the findings concerning gradable features and vagueness of the graduation signals. Finally, the gradability concerning the three types of appraisal signal has been presented and how these signals could interact with each other have been discussed.

Chapter 5 Disciplinary-specific features of appraisal signals in ELF academic lectures

5.1 Introduction

For the answers to RQ 2, this chapter explores disciplinary differences of how appraisal signals can be used when expressing evaluative meaning in academic lectures of humanities and hard sciences. Firstly, the use of attitude signals by these two groups of lecturers are presented and frequently used discourse signals are summarised in Section 5.2. Section 5.3 then shifts its research focus to how the use of engagement signals in academic lectures can differ between the disciplines of social and hard sciences. Finally, Section 5.4 concentrates on the disciplinary differences of the use of the graduation signals by lecturers from humanities and sciences.

5.2 Disciplinary-specific features of attitude signals in ELF academic lectures

This section of the chapter will focus on the disciplinary-specific features of attitude signals identified in the lecture discourse and how they have been used to express evaluative meanings in the classroom communications. These statistical results are generalising from the analysis of 6 humanities lectures and 6 sciences lectures, supporting the following qualitative analysis of the discourse features of these attitude signals. Table 5-1 introduces the raw frequencies of the attitude signals collected from the lectures of both Humanities and Sciences. The number of attitude signals has also been normalized per 1000 words, with science lecturers (61.1) making a slightly more frequent use of these signals than lecturers of humanities (58.1).

Table 5-1 Raw frequencies of attitude signals in ELF lectures of Humanities and sciences

Subject	Raw frequency	Word account of 6 transcripts	Per 1000 words
Humanities	1936	33310	58.1
Sciences	1959	32036	61.1

A comparison of how lecturers between humanities and sciences make use of three major types of attitude signals has been provided in Figure 5-1 below. As we can see from the data, lecturers from humanities used more affect signals than science lecturers; conversely, science lecturers tend to use more judgement and appreciation signals than do those from humanities. For AFFECT, humanity lecturers used 2.9 attitude signals whereas science lecturers used only 1.5, with the former using about twice as many signals as the latter. As to JUDGEMENT (28.8 in total for Humanities and 32.8 in total for Sciences) and APPRECIATION (26.4 in total for Humanities and 26.8 in total for Sciences), the frequency differences of these two types of attitude signals between the two disciplinary domains are very small, both with science lecturers using slightly more expressions than lecturers in humanities. As to judgement signals for humanities lecturers, veracity signals (11.5) have been used most frequently, followed by capacity signals (7.0) which rank second. The use of attitude signals in PROPRIETY (3.6), NORMALITY (3.6) and TENACITY (3.1) are almost parallel with each other. As with lecturers in humanities, sciences lecturers used attitude signals in VERACITY (15.4) and CAPACITY (9.7) much more frequently than those in the subsystems of TENACITY (3.0), PROPRIETY (2.7) and NORMALITY (2.0). Differing from lecturers in humanities who used tenacity signals the least, normality signals have been used with the least frequency by science lecturers. As to appreciation signals for humanities lecturers, the use of valuation signals (15.6) is appreciably more frequent than the other two types of signals, i.e., signals in REACTION (5.2) and COMPOSITION (5.7). As with humanities lectures, the number of valuation signals (17.7) is also very high in science lectures, considerably overtaking the other two types of attitude signals, i.e., REACTION (5.6) and COMPOSITION (3.6).

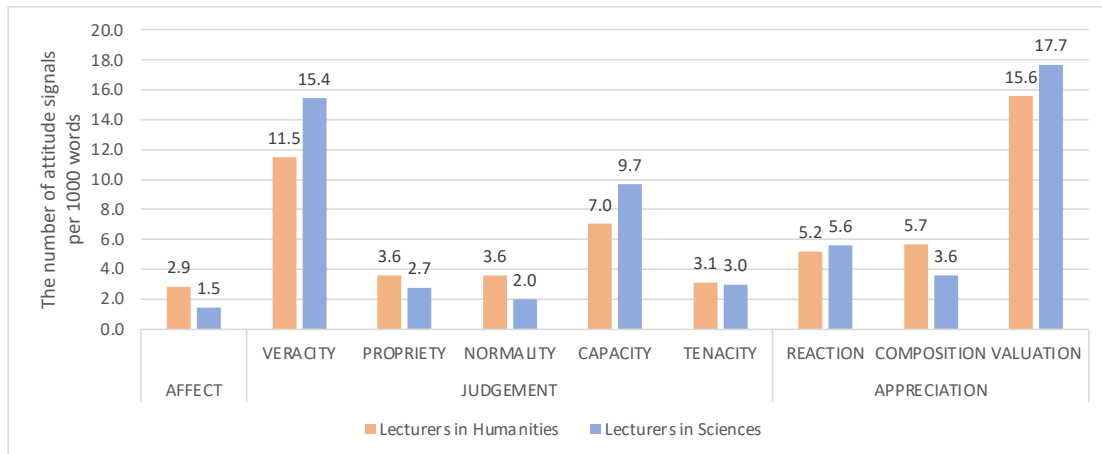


Figure 5-1 The number of attitude signals used by ELF lecturers of humanities and sciences

Table 5-2 below gives examples of the most frequently used attitude signals by ELF lecturers of both social and hard sciences. The raw frequencies of the occurrence of these selected signals were the highest in the comparisons among all the coded signals in each ATTITUDE subsystem. Specific token counts of these listed attitude signals and some lecture extracts have been presented in Appendix A-1 and Appendix A-2.

Table 5-2 The most frequently used attitude signals by ELF lecturers of humanities and hard sciences (see the usage frequency and lecture extract of each attitude signal in Appendix A-1 and Appendix A-2)

System	Attitude signals by humanities lecturers	Attitude signals by sciences lecturers
AFFECT	<i>sorry, care, happy, interested, like</i>	<i>like, sorry</i>
JUDGEMENT	VERACITY	<i>will, can, could, maybe, have to</i>
	PROPRIETY	<i>should, supposed to, wrong</i>
	NORMALITY	<i>often, always, famous</i>
	CAPACITY	<i>can, cannot, can't, familiar</i>
	TENACITY	<i>will, going to, would, gonna</i>
APPRECIATION	REACTION	<i>good, interesting, simple, clear, clearly, great, difficult</i>
	COMPOSITION	<i>different, clear, coherent, concrete</i>
	VALUATION	<i>important, wrong, problem, right</i>

As presented in Figure 5-1, affect signals only occasionally occurred in the lecture discourse. The word *sorry* has been identified as the most frequently used affect signal by humanities lecturers, as in *I am **sorry** to everyone who was in the Friday, **sorry**, the Thursday tutorial, ...* The first *sorry* was to apologise to the students for a mathematical error the lecturer made in the previous tutorial and the second *sorry* was to apologise for giving the wrong date of the tutorial, expressing emotions of regret. Other affect signals being listed in Table 5-2 below include: *care*, *happy*, *interested* and *like*. Most of these signals convey positive affect meanings such as feelings of concern, happiness and interest. As with humanities lecturers, the words *like* and *sorry* have also been identified as the most frequently used affect signals by sciences lecturers. For example, *like* as in *I really **like** life science.* and *sorry* as in *Next one, what's your name again, **sorry**?* These two affect signals both concern the lecturers' own emotions, with the former expressing a personal interest and the latter apologising for not being able to remember a student's name.

The most frequently used judgement signals by the two groups of lecturers are mainly modals indicating judgement of modality embedded in the lecture discourse. Firstly, the usage frequency for the most frequently used veracity signals is generally higher than that of other judgement signals in all of the lectures. For humanities lecturers, these signals have been used to express different degrees of probability (Halliday, 2014: 145): *will* (medium as in *Mark Zuckerberg **will** say...*), *can* (low as in *You **can** just imagine you are the actress.*), *could* (low as in *this example **could** be applied to many other things*), *maybe* (low as in *These are **maybe** cattle being transported.*) and *have to* (high as in *So there **have to** be some significant updates.*). As with humanities lecturers, *can* and *will* have also been used most frequently by sciences lecturers to indicate a probability, followed by *need* (*But if you **need** to know them, here they are.*), *may* (*I **may** not reply immediately*) and *would* (*It **would** be a huge expense.*), which were not so commonly used in humanities lectures for the modulation of a probability.

For propriety signals evaluating an obligation, *should* has been used most frequently by humanities lecturers (*you **should** refer to at least one work of theory or criticism.*), remotely followed by the expressions *supposed to* (*...understand what you're **supposed to** do.*) and the adjective *wrong* (*...a lie is **wrong**...*). However, sciences lecturers tend to choose different words when evaluating an obligation, words including *need* (*You **need** to do a little bit better.*), *should* (*they **should** obey the rule of the nature.*) and *have to* (*people **have to** do what is stipulated there.*).

For normality signals in humanities lectures, *often* (*He doesn't **often** show up in person*) and *always* (*John, and who doesn't **always** agree with his mother.*) have been used most frequently indicating different degrees of likelihood. One adjective – famous – appeared as the next most frequently used normality signal, as in *Elizabeth Costello, the **famous** writer...* introducing the referent as an exceptional person. In comparison, four adverbs occurred as the most frequently normality signals by sciences lecturers, with *always* being the most common, followed by *often*, *usually* and *normally*. These normality signals all convey evaluative meanings concerning the usuality of a human behaviour or a situation involving a human being.

For capacity signals in humanities lectures, the modal verb *can*, together with its negative forms *cannot* and *can't*, are the most frequently used expressions as *can* in *So in this way children **can** easily understand the content of the Bible.* expressing a perceived capability of the referent. The least frequent capacity signal listed in Table 5-2 below is the adjective *familiar* (*Are you guys **familiar** with the Arab spring?*), concerning the capability of knowing something very well. The word *can* has also been used most frequently in sciences lectures; other frequently used capacity signals by sciences lecturers include *good* (*I am not **good** at programming.*), *cannot* (*I **cannot** follow what you mean.*) and *being able to* (*is everybody **able to** see the presentation?*).

As to tenacity signals associated with willingness and determination, these three expressions *will* (*I **will** talk about this a bit more...*), *gonna* (*We **gonna** see what the*

immune system is.) and *going to* (*we are **going to** use it here.*) occurred as the most frequently used in both sciences and humanities lectures. It is worth noting that these judgement signals are very often overlaid with engagement meanings due to the tentativeness of the various degrees of modality, functioning as entertain devices to engage other voices, such as veracity signals of *can* and *will* and normality signals of *always* and *often*.

For appreciation signals, the frequently used expressions listed in Table 5-2 are mainly adjectives expressing the lecturers' positive and negative attitudes towards a range of referents. The gradable features of appreciation signals also appear in some of the examples given in Appendix A-1 and Appendix A-2. For reaction signals in humanities lectures, firstly, the adjectives *good* and *interesting* have been used most frequently as in *Yes, very **good**. It resembles a report...* when the lecturer was evaluating a student's response and *I thought it was a little bit **interesting**.* when another lecturer was sharing an item of news with the class that he considered appealing. The word *good* has been toned up using an up-scale quality signal *very*; by contrast, a down-scale signal *a little bit* has been attached to the word *interesting* to decrease the quality of the reaction meaning. Other reaction signals used by humanities lecturers mainly convey positive assessments of the information being described (such as *simple, clear, clearly* and *great*), except for the word *difficult* which conveys a negative stance as in *this novel presents some interesting, **difficult**, ethical problems.* As with humanities lecturers, reaction signals such as *good, interesting, clearly* and *difficult* have also been used frequently by sciences lecturers.

For composition signals concerning textual features, the most frequently used signals by humanities lecturers are: *different* (being intensified by a quality signal *very* as in ***very different** from American dramas*), *clear* (also being intensified by a quality signal as in *I think this one is **pretty clear**, right?*), *coherent* (*a target text must be internally **coherent**.*) and *concrete* (*a **concrete** form for words*). As defined by Halliday and Hasan (1976:1), texts are semantic units referring to 'any passage, spoken or written, of

whatever length, that does form a unified whole'. The texts being referred to in these lecture extracts include a drama, an essay brief, a translated text and some words discussed in class. As to sciences lecturers, the most frequently used composition signals include *detail*, *basic* and *clear*. The noun *detail* has been identified as a token for a composition signal (as in...*readers already knows the base plan, so it doesn't go into more **detail**.*) and has been used by several of the lecturers in this current study. The word *detail* here concerns pieces of information relevant to an emergency operation plan discussed in class and its composition meaning has been intensified by a number signal *more* (***more detail***). The word *clear* (*that seems to be quite **clear evidence***) has been used frequently by both sciences and humanities lecturers, mostly referring to a positive evaluation of being logical and easy to understand; and here it has been modulated by an up-scale quality signal *quite* (***quite clear***).

For valuation signals, the adjective *important* has been used most frequently by both humanities and sciences lecturers as in *Family members and family relationships have very **important** effect on the narratives...* when the lecturer was evaluating the importance of family issues in a narrative. The noun *problem* (*some biological **problem***) has also been frequently used by both groups of lecturers, expressing negative evaluative meanings. Other common valuation signals in humanities lectures include: *wrong* (*phoneme assignment has gone **wrong**.*) and *right* (*there's not **really a right answer here**.*, intensified by a quality signal *really*). The adjective *wrong* and *right* indicates a negative or positive meaning of whether being correct and acceptable. Other frequently used valuation signals by sciences lecturers are *different* (*at **different hierarchical levels***), *better* (modulated by a process signal adding emphasis to a verbal process as in *the water can infiltrate **much better**.*) and *success* (*a **big success***, modulated by a mass signal *big* highlighting the valuation meaning of *success*). The word *different* in this context is indicative of social status having a hierarchical set of values, whereas *better* and *success* are describing a positive result or achievement.

In summary, there were more occurrences of attitude signals in sciences lectures than in humanities. More specifically, more judgement and appreciation signals have been identified in sciences lectures than those in humanities whereas more affect signals occurred in humanities rather than in sciences. The most significant disciplinary-specific discourse feature of attitude signals is concerned with appraisal meanings in relation to judgement of probability and capacity as well as the aesthetic evaluation of things or phenomena such as a text or the valuation of an object. For judgement signals, both groups of lecturers made frequent use of modals to indicate a judgement of modality in the lecture discourse. Humanities lecturers had a preference on judgement signals concerning obligation, usuality and inclination. By contrast, sciences lecturers made more frequent use of judgement signals in relation to probability and capacity. For appreciation signals, valuation signals excelled in both groups of lectures, with relatively more occurrences found in sciences lectures. Another disciplinary-specific disparity occurred in the use of composition signals. Humanities lecturers used more of such signals as compared to sciences lecturers.

5.3 Disciplinary-specific features of engagement signals in ELF academic lectures

This chapter will then make an investigation into the disciplinary features of engagement signals comparing how ELF lecturers from humanities and hard sciences use evaluative language in their ordinary teaching. Table 5-3 clarifies the raw frequencies of all the engagement signals identified in the lecture discourse of this current study. As we can see from results, ELF lecturers from humanities (91.2) and hard sciences (96.4) tend to have very similar use of engagement signals in their classroom communication.

Table 5-3 Raw frequencies of engagement signals in ELF lectures of Humanities and sciences

Subject	Raw frequency	Word account of 6 transcripts	Per 1000 words
Humanities	3037	33310	91.2
Sciences	3089	32036	96.4

Figure 5-2 makes comparisons of how ELF lecturers from soft and hard sciences use engagement signals according to the two major ENGAGEMENT subsystems – EXPAND and CONTRACT. Overall, the statistical results show that the use of expand signals present more disciplinary differences than contract signals. For EXPAND, lecturers from hard sciences (81.8 in total) used more engagement signals than lecturers from humanities (76.3 in total). By contrast, more occurrences of contract signals are found in the lecture discourse of humanities (14.8 in total) than lectures of hard sciences (14.6 total). As we can see from the results, lecturers in humanities made the most use of engagement signals in ENTERTAIN (49.6) and ATTRIBUTE (26.8). Additionally, humanities lecturers’ use of disclaim signals (12.5) is also relatively common even though the number of occurrences is far fewer than the former two categories. By contrast, proclaim signals appear much less frequently in the lectures than the other three types of engagement signals, there only being about 2.3 occurrences per 1000 words. As with lecturers in humanities, science lecturers also made substantial use of expand signals of entertain (57.4) and attribute (24.3) whereas much less use of the contract signals, i.e., disclaim (12.4) and proclaim (2.2) signals.

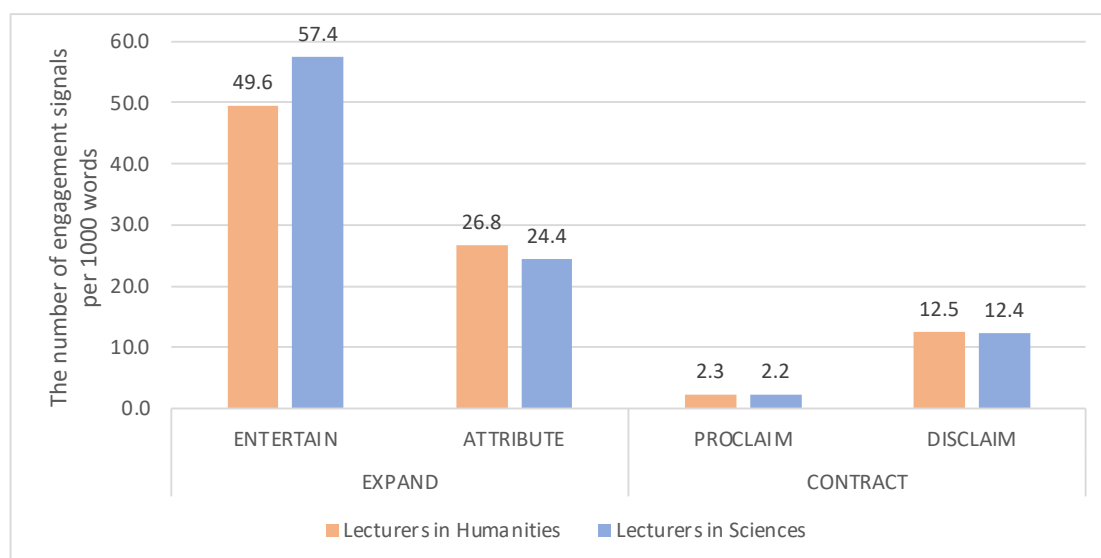


Figure 5-2 The number of engagement signals used by ELF lecturers of humanities and sciences

Table 5-4 lists the most frequently used engagement signals by ELF lecturers of social sciences and hard sciences. Examples of the lecture discourse have been presented in Appendix A-3 and Appendix A-4, and emphasis has been given to the identified engagement signals with their normalized usage frequency.

Table 5-4 The most frequently used engagement signals by ELF lecturers of humanities and hard sciences (see the usage frequency and lecture extract of each engagement signal in Appendix A-3 and Appendix A-4)

System		Attitude signals by humanities lecturers	Attitude signals by sciences lecturers
EXPAND	ENTERTAIN	a question, <i>like</i> , <i>you can</i> , <i>if you</i> + a verb, <i>you know</i>	a question, <i>you can</i> , <i>if you</i> + a verb, <i>do you</i> , <i>like</i>
	ATTRIBUTE	<i>you</i> , <i>we</i> , <i>your</i> , <i>say</i> , <i>our</i>	<i>you</i> , <i>we</i> , <i>your</i> , <i>our</i> , <i>say</i> , <i>yourself</i> , <i>my</i>
CONTRACT	PROCLAIM	<i>of course</i> , <i>call</i> , <i>I want</i> , <i>clearly</i>	<i>of course</i> , <i>I want</i> , <i>call</i>
	DISCLAIM	<i>not</i> , <i>don't</i> , <i>no</i> , <i>nothing</i> , <i>cannot</i> , <i>can't</i>	<i>not</i> , <i>don't</i> , <i>no</i> , <i>but</i> , <i>nothing</i> , <i>cannot</i>

For entertain signals, first of all, questions have been identified as the most frequently used device in both humanities and sciences lectures. For example, when the lecturer was asking the class, ***Any questions about that?***, he was engaging his students for the purpose of either soliciting agreement or checking for their comprehension. For the current study, all of the questions that occurred in the lecture discourse have been coded as entertain signals due to their dialogistic nature of inviting other voices. The word *like* is also one of the most frequently used engagement signals by both groups of lecturers. For example, the word *like* occurred as in *So we have, kind of like what we saw with Hollywood last week...*, when the lecturer was discussing with his students the concept of romanticized ideal love. The lecturer is hedging his statement with a down-scale focus signal *kind of* to modulate *like*, to weaken the assertion of the resemblance and to open up more dialogic space for alternative views.

The other most frequently used entertain signals listed in Table 5-4 all involve the use of second-person pronoun *you*: *you can*, *if you* + a verb, *you know* and *do you*. The entertain signal of *you can* (***you can*** *imagine...*) has been coded as an occurrence of 1st2ndPronM whereas *if you agree* (***if you agree with this...***) and *you know* (***but you know*** *in comics or in novels...*) are included as instances of 1st2ndPronV, and these three signals all carry engagement meanings to involve students in a conversation with a dialogical voice embedded in the lecture discourse. As Fortanet (2004: 45) states, personal pronouns such as *I*, *we* and *you* are rhetorical indicators in lectures as they can project 'levels of attempted rapport and degrees of personal involvement'. According to these three entertain patterns, pronouns can co-occur with either a modal verb or a common verb to convey engagement meanings. The variety of the former can be limited due to the number of modals and the degree of modality varies from one modal to another; by contrast, there is a wide range of collocations for a common verb to co-occur with a pronoun, even though the frequent word choice may also be constrained to the context of academic lectures. The pron_Q pattern of *do you* did not appear as the most frequently used engagement signal for humanities lecturers. Where a pronoun appears in a question, the purpose of the question is usually audience-oriented inviting students' participation, such as this example from a science lecture ***Do you*** *know any of the symptoms?* directly seeking for students' response.

For attribute signals, second-person pronoun *you* (11 occurrences per 1000 words) has been used most frequently, with a much higher usage frequency than the following three frequently used signals – *we* (5.5, ***We*** *made it to the 21st century in this module.*), *your* (2.5, *Thanks for **your** attention.*) and *our* (1.1, *...because **our** target readers are students.*). The attribute signal of *you* as in *it's for **you** to like balance out pros and cons and try to make distinctions.* directly acknowledges that the students should decide for themselves the pros and cons of using social media for political issues. For attribute signals, as with humanities lecturers, the most frequently used signals by sciences lecturers include the same four pronouns: *you* (5.0), *we* (2.7), *your*

(1.4) and *our* (0.6), but each with an approximately 50% reduction in the usage frequency. The word *say* also appeared frequently as an attribute signal in both groups of lectures as in *Mark Zuckerberg will **say**, Facebook is just a platform.*, giving a proposition grounded in the subjectivity of an external voice. There are two more attribute signals with sciences lecturers: *yourself* (*You guys should go over by **yourself**.*) and *my* (*I have **my** phone number here. You can save it.*). The reflexive pronoun *yourself* refers back to the students (*you guys*), emphasising a follow-up action for which they should take ownership, and the possessive pronoun *my* indicates some personal information about the lecturer.

For proclaim and disclaim signals, the word choices of the most frequently used engagement device are very similar between lecturers in humanities and hard sciences, but with sciences lecturers having a lower usage frequency for each engagement signal (See usage frequency of the signals in Appendix A-3 and Appendix A-4). The phrase *of course* has been used to emphasise a generally agreed statement, thereby ruling out alternative viewpoints, such as *And **of course** this has been incredibly influential on western society*. The word *call* has been identified as a proclaim signal because it indicates a reliable resource for the provided information as in *let's talk about the Korean wave or Hallyu as often it's **called***. Another proclaim signal *I want*, as in ***I want** you to look at this s, what is this s? Tell me.*, has been used to express an order which needs students' immediate attention and action; in this case, the teacher would expect her students to follow the order and act collaboratively without disobedient positions. For disclaim signals, humanities and sciences lecturers share these five frequently used expressions: *not* (*...that's **not** an environmental factor.*), *don't* (*they **don't** know ...*), *no* (*There are **no** bad questions or bad answers.*), *nothing* (*and **nothing** on the south end*) and *cannot* (*Some diseases **cannot** be prevented*). The word *but* only appeared as the most frequently used disclaim signal for sciences lecturers, as in *There's some other side effects that are more serious **but** are very rare.*, introducing a contrast with the information provided in the preceding clause.

In summary, the overall disparity of the use of engagement signals between lecturers in humanities and sciences is very small. In comparison, sciences lecturers used more expand signals to express engagement meanings whereas humanities lecturers made slightly more use of contract signals. The usage difference of entertain signals is a prominent disciplinary-specific feature, as much more of such discourse devices have been found in sciences lectures rather than in humanities. For other engagement signals, i.e., those in the subsystems of ATTRIBUTE, PROCLAIM and DISCLAIM, the number of occurrences in both groups of lectures is very close.

5.4 Disciplinary-specific features of graduation signals in ELF academic lectures

This major part of the findings will exemplify the disciplinary differences of how appraisal signals have been used when expressing evaluative meaning in the lecture discourse and such process can be regarded as a particular classroom interaction in academic lectures. The raw frequencies of the graduation signals extracted from the ELF lectures of Humanities and Sciences have first been presented in Table 5-5 below. The resulting contrast of these signals used in different subjects between social science (79.9) and hard science (91.0) has also been shown with the former slightly lower than the latter.

Table 5-5 Raw frequencies of graduation signals in ELF lectures of Humanities and sciences

Subject	Raw frequency	Word account of 6 transcripts	Per 1000 words
Humanities	2660	33310	79.9
Sciences	2915	32036	91.0

Figure 5-3 compares the number of graduation signals used by ELF lecturers of different disciplines, i.e., between lecturers in humanities and sciences. Results show

that science lecturers used more intensification (19.7 vs. 13.5 in total) and quantification signals (43.2 vs. 36.2 in total) than lecturers in humanities. For focus signals, however, more tokens have been found in humanities lectures (30.2) than in sciences (28.1). According to the results, focus signals constantly appeared in humanity lectures, markedly more frequently than all the other graduation signals. Extent (18.0) and Number (17.3) signals also commonly occur, presenting a similar usage frequency. In contrast, graduation signals of quality (7.8), process (5.7) and mass (1.0) have been used much less frequently, especially mass signals with only one occurrence per 1000 words. By contrast, both focus and number (25.0) signals have a substantial presence in the science lectures, exceeding all other types of graduation signals, such as extent (16.9), quality (12.4) and process (7.3). As with humanities lecturers, those in the sciences also made little use of mass signals, which only occurred 1.3 words in the lecture discourse.

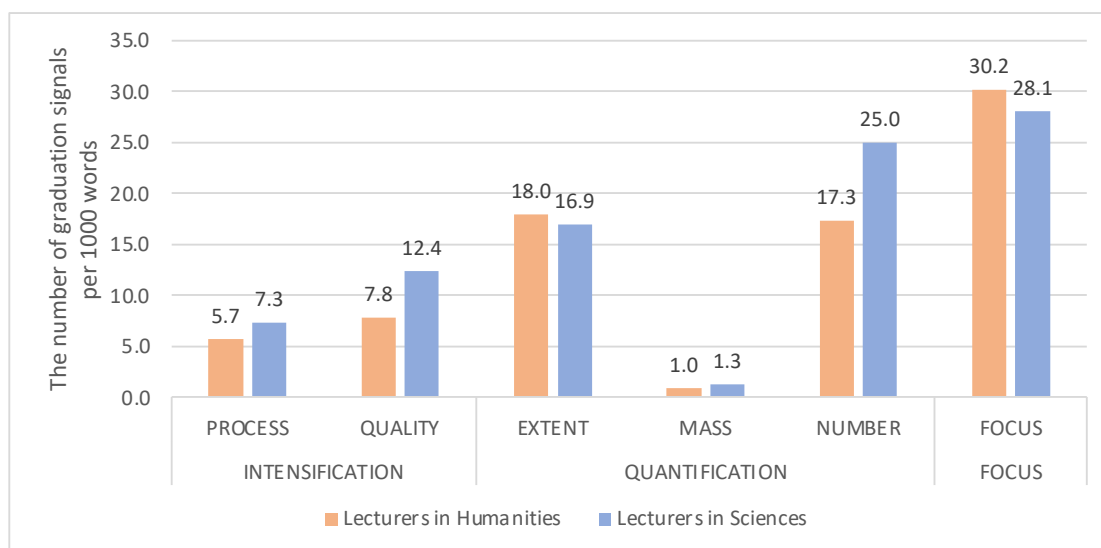


Figure 5-3 The number of graduation signals used by ELF lecturers of humanities and sciences

Figure 5-4 further compares the use of graduation signals by lecturers of these two academic domains according to three different scales of gradable features, i.e., no-scale, up-scale and down-scale. The major disciplinary differences in the use of

different scales of graduation signals between humanities and hard sciences are the use of up-scale intensification (11.4 in total for Humanities and 17.6 for Sciences) and quantification signals (10.6 in total for Humanities and 16.0 for Sciences) as well as down-scale focus signals (1.7 for Humanities and 0.8 for Sciences). By contrast, graduation signals in other categories exhibit much closer usage frequency, with some even paralleling each other such as down-scale intensification signals (1.8 in total for both Humanities and Sciences), no-scale quantification signals (24.3 in total for Humanities and 26.1 for Sciences) and up-scale focus signals (10.1 for Humanities and 10.6 for Sciences). For further comparisons between each subsystem, no-scale focus signals (18.3) have been used most frequently by ELF lecturers in humanities, followed by no-scale extent signals (13.8). Other functions of the graduation signals, such as up-scale PROCESS (4.7) and QUALITY (6.7), both no-scale (9.8) and up-scale (6.9) NUMBER, as well as up-scale FOCUS (10.1) can also be commonly found in the humanity lectures. Conversely, occurrences of graduation signals did not appear in no-scale QUALITY and down-scale MASS in any of the lecture discourses in humanities. According to the results, no-scale focus signals (16.7) have also been used most frequently by science lecturers, closely followed by five groups of graduation signals, i.e., no-scale extent (13.0), no-scale (12.1) and up-scale (12.5) number, up-scale quality (11.2) and focus (10.6). Up-scale process signals (6.4) have also been frequently used by science lecturers; other graduation signals, however, did not often appear. Also, neither can graduation signals of no-scale quality nor down-scale mass be found in the science lectures.

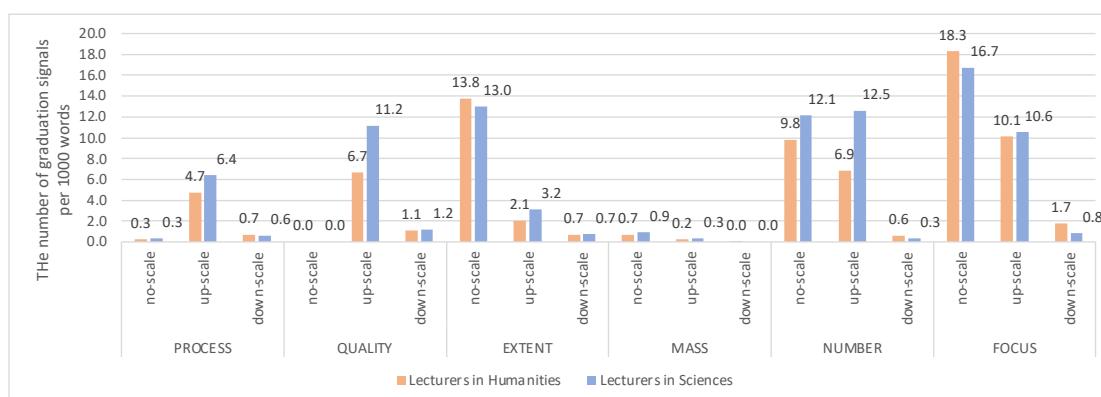


Figure 5-4 The gradable features of graduation signals used by ELF lecturers of humanities and sciences

The most frequently used graduation signals by ELF lecturers in humanities and sciences have been given in Table 5-6 below. The normalized usage frequency and the scale feature of these signals are listed in Appendix A-5 and Appendix A-6, together with lecture extracts as examples to indicate how these graduation signals have been applied in the lecture discourse.

Table 5-6 The most frequently used graduation signals by ELF lecturers of humanities and hard sciences (see the usage frequency, scale feature and lecture extract of each graduation signal in Appendix A-5 and Appendix A-6)

System		Attitude signals by humanities lecturers	Attitude signals by sciences lecturers
INTENSIFICATION	PROCESS	<i>just, actually</i>	<i>just, very, still, really, well</i>
	QUALITY	<i>very, more, most, a little bit</i>	<i>very, more, most, better, quite</i>
QUANTIFICATION	EXTENT	<i>in-phrase, now, today, already, often, sometimes, always, before, still</i>	<i>in-phrase, now, already, always, sometimes, later</i>
	MASS	<i>little, big</i>	<i>big, little, larger</i>
	NUMBER	<i>some, all, more, one of, another</i>	<i>some, all, more, many, a lot of</i>
FOCUS		<i>about, other, kind of, something, any</i>	<i>about, kind of, other, any, things</i>

For intensification signals of process and quality in both groups of lectures, the discourse signals of *just* have been used most frequently to emphasize a verbal process (*We can **just** have... and **Just** looking at this data...*) and the word *very* has been most commonly used to modulate the intensity of a quality (*a **very** influential model and **very** wet*). As indicated previously in Figure 5-4, the majority of both process and quality signals are up-scale intensifications, so the most frequently used graduation signals in these two categories are mainly functioning as up-scale devices. The gradient features of the up-scale evaluative meanings signalled by *just* and *very* elaborate descriptions with specifications relating to a particular process and quality that are needed to highlight the lecturer's opinions on the information being imparted. According to the results, more word choices of frequently used process signals have

been found in sciences lectures than in humanities, including words such as *very* (**very** quickly), *still* (*So neuron anti-psychotics **still** got side effects.*), *really* (*it doesn't **really** matter...*) and *well* (*Everybody is **well** coordinated.*). These process signals are all functioning as up-scale devices except *really* as in *doesn't really matter* working as down-scale process signal lowering the degree of the negation. As to other quality signals, the comparative *more* (**more** cost-effective) and the superlative *most* (*the **most** important*) have been commonly used as up-scale quality signals by both humanities and sciences lecturers. The word *better* (*I think vaccine is **better**.*) being the comparative of *good* often occurred in sciences lectures expressing an up-scaled quality. The phrase *a little bit* (**a little bit** tense) has been found common in humanities lectures performing a down-scale feature whereas the word *quite* (*It's **quite** curious technique.*) usually performs an up-scale intensification in sciences lectures as the quality signal of *very*.

For quantification signals of extent, mass and number, there is a wider range of word choices for extent and number signals than that of mass. The most frequently used extent signals by both groups of lecturers are *in*-phrases (*in 2005* and *in Germany*) specifying information of time and space, and the word *now* being used to attract students' attention before changing the subject of a discussion as in **Now**, *when you compare to china, that doesn't sound like a lot*. Other frequently used extent signals include: *today* announcing the end of the lecture as in *So that's all for **today's** lecture.*; lexical items signalling before or until a particular point in time such as *already* (*We have **already** tagged the morpheme information.*), *before* (**before** the deadline) and *still* (*So today we are **still** focusing on functional theories.*); and discourse signals indicating frequency such as *often* (*He doesn't **often** show up in person*), *sometimes* (*she **sometimes** appears to reject logic in her argument*) and *always* (*you **always** have to...*). One other commonly used extent signal by sciences lecturers is the word *later* as in *We'll come back to that issue a little bit **later**.* when the lecturer was explaining future course plans. These extent signals are mainly performing no-scale features with

the exceptions of *always* and *still* being up-scale signals and words *often* and *sometimes* functioning as down-scale signals.

As to mass signals, they rarely appeared in the lecture discourse, with the words *little* (*little pond*) and *big* (*big rivers*) being the most frequent as no-scale graduation signals in both groups of lectures. Another mass signal, *larger*, being the comparative of *large* also occurred fairly frequently in science lectures.

For number signals, the most frequently used lexical items by both humanities and sciences lecturers are the words *some* (*some species*), *all* (*walk through all the trials and track*) and *more* (*more oxygen*). The word *some* and *more* perform mainly with a no-scale and an up-scale feature to provide quantification information. However, the scale feature of the word *all* is hard to define as the quantification information embedded in the discourse is too vague and sometimes it seems to be more sensible to include them as focus signals indicating a blurred boundary between different entities. For the analysis of lecture discourse, however, if the word *all* has been used to describe some concrete object (*all the American cartoons of the 1930s and 1940s*), mainly content nouns in the co-text, it will be included as an up-scale number signal since evaluations will then be placed on the object itself and its boundless quantities; such evaluative meanings could signal the importance of these objects which might then draw the student's attention to the content. Other number signals concerning quantification information include: *one of* (*one of the most acclaimed living authors*) and *another* (*look at another example*) for humanities lecturers and *many* (*many unknowns with this kind of stuff*) and *a lot of* (*a lot of rainfall*) for sciences lecturers to vaguely emphasise large quantities.

For focus signals, both humanities and sciences lecturers used the word *about* most frequently. For example, *about* as in *We talked about melodrama last week* provides a focus signal to the students, emphasising the topic of what has been covered in the previous lecture. The word *about* being a focus signal can help draw students'

attention to the information that follows. The next two frequently used focus signals by both groups of lecturers are *other* and *kind of* as in *Let's finally look at some of the **other** stylistic features of the novel.* and *They are **kind of** superhero.* The word *other* as a no-scale focus signal helps organise the lecture discourse and direct students' attention to the literary features that the lecturer intended to discuss. *Kind of*, however, functioning as a down-scale focus signal softens the semantic boundary of the word *superhero* when the lecturer was introducing football players like Johan Crujff. The last two frequently used focus signals by humanities lecturers are *something* and *any*. *Something* (**Something** you might want to think about, the form of the novel.) functioning as a no-scale focus signal is vague and context-dependent, which in this context refers to the form of the novel. The word *any* (**any** big corporation has...), however, is an up-scale graduation device as, in this context, emphasising that every big corporation probably has a Facebook account. The last two frequently used focus signals in science lectures include: *any* and *things* as in *do you know **any** of the symptoms?* and *I learnt three **things**, only three **things**.*; the former is an up-scale focus signals opening up a wide range of choices to elicit student response, and the latter is a no-scale focus signal working as a vague expression before proceeding onto specific clarifications.

In summary, sciences lecturers used more graduation signals than humanities lecturers. As compared to the use of attitude and engagement signals in the 12 ELF lectures, more disciplinary-specific differences have been found in the use of graduation signals. More specifically, more intensification and quantification signals have been identified in sciences lectures whereas more focus signals occurred in humanities lectures. For intensification signals, sciences lecturers used much more of such signals in relation to both PROCESS and QUALITY than lecturers in humanities, especially with an up-scaling function being applied. For quantification signals, the most significant disparity between the two groups of lecturers is related to the use of number signals, with considerably more occurrences found in sciences lectures than in humanities. As to the scaling of such devices in NUMBER, the disciplinary-specific

differences feature prominently in no-scale and up-scale modulation. Although more extent signals occurred in humanities lectures and more mass signals appeared in sciences lectures, the statistical difference between the two groups is rather small. For focus signals, humanities lecturers used slightly more of such devices than lecturers in sciences. In addition, both groups of lecturers had very similar preference on the gradient features of a focus signal, especially the usage of up-scale modulation.

5.5 Summary of the chapter

In response to RQ 2, this chapter addressed the importance of understanding the appraisal signals from a disciplinary-specific perspective. The chapter first presented the use of attitude signals in the ELF academic lectures. Humanities lecturers used most of the attitude signals for the evaluation of personal emotions, the judgement of obligation, usuality and inclination, as well as the appreciation of textual features. In comparison, sciences lecturers made frequent use of attitude signals to describe modalities of probability and human capacity, as well as to praise and emphasize the valuation of an entity. The chapter then demonstrated the use of engagement signals in both humanities and sciences lectures. As discussed, a slightly more attribute signals have been found in humanities lectures whereas much more entertain signals occurred in sciences lectures. However, the disciplinary differences in the use of both proclaim and disclaim signals between these two groups of lecturers are marginal. Finally, the chapter discussed the graduation signals used by all the participants. Again, humanities and sciences lecturers had different preferences for what was being appraised in their lecture discourse. Humanities lecturers paid more attention to the evaluation of time and space, as well as the specification of a semantic boundary, whereas sciences lecturers used more graduation signals to modify the intensification of a process or a quality, as well as the quantification of an amount.

Chapter 6 ELF-specific features of appraisal signals in ELF academic lectures

6.1 Introduction

This chapter reports the ELF-specific features of the appraisal signals used in the ELF academic lectures with reference to RQ 3 of this current study. Section 6.2 presents how attitude signals can be used to clarify evaluative meanings from an academic ELF perspective by considering lecturers' different L1 backgrounds. Section 6.3 concentrates on the discourse features of how these lecturers make use of engagement signals in their ordinary teaching. Section 6.4 explores how graduation signals can be used by lecturers having different L1 backgrounds.

6.2 ELF-specific features of attitude signals in ELF academic lectures

This major part of the chapter provides the detailed descriptions of how attitude signals have been used to express evaluative meanings in ELF academic lectures from an academic ELF perspective. There are 12 ELF academic lecturers in this current study, including 4 Chinese ELF lecturers, 4 non-Chinese ELF lecturers and 4 English native speakers. The usage frequency and the qualitative characterisation of the attitude signals provide a vivid picture of how lecturers of different L1 backgrounds may express evaluative meanings differently in their ordinary teaching. The raw frequencies of all the attitude signals identified from the ELF lectures given by lecturers of different L1s have first been laid out in Table 6-1 below. According to the results, ELF lecturers with different L1s have similar preferences for the use of attitude signals in academic lectures. NC-ELF (non-Chinese ELF speakers) used the highest number of attitude signals (61.3), closely followed by NS (58.8) and C-ELF (Chinese ELF speakers, 58.0).

Table 6-1 Raw frequencies of attitude signals used by ELF lecturers of different L1s

Subject	Raw frequency	Word account of 4 transcripts	Per 1000 words
C-ELF lecturers	1094	18859	58.0
NC-ELF lecturers	1635	26665	61.3
NS lecturers	1166	19822	58.8

Figure 6-1 compares the number of attitude signals used by ELF lecturers of different L1s according to the three major subsystems, i.e., AFFECT, JUDGEMENT and APPRECIATION. For AFFECT, there is only a small statistical difference in the tokens identified from the lecturers of different L1s, with NS lecturers using the most affect signals (2.6), very closely followed by C-ELF (2.3) and then NC-ELF lecturers (1.8). For judgement signals, C-ELFs' usage frequency is the highest (32.2 in total), with NSs' ranking second (30.8 in total) followed by NC-ELFs (29.8 in total). As with AFFECT, the frequency of use of judgement signals between lecturers of different L1s is very small. As to appreciation signals, much more occurrences have been found with NC-ELF lecturers (29.8 in total) than with NS (25.4 in total) and C-ELF lecturers (23.5 in total).

For further comparisons of the results within JUDGEMENT, veracity signals (12.3) and capacity signals (10.0) have been used most frequently by C-ELF lecturers. In contrast, tenacity signals (5.5) have a relatively higher frequency than signals in PROPRIETY (3.0) and NORMALITY (1.4). For NC-ELF lecturers, veracity signals (13.8) occur the most frequently, followed by capacity signals (8.1). However, NC-ELF users made much less use of the judgement signals in the subsystems of NORMALITY (3.0), PROPRIETY (2.8) and TENACITY (2.0). as with C-ELF and NC-ELF lecturers, NS made the most frequent use of veracity signals (13.9), prevailing among all the JUDGEMENT subsystems. The use of capacity signals (7.0) ranks second, as they also did with C-ELF and NC-ELF lecturers. The usage frequency of attitude signals in PROPRIETY (3.9), NORMALITY (3.8) and TENACITY (2.2) is close, with tenacity signals being the least frequent. The usage frequency of these three JUDGEMENT subsystems between lecturers of different L1s are very different; C-ELF users made the most frequent use of tenacity signals whereas normality signals were more commonly used by NC-ELFs while propriety signals were

preferred by NSs. In contrast, C-ELF users made the least frequent use of normality signals whereas both NC-ELF and NS used tenacity signals the least frequently in their lectures.

For further comparisons of the results within APPRECIATION, C-ELF users made the most frequent use of valuation signals (13.6), much more so than attitude signals in COMPOSITION (5.9) and REACTION (4.0). Valuation signals (17.3) also have a substantial presence in the NC-ELF lecture discourse, being significantly more frequent than attitude signals in REACTION (7.2) and COMPOSITION (5.3). As with C-ELF and NC-ELF lecturers, NSs' usage frequency of valuation signals (18.6) is the highest, clearly much higher than their usage of attitude signals in REACTION (4.2) and COMPOSITION (2.6). The usage frequencies of the appreciation signals in these last two subsystems are also very different. C-ELF lecturers used composition signals much more frequently than reaction signals whereas NC-ELF and NS used more reaction signals than composition signals.

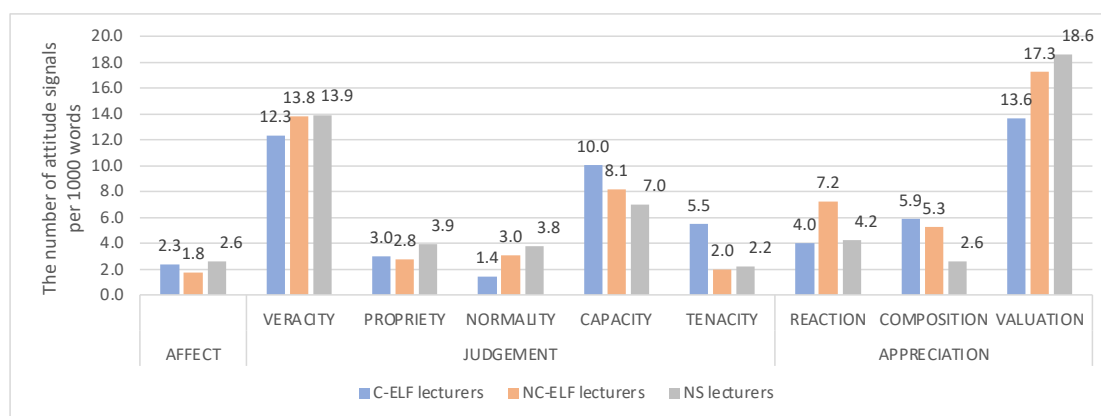


Figure 6-1 The number of attitude signals used by ELF lecturers of different L1s

The most commonly used attitude signals by C-ELF, NC-ELF and NS lecturers have been listed in Table 6-2 below. The usage frequencies of these selected signals have been presented in descending orders in Appendix B-1, Appendix B-2 and Appendix B-3, and examples of lecture extracts have also been given.

Table 6-2 The most frequently used attitude signals by C-ELF, NC-ELF and NS lecturers (see the usage frequency and lecture extract of each attitude signal in Appendix B-1, Appendix B-2 and Appendix B-3)

System		Attitude signals by C-ELF lecturers	Attitude signals by NC-ELF lecturers	Attitude signals by NS lecturers
AFFECT		<i>like, sorry, care, interested,</i>	<i>like, sorry, happy, care</i>	<i>sorry, hate, emotionally, cry, like</i>
JUDGEMENT	VERACITY	<i>will, need, can, may, have to</i>	<i>can, will, would, need, maybe, have to</i>	<i>can, will, might, could, may</i>
	PROPRIETY	<i>should, need, have to</i>	<i>should, need, have to, bad, supposed to</i>	<i>should, wrong, hypocritical</i>
	NORMALITY	<i>always, often</i>	<i>always, normal, usually, often</i>	<i>often, always, usually, personal</i>
	CAPACITY	<i>can, good, best</i>	<i>can, cannot, can't</i>	<i>can, sick, be able to, flawed, familiar</i>
	TENACITY	<i>will, going to, need, would like</i>	<i>will, gonna, would, going to, have to</i>	<i>gonna, would, will, going to</i>
APPRECIATION	REACTION	<i>good, difficult, simple, interesting</i>	<i>good, clearly, interesting, easy, clear</i>	<i>interesting, good, difficult, better, extreme, terrible</i>
	COMPOSITION	<i>coherent, coherent, abstract, basic</i>	<i>clear, short</i>	<i>detail, different</i>
	VALUATION	<i>wrong, different, important, right, similar</i>	<i>important, different, better, productive, problem</i>	<i>different, problem, important, good</i>

For affect signals, the most frequently used words by the three groups of lecturers include *like* (*I often **like** to read.*) and *sorry* (*This is wrong. **Sorry.***). Both C-ELF and NC-ELF lecturers also used the word *care* (*what we **care** more about...*) fairly frequently. Other affect signals include: *interested* (*if you are **interested** in*), *happy* (***Happy** that I know I have no questions about the word count.*), *hate* (*whether or not he **hates** her*), *emotionally* (*...makes us feel **emotionally** involved in the novel*) and *cry* (*...she reads a novel by Paul West, **cries** spontaneously.*). All of these affect signals contribute to the interpersonal meanings of the lecture discourse, and lecturers are seen to share their personal emotions with their students signalling affiliation that could enhance the communicativeness of the discourse.

For judgement signals, the most frequently used expressions by all three groups of lecturers are mainly modal verbs and adverbs indicating varying degrees of modality, and the majority of these signals also present a connotation of engagement meanings in ENTERTAIN. NC-ELF and NS lecturers tend to have more word choices for the frequently used judgement signals than C-ELF lecturers, especially that NS lecturers also make frequent use of adjectives. For veracity signals, *can* (...you **can** have more active effect.) and *will* (people **will** stop buying physical media games) frequently occur in all three groups of lectures. Other veracity signals include: *need*, *may* and *have to* for C-ELF lecturers, *would*, *need*, *maybe* and *have to* for NC-ELF lecturers and *might*, *could* and *may* for NS lecturers. These expressions signal to the students a degree of truth depending upon a particular situation.

For propriety signals, *should* (what people inside your gender **should** do) is the most common in all three groups of lectures. Other word choices include *need*, *have to* and *supposed to* concerning matters of obligation, responsibility and duty. Some adjectives also occurred, such as *bad* (or human **bad** qualities.) in NC-ELF lectures and *wrong* (its nature is **wrong** because it's mean...) and *hypocritical* (So someone **hypocritical**.) in NS lectures.

For normality signals describing an ordinary or typical state, the modal adverbs *often* (...what are **often** viewed as...) and *always* (...as we **always** do.) are common in all three groups of lectures, and the word *usually* (...this uh **usually** attracts about 20,000 people each year.) occurs frequently in NS and NC-ELF lectures. One adjective *personal* (**personal** desires or motivations) has also been identified as a common normality signal by NS lecturers, as in ...it's not about **personal** desires or motivations.

For capacity signals, *can* (I **can** not do maths.) is the most frequently used signal by all three groups of lecturers, illustrating the capabilities and qualities of human capacity such as skill and intelligence. Adjectives often appeared as capacity signals, such as *good* (very **good** programmer) and *best* (...try our **best** to make it successful.) in C-ELF

lectures, and *sick* (...when you get **sick**.), *flawed* (his **flawed** mother) and *familiar* (...**familiar** with Parkinson's disease?) in NS lectures.

For tenacity signals, all three groups of lecturers share two most frequently used signals – *will* (we **will** come back to that) and *going to* (we're **going to** be looking at). In addition, NS and NC-ELF lecturers also used *gonna* (...we're **gonna** watch a little bit of it right now.) and *would* (I **would** like to say...) very frequently. These expressions convey a cline of inclination signaling to the students the lecturer's disposition towards what may happen.

For appreciation signals, the most frequently used appreciation signals by NC-ELF and NS lecturers can include linguistic forms of adjectives and nouns, whereas C-ELF used solely adjectives. For reaction signals, the adjectives *good* (...or you already have it. **Ok. Good.**) and *interesting* (the very **interesting** part), conveying positive evaluative meanings, have been used frequently in all three groups of lecturers. The word *difficult* (a little bit **difficult** for you to think about in such a short time.) frequently occurs in NS and C-ELF lectures, as an adjective for a negative evaluation. These words have been used to describe the lecturers' reactions to various referents, such as a student's behaviour, a translation task and a class activity. These adjectives are mainly expressing positive evaluations except for the word *difficult* which is conveying a negative connotation; the word *interesting* also presents an up-scale gradable feature by the quality signal *very* and the word *difficult* has been toned down by a down-scale quality signal *a little bit*.

As to composition signals, these three groups of lecturers have totally different word choices. Lexical items such as *coherent* (a target text must be **coherent** with the source text), *concrete* (retrieving the **concrete** form of this word), *abstract* (Skopos theory is a little bit **abstract**, also being modulated by the down-scale quality signal *a little bit*) and *basic* (some **basic** underlying rules of Skopos theory) have been used most frequently by C-ELF lecturers when describing textual features. Words such as *clear*

(in a very **clear** way) and short (**Short** conclusion) were more commonly used in NC-ELF lectures, whereas NS lecturers made the most frequent use of a noun, e.g. *detail* (...but omit some **detail**) and an adjective, e.g. *different* (very **different** from American dramas).

Finally for valuation signals, two words *different* (there are **different** ways...) and *important* (An **important** part of Korean media exports) are common in all three groups of lectures. NS and NC-ELF share one frequently occurring valuation signal, which is the word *problem* (...there could be **problems**.) indicating a negative evaluation. Other commonly used valuations signals include adjectives such as wrong, right, similar, better, productive and good. All of these valuation signals are easily understood, requiring little effort on the part of the students to capture the underlying evaluative meanings and thereby facilitating the smooth progress of the classroom communication.

In summary, the number of attitude signals in the three groups of ELF lectures is very close, with NC-ELF lecturers made slightly more use of such discourse devices than NS and C-ELF lecturers. The most ELF-specific feature of the use of attitude signals concerns judgement and appreciation signals, as the usage difference of affect signals between the three groups of lecturers is very small. More specifically, C-ELFs' usage frequency of judgement signals is the highest whereas NC-ELF lecturers' use of appreciation signals is the most common.

6.3 ELF-specific features of engagement signals in ELF academic lectures

This part of the chapter will concentrate on the ELF-specific features of the engagement signals identified from the ELF academic lectures. The raw frequencies of all the engagement signals have first been provided in Table 6-3 below. Results show that C-ELF lecturers (Chinese ELF users) used the most engagement signals at these academic lectures, with a normalized number of 107.9 per 1000 words. The number

of engagement signals used by NC-ELF lecturers (non-Chinese ELF speaker, 97.9) ranks the second, followed by NS lecturers (74.8).

Table 6-3 Raw frequencies of engagement signals used by ELF lecturers of different L1s

Subject	Raw frequency	Word account of 4 transcripts	Per 1000 words
C-ELF lecturers	2034	18859	107.9
NC-ELF lecturers	2610	26665	97.9
NS lecturers	1482	19822	74.8

Figure 6-2 provides the contrasting results of how ELF lecturers of different L1s used engagement signals according to the two major ENGAGEMENT subsystems of EXPAND and CONTRACT. For EXPAND, it is apparent from the data that, C-ELF lecturers used many more expand signals (96.1 in total) than both NC-ELF (80.2 in total) and NS lecturers (61.1 in total). For CONTRACT, NC-ELF lecturers used the highest number of engagement signals, about 17.7 occurrences in total. NS (13.6 in total) and C-ELF (11.7 in total) lecturers had very similar preferences on contract signals, both used about 5 such expressions fewer than NC-ELF lecturers.

According to the results, entertain signals (56.2) have a substantial presence at C-ELF lectures, being more commonly seen than in NS lectures but less in NC-ELF lectures. C-ELF lecturers' use of attribute signals (40.0) occurred to the largest amount as compared with NC-ELF and NS lecturers. By contrast, C-ELF lecturers used fewer contract signals than the other two groups of lecturers, with disclaim signals about 10.3 expressions and proclaim signals only about 1.4. As with C-ELF lecturers, entertain signals (59.1) have been used most frequently by NC-ELF lecturers, followed by the use of attribute signals (21.2). Disclaim signals (14.9) also occurred fairly frequently at NC-ELF lectures whereas the occurrences of proclaim signals are rare (2.8). As with C-ELF and NC-ELF lecturers, NS also used entertain signals (43.2) most frequently at academic lectures; however, they used the least number of entertain

signals compared with these two groups of lecturers. Attribute signals (18.0) occurred as the second most frequent signals at NS lectures and the number of occurrences is close to that identified from NC-ELF lectures (21.2). Disclaim signals (11.3) can also be commonly found at NS lectures, the number of which is less than that of NC-ELF lectures but more than that of C-ELF lectures. As with both C-ELF and NC-ELF lecturers, NS also used a small number of proclaim signals (2.3), the results of which are very close to the number of signals that appeared at NC-ELF lectures (2.8).

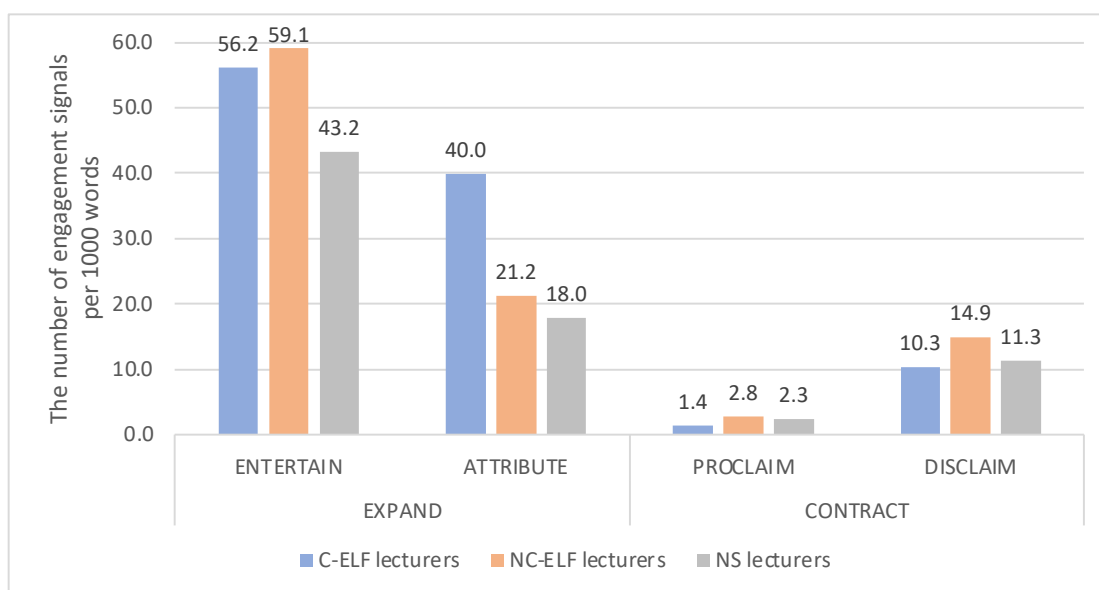


Figure 6-2 The number of engagement signals used by ELF lecturers of different L1s

The engagement signals most preferred by C-ELF, NC-ELF and NS lecturers have been shown in Table 6-4 below. The normalized usage frequencies of these signals have been presented in Appendix B-4, Appendix B-5 and Appendix B-6, together with examples of lecture extracts.

Table 6-4 The most frequently used engagement signals by C-ELF, NC-ELF and NS lecturers (see the usage frequency and lecture extract of each engagement signal in Appendix B-4, Appendix B-5 and Appendix B-6)

System		Attitude signals by C-ELF lecturers	Attitude signals by NC-ELF lecturers	Attitude signals by NS lecturers
EXPAND	ENTERTAIN	<i>you can</i> , a question, <i>if you</i> + a verb, <i>you need</i> , <i>like</i>	a question, <i>if you</i> + a verb, <i>you can</i> , <i>like</i> , <i>do you</i>	a question, <i>like</i> , <i>some</i> , <i>let's</i> , <i>do you</i> , <i>I think</i>
	ATTRIBUTE	<i>you</i> , <i>we</i> , <i>your</i> , <i>our</i> , <i>my</i>	<i>you</i> , <i>we</i> , <i>your</i> , <i>say</i> , <i>I say</i>	<i>we</i> , <i>you</i> , <i>your</i> , <i>say</i>
CONTRACT	PROCLAIM	<i>I want</i> , <i>sure</i>	<i>I want</i> , <i>of course</i> , <i>call</i> , <i>clearly</i> , <i>sure</i> , <i>generally</i>	<i>of course</i> , <i>call</i> , <i>obviously</i>
	DISCLAIM	<i>not</i> , <i>don't</i> , <i>no</i> , <i>cannot</i> , <i>can't</i>	<i>not</i> , <i>don't</i> , <i>no</i> , <i>nothing</i> , <i>cannot</i>	<i>not</i> , <i>don't</i> , <i>but</i> , <i>no</i> , <i>cannot</i> , <i>rather than</i>

For entertain signals, questions (*What about the role of the focaliser?*) and the lexical item *like* (*Does that sound like somebody you just mentioned?*) have been used frequently in all three groups of lectures, with the former being the most frequent in NS and NC-ELF lectures. Questions have been used as engagement signals with high frequency directly seeking for student response, and thereby the classroom communication can proceed collaboratively between the lecturers and their students. Furthermore, *if you* + a verb (*If you look at terrestrial systems...*) and the 1st2ndpronM pattern of *you can* (*You can check it on YouTube*) are frequently used by both NC-ELF and C-ELF lecturers, and the pron_Q pattern of *do you* (*Did you know any identical twins?*) is common in both NS and NC-ELF lectures. Other frequently used entertain signals by NS are: *some* (*some biological problem*), *let's* (...*let's start with measles*) and *I think* (*I think it's meaning a sense of...*). These entertain signals are being used either to elicit student response or to express evaluative meanings based on the lecturers' personal opinions. Additionally, the word *some* is also a down-scale focus signal overlaid with the entertain meaning, softening the semantic boundary of the *biological problem*, which reduces the assertiveness of the statement and help engaging other voices.

As to attribute signals, three pronouns *we* (*We talked about melodrama last week...*), *you* (*Those of you online...*) and *your* (*from your textbooks*) have been used frequently by all three groups of lecturers, with *we* being used most frequently by NS lecturers and *you* by C-ELF and NC-ELF lecturers. Another attribute signal *say* ("*Cogito, ergo*

sum" Descartes famously **said**.) has been commonly used by both NS and NC-ELF lecturers. These attribute signals are effective devices signalling interpersonal meanings in the classroom communication foregrounding the use of personal involvement and self-mention in the communicative process.

As to the most frequently used proclaim signals, the three groups of lecturers tend to have different word choices. Expressions such as *of course* (*the formation of the brain **of course** is the...*), *call* (*what's **called** concordance rates.*) and *obviously* (**Obviously** , *this is her son.*) have been used most frequently in NS lectures but are not so commonly found in C-ELF and NC-ELF lectures except for *of course* has been used fairly frequently by NC-ELF lecturers. By contrast, C-ELF and NC-ELF lecturers used the expression *I want* (**I want** *you to look at this...* and **I want** *to show you...*) as the most frequent proclaim signal which is not so commonly used by NS lecturers. These proclaim signals overtly present the lecturers' authority in the classroom communication and reduce the dialogic space for any contrary positions.

As to disclaim signals, four expressions expressing a negation or denial have been identified as the most frequent in all three groups of lectures: *not* (*It is **not** a good idea to...*), *don't* (*They **don't** have 1.5 billion people.*), *no* (*That's **no** consolation to ...*) and *cannot* (*The natural mother for some reason **cannot** take care of the baby.*). However, two other disclaim signals appeared frequently in NS lectures but were not so common in C-ELF and NC-ELF lectures: *but* (*The vaccine is not 100 percent safe, **but** I think it's safer than the natural immunity.*) and *rather than* (*Environmental influence **rather than** the genetic influence.*), both indicating a counterargument. These expressions are being used to form a negation which explicitly rules out alternative viewpoints that may occur unless students have a strong desire to engage in the communicative process.

In summary, the usage frequency of engagement signals in C-ELF lectures is the highest, followed by those in NC-ELF and NS lectures. The most ELF-specific feature of

the use of engagement signals is related to expand signals rather than those in CONTRACT. For expand signals, C-ELF and NC-ELF lecturers made much more use of entertain signals than NS lecturers, whereas C-ELF lecturers' usage frequency of attribute signals is exceedingly higher than both NC-ELF and NS lecturers. For contract signals, by contrast, the number of occurrences in the three groups of lectures is very close.

6.4 ELF-specific features of graduation signals in ELF academic lectures

The research focus of this section is to explore how appraisal signals have been used to clarify evaluative meanings for ELF communication in the academic lectures. The raw frequencies of the graduation signals extracted from the ELF lectures of different L1s have first been presented in Table 6-5 below. As we can see from the data that NC-ELF lecturers (non-Chinese ELF speaker, 90.6) used the highest number of graduation signals, followed by NS (native speaker, 89.1) and then C-ELF (Chinese ELF speaker, 73.8).

Table 6-5 Raw frequencies of graduation signals used by ELF lecturers of different L1s

Subject	Raw frequency	Word account of 4 transcripts	Per 1000 words
C-ELF lecturers	1392	18859	73.8
NC-ELF lecturers	2416	26665	90.6
NS lecturers	1767	19822	89.1

Information on the number of graduation signals used by ELF lecturers of different L1s have been provided in Figure 6-3 below. Results show that, these three groups of lecturers, i.e., lectures of C-ELF, NC-ELF and NS, made very similar use of intensification signals, with NC-ELFs' usage frequency ranking the highest (17.5 in total), followed by C-ELFs (16.1 in total) and NSs (15.7 in total). As to quantification signals, however, they have been used most frequently in NS lectures (42.7 in total), very closely followed by those in NC-ELF lectures (41.8 in total); in comparison, C-ELF lecturers used less quantification signals than the former two, with about 33.3 occurrences in total. For

focus signals, the frequency differences between NC-ELF (31.3 in total) and NS (30.7 in total) is also very small, compared with the usage frequency with C-ELF lecturers (24.4 in total). In summary, NC-ELF lecturers used the highest number of intensification and focus signals whereas NSs used quantification signals the most.

For further comparisons between subsystem, focus signals are the most common in C-ELF lectures, with number signals (19.2) ranking second followed by extent signals (13.3). Intensification signals of both quality (9.1) and process (6.9) also occur relatively frequently, compared to the low usage frequency of mass signals (0.8). As with C-ELF lecturers, NC-ELF lecturers also favour the use of focus signals the most. Their usage frequency of both number (20.3) and extent (20.1) signals are also very high, clearly higher than the use of quality (11.5), process (6.0) and mass signals (1.4). For NS lecturers, by contrast, the token counts of these signals, from top to bottom, are 30.7 (focus signals), 23.9 (number), 17.9 (extent), 9.1 (quality), 6.7 (process) and 1.0 for mass. According to these results, the six types of graduation signals used by these three groups of lecturers follow a similar usage frequency sequence, always with focus signals ranking the highest, with a significantly higher frequency than all other graduation signals. Number signals rank second, followed by extent signals and with signals of quality, process and mass presenting a relatively much lower usage frequency.

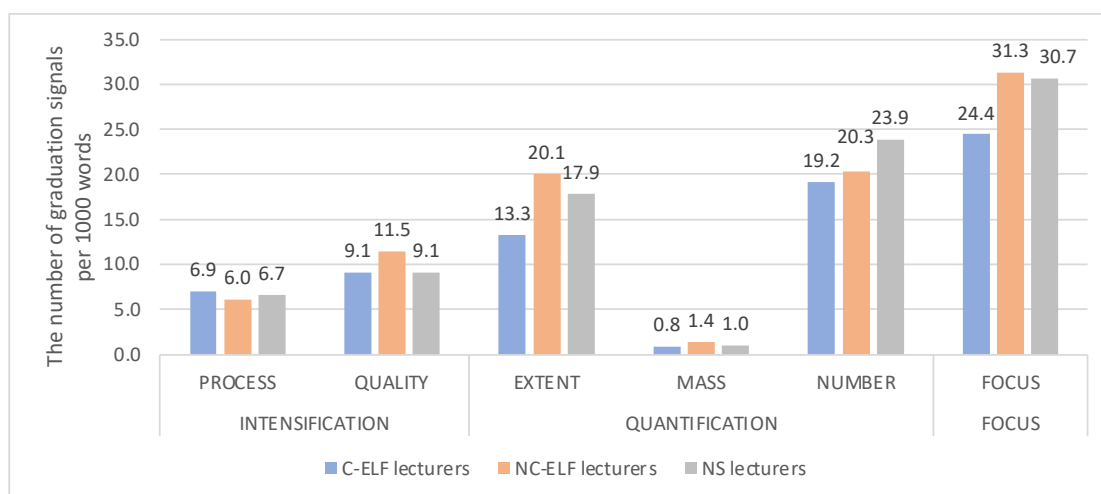


Figure 6-3 The number of graduation signals used by ELF lecturers of different L1s

Figure 6-4 further compares the gradable features of these expressions in the three major GRADUATION subsystems. For INTENSIFICATION, C-ELFs used no-scale signals (0.4 in total) most frequently whereas NC-ELF speakers made the most frequent use of both up-scale (15.3 in total) and down-scale signals (2.1 in total). NSs' usage frequency of the down-scale signals (1.8 in total) is higher than that of the C-ELF users (1.4 in total) as well as their no-scale signal (0.5 in total) frequency being higher than that of the NC-ELF lecturers (0.2 in total). As to QUANTIFICATION, no-scale (27.5 in total) and up-scale (14.2 in total) signals have been used most frequently by the NS lecturers whereas down-scale (1.4 in total) signals have been used most frequently by the NC-ELF users. C-ELF used the down-scale (1.1 in total) signals more frequently than NS (1.0 in total) but used fewer graduation signals with no-scale (21.1 in total) and up-scale (11.1 in total) features than the other two groups of participants. Within FOCUS, the usage frequency of both no-scale (18.8 vs. 18.6) and up-scale (10.7 vs. 10.6) signals between NC-ELFs and NSs is almost paralleling each other whereas C-ELFs made less use of these two types of signal (14.6 for the former and 9.5 for the latter). For down-scale focus signals, the most occurrences have been found in NC-ELF lectures (1.9), closely followed by NS lectures (1.4) and with very few in those of C-ELF (0.3).

For further comparisons between each subsystem, no-scale focus signals (14.6) have been used most frequently by C-ELF lecturers, followed by no-scale extent signals (10.4) and no-scale number signals (10.3). C-ELF users also made frequent use of up-scale signals in the lecture discourse, especially graduation signals in FOCUS (9.5), NUMBER (8.6), QUALITY (8.0) and PROCESS (6.3). As with C-ELF lecturers, no-scale focus signals (18.8) have been used most frequently by NC-ELF users, closely followed by no-scale extent signals (15.6). The use of up-scale signals in FOCUS (10.7), QUALITY (10.3) and NUMBER (10.3) are almost parallel with each other in NC-ELF lectures, with no-scale number (9.4) and up-scale process (5.0) ranking next. In comparison, no-scale focus signals (18.6) also occurred most frequently in the NS lecture discourse and were very close to its usage frequency in the NC-ELF lectures (18.8). No-scale number (13.6) and

extent signals (13.3) have been almost evenly used in NS lectures, followed by up-scale signals of FOCUS (10.7) and NUMBER (9.8). The use of up-scale QUALITY (7.9) and PROCESS (5.7) has also been relatively common in NS lectures. None of the lecturers in any of the three groups made any use of no-scale quality and down-scale mass signals in their lecture discourse.

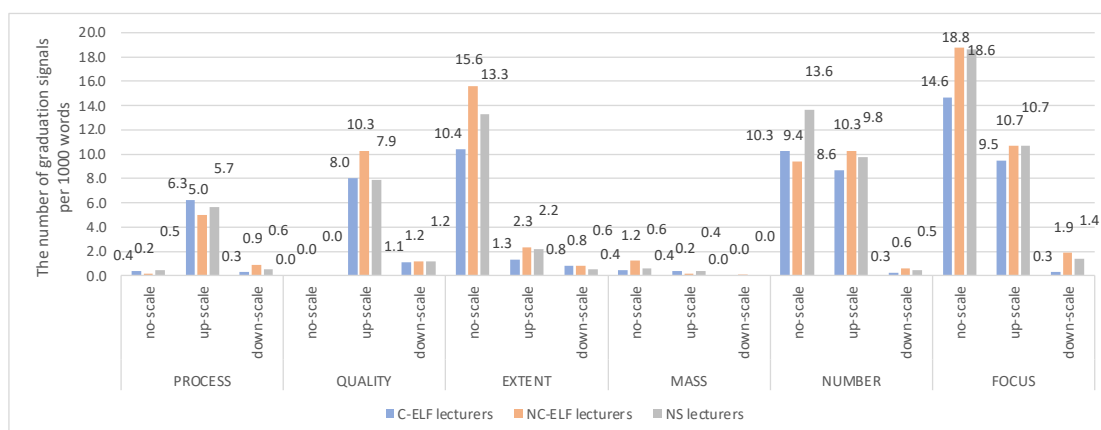


Figure 6-4 The gradable features of graduation signals used by ELF lecturers of different L1s

The list of most frequently used graduation signals by the three groups of lecturers has been laid out in Table 6-6 below. The presentations of their normalized usage frequencies and scale features, as well as examples of lecture extracts can be found in Appendix B-7, Appendix B-8 and Appendix B-9.

Table 6-6 The most frequently used graduation signals by C-ELF, NC-ELF and NS lecturers (see the usage frequency, scale feature and lecture extract of each graduation signal in Appendix B-7, Appendix B-8 and Appendix B-9)

System		Attitude signals by C-ELF lecturers	Attitude signals by NC-ELF lecturers	Attitude signals by NS lecturers
INTENSIFICATION	PROCESS	<i>just, really, very, even, easily</i>	<i>just, still, louder, completely, well</i>	<i>Just, actually, still, completely, very, even, well, effectively</i>
	QUALITY	<i>very, more, quite, better, a little bit</i>	<i>very, most, more, better, pretty</i>	<i>very, more, quite, even, highly, most</i>

System		Attitude signals by C-ELF lecturers	Attitude signals by NC-ELF lecturers	Attitude signals by NS lecturers
QUANTIFICATION	EXTENT	<i>now, already, In-phrase, today, sometimes</i>	<i>In-phrase, now, already, always, before</i>	<i>In-phrase, now, often, already, today, later, still</i>
	MASS	<i>larger, little</i>	<i>big, little</i>	<i>big, largest</i>
	NUMBER	<i>all, some, many, each, more</i>	<i>some, more, all, many, one of, a lot</i>	<i>some, more, one of, all, another</i>
FOCUS		<i>about, other, any, kind of, something</i>	<i>about, other, something, kind of, thing</i>	<i>about, kind of, other, the same, any, just, actually</i>

According to the results, as compared with C-ELF and NC-ELF lectures, more word choices of both process and quality signals with a high usage frequency have been found in NS lectures. Additionally, all of these frequently used process and quality signals by all the lecturers are functioning as up-scale devices intensifying the evaluative meanings embedded in the lecture discourse. First of all, the most commonly used process and quality signals by all the lecturers are the lexical items *just* (*let's **just** get familiar with terms on this page*) and *very* (***Very** simple terms*). The intensification explicitness expressed by these two signals effectively illustrates the lecturers' opinions and can help students capture the evaluative meanings encoded in the lecture discourse. The process signals of *very* (*cultural industries are doing **very** well*) and *even* (*she doesn't **even** call it farm*) can be common in both NS and C-ELF lectures, whereas signals such as *still* (***still** remains the question of*), *completely* (***completely** deregulate*) and *well* (*cultural industries are doing **very well***) constantly occur in NS and NC-ELF lectures. By contrast, the quality signal of *more* (***more** diversified*) has been used frequently by all three groups of lecturers, the signals *quite* (***Quite** notorious comparison*) and *even* (***even** disgusted at times*) have been commonly used by NS and C-ELF lecturers, and the signal *most* (*the **most** interesting kind of comparison*) have been used frequently by NS and NC-ELF lecturers. These quality signals help modulate the intensity of various qualities, thereby manifesting lecturers' opinions toward the information that is being described.

As to quantification signals of extent, mass and number, three groups of lecturers share many word choices presenting either a no-scale or up-scale modulation. For extent signals, *in*-phrases (*in 2008* and *in the US*), *now* (*Thinking about literary techniques **now***.) and *already* (*you have an idea in your head **already***.) have been commonly found in all three groups of lectures, with NS and NC-ELF lecturers using *in*-phrases most frequently and C-ELF lecturers using *now* with the highest frequency. These extent signals mostly concern information of time, except that *in*-phrases can also be used to clarify information of space. The clarification of time and space is needed to enhance the classroom communication and facilitate the teaching flow. The extent signal *sometimes* (***sometimes** they can be one person.*), however, can also be seen as a vague expression as the frequency being referred to is ambiguous. Nevertheless, vagueness can be a desirable feature when expressing evaluative meanings on a scale, as the precision of the information may be inflexible and unnecessary. As previously discussed, mass signals only occurred occasionally in the lecture discourse, including words such as *large* (***larger** errors*), *little* (*a **little** book*) and *big* (*a **big** mathematical error*). These mass signals help to provide illustrative descriptions and reveal the lecturers' evaluations towards the size of the entities being described. As to number signals, lexical times such as *some* (***some** symptoms*), *more* (***more** details*) and *all* (***all** the other preachers*) have been frequently used by all three groups of lecturers, with *some* being used most frequently by NS and NC-ELF lecturers and *all* by C-ELF lecturers. The expression *one of* (***one of** the most acclaimed living authors*) has also been found common in NS and NC-ELF lectures. The number signals of *all* and *more* are functioning as an up-scale device increasing the force of the quantification information whereas others are presenting no-scale features. Vagueness can also be detected in these number signals, for instance with the signals of *all*, *some* and *more*, providing imprecise quantification information.

Finally, for focus signals, three expressions have been commonly used by all three groups of lecturers and they are: *about* (***about** animal welfare*), *kind of* (*What **kind of** literary techniques...*) and *other* (*The **other** school, the Deontological.*), with *about*

being used the most frequently. NS also share the frequently-used word *any* (*any questions*) with C-ELF lecturers, and used a few words, such as *the same* (*the same way*), *just* (*from a more of a public health perspective, just sort of*) and *actually* (*hybrid is actually a term that*) that are not so commonly used as focus signals in C-ELF and NC-ELF lectures. Compared with C-ELF and NC-ELF lecturers, NS lecturers used more up-scale focus signals to sharpen a semantic boundary (*any, just* and *actually*) whereas the other two groups of lecturers mainly utilized no-scale focus signals to specify a categorisation (*about, other* and *something*). The focus signals such as *about* and *other* help to direct students' attention to the specific information the lecturer was imparting, and the signals such as *kind of* and *something* are being used as vague expressions that could facilitate the classroom communication based on shared knowledge between the lecturers and their students. The up-scale device *any* is signalling to the students that the lecturer will be prepared for any kind of question they would like to ask, and this will help with rapport-building in the classroom communication.

In summary, the number of graduation signals in NC-ELF and NS lectures is very close whereas those in C-ELF lectures is relatively less than the former two groups. For intensification signals, the usage difference among the three groups of lecturers is very small. An up-scale feature has been applied to almost all these intensification signals occurred in the three groups of lectures. For quantification signals, however, some significant ELF-specific features can be found in the use of extent and number signals. NC-ELF made much more use of extent signals than the other two groups of lecturers whereas number signals occurred the most in NS lectures. Most of the extent signals indicate a no-scaling feature whereas number signals frequently demonstrate either a no-scaling or an up-scaling feature. For focus signals, there is also a marked difference among the three groups of lecturers. The usage frequency in both NC-ELF and NS lectures is much higher than that in the C-ELF lectures. As with number signals, both no-scale and up-scale features are common when a focus signal occurs.

6.5 Summary of the chapter

This chapter concentrated on the findings regarding RQ 3 and made an investigation into the use of appraisal signals in the 12 lectures from an academic ELF perspective. The chapter first compared ELF lecturers' different preferences on the use of attitude signals, and the overall usage frequencies of such signal by C-ELF, NC-ELF and NS are very similar. The chapter then made an investigation into how engagement signals have been used to clarify evaluative meanings in the ELF academic lectures. According to the results, there were much more occurrences of engagement signals in C-ELF and NC-ELF lectures as compared to NS lectures, especially more entertain signals allowing alternative viewpoints. Finally, the chapter presented the use of graduation signals between these three groups of lectures having different L1 backgrounds. Overall, the usage frequencies of such signal between NC-ELF and NS lectures are very small, both much higher than that of C-ELF lecturers. The major difference between these three groups of participants are the use of quantification and focus signals when modulating an appraisal.

Chapter 7 A case study: appraisal signals in the lecture discourse of a NC-ELF sciences lecturer

7.1 Introduction

A case study of a text analysis was carried out to present an overview of how appraisal signals were applied in an ELF academic lecture, synthesizing all three major types of appraisal signals and their discourse practice into an integrated picture. Firstly, all the attitude, engagement and graduation signals are identified in this chosen text, and the data analysis concerns all the discourse features and patterns that have been discussed in the previous three finding chapters (Chapter 4 to Chapter 6), such as the referents of attitude signal, the pronoun patterns, the gradable features and the layers of appraisal meaning (Section 7.2). Section 7.3 then progresses to the discussion on the text analysis, following two overarching dimensions, i.e., disciplinary-specific and ELF-specific linguistic features of the appraisal signals used in the chosen ELF academic lecture. Thus, emphasis is given to the discourse features of the appraisal signals in relation to the ELF classroom setting. Finally, Section 7.4 closes with some summaries of the findings and discussions of the case study.

7.2 Appraisal signals in the ELF lecture discourse: text analysis

This chosen text is a lecture episode selected from the transcript of a 60-minute lecture delivered by participant 9 (P9) of this current study. P9 is a NC-ELF (non-Chinese ELF speaker) lecturer teaching the subject of Health and Environmental Sciences in the domain of hard sciences. In this lecture episode, P9 was having a discussion with his students on two academic papers. One paper concerned the importance of rivers and the unpredictable impacts of a water project in China and the other was about managing nitrogen to restore water quality in China. Although there was some student input to the discussion, the appraisal analysis will focus only on the spoken discourse of the lecturer. This sample text has been divided into three

parts according to the different topics of the specific classroom interaction and for the convenience of presenting segments of the text analysis. The text has been analysed and coded using the modified APPRAISAL framework, with some statistical results being provided in Table 7-1 below. According to the results, P9 used engagement signals (14.1 occurrences per 1000 words) most frequently in the selected lecture episode, followed by graduation signals (12.5) and finally attitude signals (9.8). Emphasis has been given to the identified appraisal signals in the text, with attitude signals having character borders, engagement signals being wave-underlined, and graduation signals **highlighted in bold**.

Table 7-1 Raw frequencies of appraisal signals in the selected lecture episode

Length of the whole lecture		60.04 min
Word account of the whole lecture		6718 words
Word account of the selected lecture episode		675 words
Appraisal signals	Raw frequency	Per 1000 words
Attitude signals	66	9.8
Engagement signals	95	14.1
Graduation signals	84	12.5
Total	245	36.4

7.2.1 Episode 1 of the selected lecture

Episode 1 is an introduction of the first academic paper that P9 was discussing with his students in class. The topic of the paper concerns the importance of rivers.

*That was our last figure, OK. Let's go back to. What's your name again? So going back to the figure, I go to the paper **now**. We go over that **a little bit**. What's your opinion at this stage? You like the paper? **Too boring, too general?** You 've got to speak **a little louder**, so Cynthia can hear you. [Student's input] Yes, yeah, like the China water project, clearly they have an impact on the on the **Guangzhou**, the poor river delta there. What a **bigger** impact on that is **much less** water flow to them. And **many** of these impacts are unpredictable **to some degree**. [Student's input] Yeah, that is right. How is the English in the paper? Easy to read? Difficult? Medium? [Student's input] **Louder, louder**. [Student's*

input] *So for you guys, it's easy. You're 4th year students now. This is easy to read? You guys? It's OK to say no. What do you think, you smiling? No? Yes?* [Student's input] *A little difficult.* *OK. If I give first year student or second year student this paper, would this be a problem?* *You now you're fourth year, if you got this paper in your second year, would this be OK?* [Student's input] *The content is fine. It is easy to follow. And the English is reasonably fine, I think. There are some specialized words, like damming and other things, but at some level you'll learn them anyhow. So I think this will be a good paper for second year students. They kinda point out that rivers are important. Everybody agrees?*

This episode of the lecture extracts begins with the lecturer completing his explanation of some figures with a closing remark *That was our last figure, OK.*, and moving on to the introduction of the first academic paper concerning the importance of rivers, by saying, *So going back to the figure, I go to the paper now.* Two graduation signals relating to extent of time, *last* and *now*, mark the transition of the topics as they indicate an end to the previous discussion and an opening for the next. Before starting with the introduction of the first academic paper, P9 used three engagement signals to interact with the students – *our (our last figure)*, *let's (Let's go back to...)* and a *what*-question (*What's your name again?*). The engagement meaning of inviting student participation is denoted by these three signals. The introduction then starts with the sentence *We go over that a little bit.*, followed by three questions (*What's your opinion at this stage? You like the paper? Too boring, too general?*). These four utterances are highly engaging: for the first sentence, the pronoun *we* represents the lecturer and the students, indicating personal involvement for rapport-building and the quantifier *a little bit* conveys tentativeness overlaid with a down-scale graduation meaning to soften the verbal process of *go over*; the second and the third sentences are pron-Q patterns, two pronouns *you* and *your* occurring in two questions, addressing students directly and asking for their opinions; the fourth sentence is a question without a pronoun, also functioning as an engagement signal to elicit student response. Three attitude signals also occur in these utterances, including *like* expressing an attitude of affect, and two adjectives *boring* and *general* indicating

appreciation meanings of the paper. Furthermore, the two attitude signals *boring* and *general* have been graded up by the graduation signal *too* which intensifies the evaluative meanings of the two adjectives. Apart from having an attitude meaning, the word *general* in this context also signals a cline of graduation meaning indicating a broad focus. Following this, P9 continued with a requirement asking students to raise their voice before receiving a student's response, and he said *You've got to speak a little louder, so Cynthia can hear you*. In this utterance, the pronoun *you*, being an engagement signal, has been used twice, one with the PronM pattern as in *You've got to...* and the other one at the end of the sentence referring to the group of students in class. There are also two attitude signals in this sentence, using modals to express judgement meanings of students' behaviour – *have got to* emphasising the importance of speaking louder and *can* indicating a capacity for being able to hear. The phrase *a little louder* modifies the verbal process of speaking, with *a little* decreasing the quality of being louder and the word *louder* intensifying the force of speaking; at the same time, *a little* also conveys a cline of engagement meaning working as a downtoner to soften the request of the lecturer. The lecture continued with P9 accepting a student's response by saying *Yes, yeah, like the China water project, clearly they have an impact on the on the Guangzhou, the poor river delta there*. This comment from the lecturer contains a factual detail concerning a Chinese city – Guangzhou, this being a graduation signal specifying the location of a river delta. The adverb *clearly* conveys layers of graduation, engagement and attitude meanings, directing students' focus to the information that follows and at the same time displaying the lecturer's attitude with a proclaim confirming the reliability of the proposition. Within this utterance, *like* is also an engagement signal giving an analogy and the word *poor* functions as an attitude signal indicating the lecturer's general opinion of the river delta. After this, P9 continued with two more comments to extend the discussion: 1) *What a bigger impact on that is much less water flow to them., and* 2) *And many of these impacts are unpredictable to some degree*. In these two comments, there are three graduation signals concerning quantification information – *bigger*, *much less*, and *many*, and also another one functioning to decrease the

evaluative meaning of an adjective – *to some degree*. The adjective *unpredictable* is an attitude signal expressing the lecturer's overall opinion of the impacts. Following this, another student's input to the discussion was acknowledged by P9 with an attitude signal *right* as in *Yeah, that is right*.

P9 continued the discussion by raising another question: *How is the English in the paper? Easy to read? Difficult? Medium?* Within this question, P9 used three attitude signals (*easy*, *difficult* and *medium*) making possible evaluations of how students might regard the English language of the paper. One or two students were giving their opinions but, as they spoke softly, they were again interrupted by the lecturer requesting them to speak up by saying *Louder, louder*. (graduation signals modifying the degree of loudness). After these student inputs, P9 continued to extend the discussion: *So for you guys, it's easy. You're 4th year students now. This is easy to read? You guys? It's OK to say no. What do you think, you smiling? No? Yes?* Within these utterances, the second-person pronoun *you* occurred five times, with two directly acknowledging the students to facilitate the face-to-face communication, and three embedded in questions to keep inviting student participation. The word *now* is a graduation signal indicating the current state of time, and the words *easy* and *OK* are attitude signals revealing the lecturer's views on the degree of the language difficulty of the paper and a hypothetical situation of students considering the language being difficult. Some students answered the questions and P9 responded: *A little difficult, OK*. The adjective *difficult* is an attitude signal indicating students' evaluation of the language difficulty of the academic paper being discussed, and the evaluative meaning has been toned down by a graduation signal *a little* which also conveys a cline of hedging. P9 carried on with the topic of the language difficulty of the paper by adding some elaboration of another hypothetical situation: *If I give first year student or second year student this paper, would this be a problem? You now you're fourth year, if you got this paper in your second year, would this be OK?* As to these utterances, the second-person pronoun *you* appeared four times, addressing students for their comments on the paper. Two *yes / no* questions have also been used as engagement

signals to elicit students' response, within which four attitude signals occurred – *would* being used twice to initiate the questions with *problem* and *OK* concerning consequences of the hypothetical situation. The word *now* has been repeated to emphasise the current status of the students. P9 then provided his comments on the content and language of the paper after receiving some students' responses: *The content is fine. It is easy to follow. And the English is reasonably fine, I think. There are some specialized words, like damming and other things, but at some level you'll learn them anyhow. So I think this will be a good paper for second year students. They kinda point out that rivers are important. Everybody agrees?* Within these utterances, many attitude signals demonstrating positive evaluations of the paper can be found, adjectives in particular, such as *fine* (being used twice), *easy*, *specialized*, *good* and *important*. P9 also made constant use of graduation signals to weaken the assertiveness of his comments for the purpose of hedging, such as *reasonably fine, I think...*, *some specialized words, like damming and other things, ... at some level you'll learn them anyhow.* and *They kinda point out....*The modal verb *will* (*you'll learn...* and *this will be a good paper...*) appeared twice in these utterances indicating assessments of high probabilities. Finally, P9 closes this part of the discussion with an engagement signal of a question: *Everybody agrees?* The compound noun *everybody* is an up-scale focus signal expressing the lecturer's intention of involving all of the students attending the lecture.

7.2.2 Episode 2 of the selected lecture

P9 gave out an assignment in this part of the lecture. The assignment is concerned with the second academic paper, regarding the management of nitrogen to restore water quality in China.

*That's why the **next** paper, it's for fourth year students. This paper does have **a lot of** data. OK? So **next week** we re going to this paper here. This paper is managing nitrogen to restore water quality **in China**. Should be clear **by now** that nitrogen is important in water. And it's a **big** problem in **many areas in China**. And **some of you** guys are gonna get the*

job doing this since **China** **clearly** **needs to** solve this **in the future**. **OK?** **But** this paper **basically** points out what the issue is **at the moment**, **doesn't really** have **any** solutions. **Probably** a **useful** solution is to use **less** fertilizer. **But** if you use **less** fertilizer, farms are **less** **productive**, so there's **always** trade-offs, **winners or losers**. You **can** clean up the water here **by next year**. **But** the farmers **are not gonna** **like** that. **OK?** **So next week** I want you guys to do **the same as before**, answer this **kind of** questions, I posted this **same kind of** form with one **additional** question online, post that on the common on the upload, what is it, learning mall, **Monday**. **Do you guys want a specific time?** Then I want to see 16 uploads, **not 8**, else **I'll** give you a **specific deadline**. **Do you want the deadline?** [Student's input] Then do post it **Monday**. **You have all Monday and all week till Monday**. **OK? OK?** [Student's input]

During this part of the lecture, P9 was giving out an assignment concerning the second academic paper on the management of nitrogen to restore water quality in China. This part of the selected lecture episode begins with two transitional sentences: *That's why the next paper, it's for fourth year students. This paper does have a lot of data. OK? So next week we're going to this paper here.* Two graduation signals, *next* (as in *the next paper*) and *next week* mark the continuity of the teaching flow and direct the students' attention to what follows. The quantifier *a lot of* presents the lecturer's evaluation of the amount of data the paper contains, and this sentence, followed by an engagement signal *OK?*, adds tentativeness to the preceding statement with a connotation of allowing students to give their opinion on the reliability of the proposition. The 1stPronM of *we're going to* is also an engagement signals affirming the topic of the following week's teaching content. P9 then introduced the central idea of this academic paper by saying: *This paper is managing nitrogen to restore water quality in China. Should be clear by now that nitrogen is important in water. And it's a big problem in many areas in China.* There are three graduation signals concerning circumstantial meanings in these three sentences – *in China* appearing twice describing the location of the issue and *by now* claiming a margin of a timeline for the purpose of emphasising the importance of the students' awareness of the use of

nitrogen to improve water quality in reservoirs. There are two other graduation signals *big* and *many*, the former illustrating the consequence of a problem, and the latter underlining such impact on a large number of areas. There are also three attitude signals in these three sentences, including the modal verb *should*, the adjective *important* and the noun *problem*, overtly presenting the lecturer's opinion on the student's grasp of the significance of nitrogen.

P9 then continued his lecture with the following utterance: *And some of you guys are gonna get the job doing this since China clearly needs to solve this in the future. OK?* The starting point of this utterance contains one second-person pronoun *you* as in *some of you guys*, functioning as an engagement signal to address the following lecture discourse from students' perspective while establishing a connection between the knowledge and students' future careers. The word *some* politely avoids presumptions about the relevance of the statements to all of the students. Similar to what has been previously described, graduation signals *China* and *in the future* are indicators of space and time, providing some detail information of what was being imparted. The word *clearly*, however, is not only a graduation signal intensifying the following verbal process of needing to solve the problem, but also an attitude signal indicating the lecturer's own assessment of the significance of the matter. Two modals, *are gonna* and *needs to* are also attitude signals, showing P9's assessment of the likelihood of future events. The tag question, *OK?* is another engagement signal, and P9 seems to have the habit of adding question tags to his statements, signalling explicitly his willingness to allow student responses. Following this, P9 draws a general conclusion of the paper: *But this paper basically points out what the issue is at the moment, doesn't really have any solutions. Probably a useful solution is to use less fertilizer.* Starting with an engagement signal *but*, P9 gave his opinion of the central idea of the paper by boldly reporting the paper's lack of solutions to the issues being raised in it. The *not*-negation *doesn't* and the word *any* are also engagement signals invoking a contrary position, signalling to the students that it is necessary for them to think of some solutions on their own. The three graduation signals – *basically*, *really*

and *any* – *are* all functioning as intensifiers to emphasise this counterargument. From the two attitude signals, *probably* and *useful*, students can capture one key solution that the lecturer suggested. The word *probably* is also an engagement signal, implying to the students that there may also be other solutions worth researching. P9 further elaborated his conclusion by saying: *But if you use less fertilizer, farms are less productive, so there's always trade-offs, winners or losers. You can clean up the water here by next year. But the farmers are not gonna like that. OK?* This elaboration also starts with the engagement signal *but*, emphasising an inevitable consequence of using less fertilizer. *If you* and *you can* are two pronoun patterns functioning as engagement signals, hypothetically involving students as participants in the topic and thereby a communicative context is construed. A few attitude signals appear in this utterance, such as the adjective *productive* and the noun phrase *winners or losers*, illustrating some possible consequences of the situation. Four other attitude signals include *always*, *can* and *are not gonna* conveying modality of possibilities and the verb *like* expressing affect meanings regarding farmers.

After the introduction of the paper, P9 then shifted his topic to the requirements for the assignment. In this part of the lecture discourse, graduation signals concerning the deadline of the assignment constantly occur, including words such as *Monday* being used four times and *deadline* being used twice, and phrases such as *next week* and *all week*. The use of pronoun as an engagement signal is also prevalent in this part of the lecture, concerning both the first-person pronoun *I* and second-person *you*, such as 1st2ndPronM of *I want (I want you guys to do the same as before...), I will* and *do you want (I'll give you a specific deadline. Do you want the deadline?)*, presenting the lecturer's aims and intentions of invoking student actions and encouraging them to complete the assignment. Apart from the use of pronouns, four questions also appear as engagement signals, including two yes / no questions (*Do you guys want a specific time?* and *Do you want the deadline?*) and two tag questions (*OK?* being used twice at the end), seeking confirmation from the students.

7.2.3 Episode 3 of the selected lecture

This part of the lecture transcript is the closing of the selected lecture.

OK. Questions, comments? Next week also, do me two favors, louder voices and more comments. I don't bite. You guys can speak a bit more. OK? There are no bad questions or bad answers. Just give me your opinion. And if you don't understand something in the paper, that's not your fault. That's the author's fault who should have explained better. OK? So if you say, I cannot follow what you mean, so that's fine. So we can talk about it and see if we can figure out what the author said. This paper was pretty general. This paper is too dense. There's a certain section here the author is trying to say too much too fast too quickly, which is difficult to follow for me. OK? Which is not my fault. It's the author's fault. Or this case, the journal's fault since they're making make it really short. So they put most of the good stuff to the supplement. OK? Anything else? Cynthia, are you OK? [Student: yes] OK. Good. Well, then we're done.

The following lecture episode is the closing of the whole lecture. P9 started with a question (*Questions, comments?*) seeking students' responses if they would like to raise any questions or make any comments. Following this, P9 continued with some requirements concerning classroom management for the next lecture: *Next week also, do me two favours, louder voices and more comments. I don't bite. You guys can speak a bit more. OK? There are no bad questions or bad answers. Just give me your opinion.* In this utterance, the lecturer used a few engagement signals to interact actively with the students using clauses such as *do me two favours, OK?* and *give me your opinions*, and pronouns such as *you* and *your*. Two other expressions – *a bit* and *just* are not only engagement signals for hedging but also graduation signals to place emphasis on some contents or actions which may be related to future arrangements of the lecture. Two negations of *don't* and *no* as in *I don't bite.* and *no bad questions or bad answers* are also engagement devices conveying the lecturer's intention of inviting student participation. The following utterances are mainly elaborations of P9's assumptions of how students might think of the paper. Expressions such as *if you don't understand...*, *if you say...*, *I cannot...* and *if we can...* are all pronoun patterns functioning as

engagement signals to maintain a dialogical voice for the lecture discourse. P9 also used a lot of attitude signals in this part of the lecture, including adjectives such as *better, fine, general, dense, difficult, short* and *good*, adverbs such as *fast* and *quickly*, modal verbs such as *should, cannot* and *can*, and nouns such as the word *fault* being used five times. Some graduation signals have been applied to modulate these attitude signals, including adverbs such as *pretty* as in *pretty general*, *too* as in *too dense, too fast, too quickly* and *really* as in *really short*. P9 ended this lecture with a few engagement signals, mainly questions seeking students' feedback, such as *OK? Anything else?* and *Cynthia, are you OK?* The pronoun *we* in the last sentence of the lecture episode, *Well, then we're done.*, is also an engagement signal, firmly announcing the end of the lecture taking into consideration the lecturer himself and his students as a unified whole in the speech event.

7.3 The overall use of appraisal signals in the text

As part of the present PhD research, the case study also regards appraisal signals as a useful interpersonal device for studying the spoken discourse practice of academic lectures. This case study has focused on the discourse features of the three types of appraisal signals, i.e., attitude signals, engagement signals and graduation signals, demonstrating how they have been applied in the lecture discourse to convey evaluative meanings for various communicative purposes. The appraisal signals discussed in the above section are the linguistic devices lecturers used to realize the evaluative meanings they intend to express. Firstly, attitude signals have been used to convey the lecturer's positive and negative opinions of student behaviours and specific entities, as well as to express his own personal emotions. For example, discourse signals such as *can* and *are going to* indicate the lecturer's judgement of how likely or willing students might be to take on an action; *boring* and *general* describe the content of an academic paper, and the word *like* demonstrates a shared personal interest. Secondly, engagement signals –including discourse signals such as *let's..., if you don't..., as you can see... and everybody agrees?* – could maintain the

dialogical voice of the lecture discourse and thereby invite student response and participation. Thirdly, graduation signals perform the function of modulating the evaluative meanings by adding assertiveness and vagueness to the evaluations being made in the lecture discourse. For instance, discourse signals such as *clearly* and *basically* are being used to intensify a verbal process so as to emphasise the lecturer's attitude toward his proposition. Graduation signals regarding quantification information function to adjust an evaluation by providing concrete details to modify the validity of the evaluative meanings, including discourse signals such as *many areas in China, at the moment* and *all week till Monday*. Evaluative meanings can also be modified by affirming or blurring a semantic focus, utilizing discourse signals such as the word *certain* as in a certain section and only as in *only... four and half pages*.

These interpersonal functions summarised in the above are central not only to the interpersonal meanings such as achieving effectiveness of the classroom communication and establishing rapport between lecturers and students, but also to the ideational meanings of the propositional contents being provided in the lecture discourse which would then contribute to the communication of the discipline. The lecture discourse of this current case study was collected from a science lecturer teaching the subject of Health and Environmental Sciences. P9's linguistic choices are closely associated with the contents in his subject and the evaluations he made surrounded the validity of these contents. Therefore, the appraisal signals being used by P9 also contain some disciplinary-specific features, including attitude signals illustrating some subject contents such as *poor* as in *poor river delta* and *productive* as in *...farms are less productive*, and graduation signals concerning details of space and time such as *Guangzhou* and *by next year*. Furthermore, some ELF-specific features of the appraisal signals can also be summarised from the analysis of this selected lecture episode, as it is an ELF academic lecture delivered by a NC-ELF lecturer. The lecturer's L1 background and the ELF academic context affect his linguistic choice of evaluative language and the use of appraisal signals can be seen as his communicative strategy

facilitating the ELF communication in the classroom context. Firstly, the appraisal signals explicitly convey the lecturer's attitudes and personal stance, and such discourse explicitness can be a useful accommodation skill in the ELF communication. For instance, P9 often expressed his attitudes using adjectives, such as *easy, difficult, right, good and fine*. Students can understand his opinions very easily and the mutual intelligibility of the ELF communication can be achieved with minimal effort. Secondly, the engagement signals can also contribute to the mutual intelligibility since ELF communication highlights the importance of interactions in the communicative process. Thirdly, the use of graduation signals modulating evaluative meanings with different scales should be encouraged as they can work efficiently to enhance clarity in the ELF communication, including those modifying an intensification such as *too* as in *too boring too general, reasonably* as in *reasonably fine, pretty* as in *pretty general*.

7.4 Summary of the case study

This case study has been conducted for the purpose of demonstrating the use of appraisal signals coherently following the teaching flow of an ELF academic lecture, taking full account of the contextual factors that might contribute to the understanding of the evaluative meanings in the lecture discourse. As is evident from the findings and discussions, the three types of appraisal signal, i.e., attitude, engagement and graduation signals, are prevalent in the lecture discourse and have been used throughout the whole lecture for various interpersonal functions. These appraisal signals present both disciplinary-specific and ELF-specific discourse features that could enhance the interactivity and mutual intelligibility of the classroom communication.

Chapter 8 Overall discussion

8.1 Introduction

Following the three main research questions and the sequence of the finding chapters (Chapter 4 to Chapter 7), this current chapter provides an overall discussion of the whole research project. Section 8.2 discusses the use of appraisal signals from a systemic functional linguistics (SFL) perspective, exploring the functions and forms of these discourse signals with extensive reference to their co-text in the lecture discourse. Such verbal context is closely associated with the referents being evaluated, the linguistic patterns of the lecturers, lecturers' modulations of their evaluative meanings and their flexible use of integrating different types of appraisal signals. Section 8.3 then focuses on the disciplinary-specific differences of how ELF academic lecturers of humanities and hard sciences employ appraisal signals in their content teaching, highlighting the communicativeness of the use of such signals for enhancing interactivity in the lecture discourse. Next, Section 8.4 concentrates on the ELF-specific discourse strategy of using appraisal signals for the clarity and mutual intelligibility of academic communication in an ELF classroom context. Finally, a summary of the whole discussion chapter is presented in Section 8.5. Overall, the discussion in this chapter is going to unfold from three main perspectives following the sequence of the three research questions of the current study:

RQ1: How are appraisal signals embedded in the lecture discourse of ELF academic lectures?

RQ2: What are the disciplinary-specific features of the appraisal signals in ELF academic lectures between soft sciences and hard sciences?

RQ3: What are the ELF-specific features of the appraisal signals in ELF academic lectures between lecturers of different L1 backgrounds?

8.2 The use of appraisal signals in ELF academic lectures

The use of appraisal signals in terms of their functions and forms identified from the ELF academic lectures of this current study is summarised and discussed in this section according to the three major APPRAISAL systems, i.e., ATTITUDE, ENGAGEMENT and GRADUATION. More specifically, this current study explores the interpersonal meanings of lecture discourse based on 1) how lecturers make evaluations towards the information and knowledge being imparted, 2) how lecturers engage students through the tentativeness encoded in these evaluations, and 3) to what extent lecturers affirm these evaluations. Compared with the extensive studies of the evaluative language in academic written genres, few studies analysed in detail the use of such discourse devices in the spoken language (Lin & Lau, 2021). This current study, therefore, contributes to this major research gap and advances the understanding of the interpersonal aspects of evaluations in spoken genres, particularly the spoken discourse of academic lectures. More specifically, the current study makes an investigation into the meanings of evaluative language in the lecture discourse considering appraisal signals as the interpersonal devices that could help lecturers to express their attitudes and stance more effectively in ELF academic lectures. These appraisal signals are evaluative choices lecturers make to pass on their evaluations on the information and knowledge they are delivering in class which will then have a direct effect on the classroom communication. Previous studies, especially the corpus study on lexical bundles in classroom teaching (Biber et al., 2004; Liu & Chen, 2020) made investigations into stance expressions in university registers and discovered that stance bundles are of great importance in the classroom teaching and classroom management of university lectures. This current study, however, divides appraisal signals according to their semantic functions across both grammatical and lexical boundaries, with a special aim to illuminate how evaluative meanings are realised concerning specific co-text in the lecture discourse and how these meanings are signalled to students in the classroom context of ELF academic lectures.

8.2.1 The functions and forms of appraisal signals in the lecture discourse

This current study integrates both function-based and form-based perspectives on the analysis of appraisal signals to lexicogrammatically shape the evaluative meanings embedded in the lecture discourse. The study delved deep into the appraisal analysis using all three systems of ATTITUDE, ENGAGEMENT and GRADUATION to provide a comprehensive study of lecturers' evaluative language in use. One major modification to the original APPRAISAL framework is that personal pronouns and questions have been included as instances of an engagement signal since such occurrences are pervasive in the lecture discourse for expressing interpersonal meanings. Additionally, the gradability of the graduation signals have been specified according to their no-scale, up-scale and down-scale features while suggesting a cline of vagueness embedded in the evaluative meanings. Other aspects regarding the modifications to the original framework mainly concern the classifications of APPRAISAL subcategories to better suit the discourse analysis specific to the register of academic lectures. Based upon the function and form of the appraisal signals identified in the 12 academic lectures (see statistical results and examples in Section 4.2, 4.3 and 4.4 in Chapter 4), some results are presented at first, followed by discussions with reference to relevant theories and empirical studies.

Results of the research findings concerning the functions and forms of all the attitude signals have first been presented. Firstly, affect signals expressing personal emotions occasionally occurred, mainly having the occurrences of adjectives. Secondly, judgement signals explaining probabilities and human capacity appeared most frequently in the lecture discourse, mainly using modal verbs. Thirdly, appreciation signals are mainly adjectives in the lecture discourse, among which those indicating significance of a value have been more commonly found than those concerning praise of feedback or compositions of a text. According to the analysis of the engagement signals in the lecture discourse, results indicate that: 1) expand signals have been prevalent in the lecture discourse when inviting other voices and when disclosing the

source of the imparted information; such appraisal signals are mainly associated with the use of pronoun. 2) contract signals appeared much more frequently when indicating a negation or counter argument rather than stating a highly warrantable proposition, mainly with the use of adverbs. 3) some pronoun patterns have been identified in the analysis of all the engagement signals – 1st2nd pronM, 1st2nd pronV, 1st2nd pron_Q, with all three patterns most commonly used to signal a dialogical space for alternative viewpoints. For graduation signals, results show that: 1) focus signals appeared most frequently when lecturers were indicating or justifying a semantic boundary; such appraisal signals have a variety of forms, having frequent occurrences in nominal, adverb, prepositional and adjective groups. 2) quantification signals rank the second with those giving concrete information concerning amount, time and space taking the dominant roles; such appraisal signals can be found mainly in adverb and prepositional groups when describing extent of time and space whereas most of those describing amount are quantifiers. 3) intensification signals are much less common compared with focus and quantification signals, and they are mostly adverbs intensifying a verbal process or a quality of a specific entity.

The linguistic forms and patterns of appraisal language can be extremely diversified across any grammatical and lexical boundaries (Martin & White, 2005; Martin & Rose, 2007; Hunston, 2011). It therefore remains unclear how to apply the lexical and grammatical mechanism to express specific evaluative meanings in a given context, as in this case, the context of ELF academic lectures. The following discussion will elaborate how appraisal meanings are realised by a specific set of discourse signals coded in the lecture discourse from both lexis-based and clause-based perspectives (see Figure 8-1 below). Overall, the linguistic form of classroom discourse can include word groups such as nominal, verbal, adverbial and prepositional groups (Sinclair & Coulthard, 1992), among which nominal and prepositional phrases are the most common (Biber et al., 2004). According to the results of this current study focusing on the use of evaluative language (see statistical results in Section 4.2.1, 4.3.1 and 4.4.1 in Chapter 4), the majority of attitude signals are expressions of adjectives and verbs

(mostly modal verbs), and engagement signals are mainly using pronouns, adverbs and questions. By contrast, the forms of graduation signals are roughly evenly distributed in the linguistic groups of adverbs, quantifiers, adjectives, prepositions and nominals.

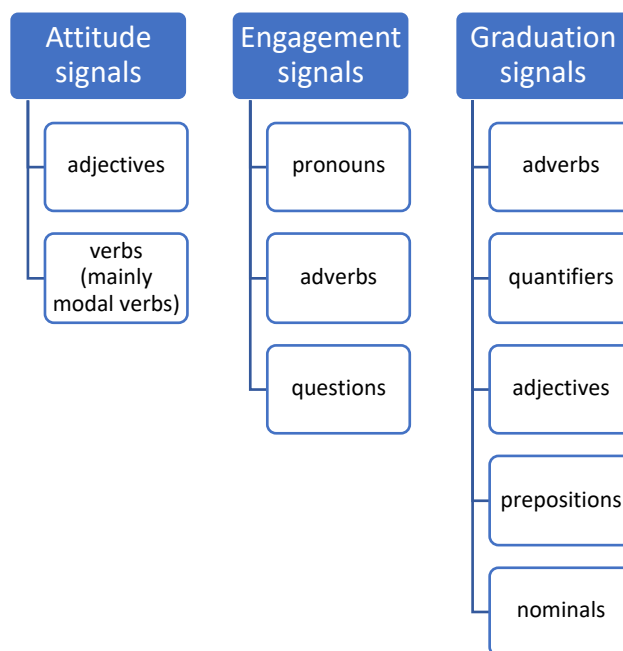


Figure 8-1 Summary of the linguistic forms of appraisal signals in ELF academic lectures

Based on the results from Section 4.2 regarding attitude signals, the ELF lecturers made considerable use of attitudinal devices to evaluate probabilities and human capacities, as well as the aesthetic consideration of the valuation of specific entities and phenomenon. Jadallah, Kang, Hund and Kirbyd (2020) also point out that teachers often need to give opinions referring to specific objects and concepts, and these opinions are associated with their stance taking. It is worth noting, however, that such evaluations are not only personal judgements and reactions, but also can be identified as ‘institutionalized feelings’; as on the one hand, institutions often determine the teaching mode thereby having a direct influence on lecturers and their lecture discourses (Sinclair, 1987). On the other hand, lecturers’ evaluations and opinions reflect ‘a shared value position of a community’ (Martin & White, 2005: 45) and their institutionalised feelings in the educational and academic context. Results also shows that these ELF lecturers made the least use of the affect signals concerning personal

emotions as compared with the judgement and appreciation signals. Biber (2006: 87) explains that, "According to one idealized representation of university language..., lecturers and textbook writers would communicate only the facts and propositional information that students need to know." Therefore, less emotional meanings in the evaluative language can be a possible means of projecting professional distance between teachers and students while maintaining the teacher's authority on the factual information.

According to the results from Section 4.3 concerning engagement signals, the substantial use of expand signals in the lecture discourse suggests the lecturers' willingness and intention to invite students' voice in the classroom interactions. As indicated by Walsh (2003), teachers have the dominant power to control the classroom discourse and the communicative context is primarily dependent on teachers' oral speech. From the discourse analysis of the evaluative meanings encoded in the appraisal signals, lecturers very often, if not always, profess in an interactive voice, so that the engagement signals they are using maintain the dialogical expansiveness of the lecture discourse. Therefore, teachers' awareness of such expand signals and their efficiency in using them can help to facilitate a more interactive classroom context. Apart from the dialogical voices, the lecturers also made use of appraisal language to indicate an authorial voice which only allows a limited space for alternative viewpoints. As Thompson (2014) observes, teachers need to assert their authority in the classroom context even though student participation should be highly encouraged. Martin and White (2005: 2) also agree that writers / speakers not only use attitudinal devices to express their feelings and attitudes, but also to establish their status and authority.

As reviewed in Chapter 2, very few studies paid particular attention to the system of GRADUATION in the APPRAISAL framework (Hood & Zhang, 2020). This current study, however, has made an intensive investigation into the usage of graduation signals in the lecture discourse taking full consideration of its unique features in expressing evaluative meanings for communicative purposes (see findings in Section 4.4). As

summarised earlier in this chapter, graduation signals are commonly used to justify a semantic boundary or to specify quantification information such as amount, time and space. The evaluative meanings being modulated clarify the validity of the information and the lecturers' certainty of their own stance and opinions. The different degrees of assertiveness and vagueness, i.e., the no-scale, up-scale and down-scale features this current study has been highlighting, contribute to the interactivity coded in the lecturers' process of justifying and affirming the evaluations they are making during their course delivery. These evaluations not only convey lecturers' own attitudes and opinions, but also reveal how likely is their assumption that students might share their points of view. White (2020: 17) suggests that the use of evaluative language should establish what he titled as 'likemindedness' between speakers and addressees, so that a putative audience can be created. Page (2003) also agrees that appraisal analysis of speakers' subjective opinions should always consider contextual factors and how the interrelations between speaker and audience can be dynamically affected. Therefore, the gradability of the appraisal signals enhances the communicativeness of the lecture discourse and helps lecturers to provide more specific evaluations that are more likely to be accepted by the students.

8.2.2 Appraisal signals with reference to their co-text in the lecture discourse

Previous studies on evaluative language tended to take corpus approaches to identify frequent recurring sequences of words and phrases (Biber, 2006; Biber & Zhang, 2018; Su & Hunston, 2019; Liu & Chen, 2020). The immediate co-text of such formulaic language can be considered when analyzing the interpersonal meanings of the discourse in use. However, it might be difficult for such corpus studies to detect a broader verbal context that might differentiate a particular personal attitude and stance. Language in use should always consider the importance of context and the function of classroom discourse is realised by teachers' language choices in relation to their verbal context (Edwards & Westgate, 1994; Van Dijk, 2009). Therefore, the

meaning of the appraisal signals in the lecture discourse cannot be interpreted without the reference of their co-text. For example, as summarised earlier in this chapter that modal verbs have been frequently used as attitude signals concerning evaluations of probabilities, words such as *can*, *will* and *need*. However, the word *can* has also been frequently used to indicate human capacity; the word *will* is commonly a signal expressing inclination; and the word *need* can also be found to emphasise propriety. Biber, Conrad and Cortes (2004) also agreed that modals occur constantly as stance bundles in classroom teaching at university level, and different modality stance bundles carry different modal values concerning personal desire, obligation, intention and ability. As in the above examples, the attitude meaning of veracity and human capacity cannot be determined by these individual modal verbs; the given co-text differentiates the meaning of these discourse signals. The following discussions in this section continue to advocate the importance of interpreting appraisal signals with reference to their co-text in the lecture discourse. The in-depth annotations for the discourse features of these appraisal signals shed light on a comprehensive understanding of the use of evaluative language for real-time communicative purposes in the register of academic lectures.

8.2.2.1 Positive and negative meanings of appraisal signals concerning their referents

First of all, it is worth noting that the understanding of the positive and negative evaluative meanings in the lecture discourse are closely associated with, if not determined by what is being referred to in the context (See also the analysis in Section 4.2.2 in Chapter 4.). In other words, attitudes often refer to a specific entity, such as person, object, proposition or situation, and identifying the entity that is being evaluated helps to classify various attitudinal resources (Bednarek, 2009; Hunston & Su, 2019). For instance, one lecturer said *I can see there myself as a **data-analysis** guy.*; a positive evaluation is coded in the noun phrase **a data-analysis guy** as the lecturer was referring to his own experience in the hope of encouraging his students to value their own interests. According to the results of this current study, appraisal signals

have been mainly used to express positive evaluative meanings in ELF academic lectures, especially for the judgement of student behaviours such as being able to provide a good answer in class or submit an assignment on time. Hellermann (2003) indicates that teachers tend to provide positive evaluations almost instantly whereas negative evaluations are often delayed. According to Cullen (2002), however, teachers' immediate evaluations on student performance may inhibit students from engaging in further discussion. Therefore, in such cases, if teachers intend to encourage further communication, they may consider using some engagement signals to help express their assessments and opinions.

8.2.2.2 Pronoun patterns as appraisal signals

Previous studies have attached great importance to the use of personal pronouns in lecture speech (Rounds, 1987; Young, 1990; Fortanet, 2004; Morell, 2004), as they are interpersonal devices for expressing attitudes and stance so as to help engage students in class and establish a rapport between teachers and students. According to the findings of this current study, however, pronouns not only carry an interpersonal function on their own, but also project the interpersonal meanings to the lexical and clausal choices within the verbal context. As analysed in Section 4.3.2 in Chapter 4 and summarised earlier in this present chapter, three pronoun patterns emerged as being frequently used in the 12 ELF academic lectures of this current study: 1st2nd pronM, 1st2nd pronV, 1st2nd pron_Q, with the former two appearing in declarative clauses indicating interpersonal meanings using a combination of a pronoun with either a modal or a common verb, and the latter occurring in an interrogative clause addressing a specific audience with a pronoun.

There is a limited number of modals in the English language, and they are interpersonal devices expressing modality for various communicative purposes. The combination of pronouns and modals is highly interactive: for the pattern of 1st pronM, they indicate the speaker's own attitudes and stance with a dialogical space being open for alternative viewpoints (such as *I could* and *we may*); for the pattern of 2nd

pronM, they explicitly but politely involve the audience in the communication process by seeking their opinions or encouraging an action (*you need, you can and you want to*). For the pattern of 1st2nd pronV, stance verbs such as *think, know* and *believe* (Biber, 2006: 90) often co-occur with first- or second-person pronouns, forming an engagement signal to allow or invite other voices. Apart from these stance verbs, expressions containing a common verb can also express such engagement meanings, such as *let's say, if you + a common verb (if you choose and if you look at)*, and *as you know*. The 1st2nd pronV pattern can also function as an engagement signal to indicate the source of the information when first- or second-person pronouns in collocation with words such as *mention, say* and *explain*. As to the 1st2nd pron_Q pattern, the engagement meaning is confirmed not only through the engaging nature of questions as elicitation markers in the lecture discourse (Morell, 2004), but also by using pronouns to acknowledge students and provoke their personal viewpoints.

8.2.2.3 The gradability coded in the co-text of appraisal signals

The results associated with the gradable features of appraisal signals have been summarised from the findings in Section 4.4.2 and 4.4.3 of Chapter 4. For attitude signals, first of all, both up-scale and down-scale features can be found for affect signals concerning personal emotions. By contrast, judgement and appreciation signals are mainly using up-scale modulation to adjust evaluative meanings on both human behaviour and aesthetic values. As to engagement signals, according to the results, expand signals can be found as having either up-scale or down-scale features with those used to invite other voices taking a dominant role; for contract signals, an up-scale signal has often been coded when analysing highly warrantable statements whereas a down-scale modulation often appeared in a denial. Regarding the gradable features of graduation signal, the following four major research findings have been summarised from the analysis of the data. Firstly, no-scale features have been commonly applied to focus and quantification signals concerning amount and extent of time and space. Secondly, up-scale features constantly occurred with all of the graduation signals except those describing extent of time and space or size of an object.

Thirdly, down-scale features are rather rare compared to the former two scale features, with relatively more instances when justifying a semantic boundary or describing a specific quality. Finally, vagueness has often been detected when analysing the gradability of appraisal signals.

Based on the results summarised in the above paragraph, firstly, the graduation signals this current study is focusing on modulating the up-scale and down-scale of lecturers' assertions in the lecture discourse, which would also help students to comprehend and process the relevant information from what was being imparted. Secondly, the gradability of evaluative meanings is highly dependent on the connotation of the verbal context where a graduation signal is used, especially those modifying the evaluative meanings of attitude (*a little bit sad, inevitably flawed to some extent* and *too basic*) and engagement signals (*clearly as you know..., I just want to... and I'm not completely sure...*). Thirdly, the gradable features of all the appraisal signals can be helpful for illustrative purposes in the ELF academic lectures, with the use of words such as *any, just, all, more* and *very*. These graduation signals are useful linguistic devices to emphasise an evaluation, and the evaluative meaning can thus be illustrated more specifically to attract students' attention. Finally, vagueness can be a useful interactional strategy when modulating evaluative meanings with a graduation signal. As explained by Jucker et al. (2003: 1765-1766), vagueness can help to describe a quality "on a scale" and the gradable feature of the graduation signals elaborates a referent and enables students to process information more effectively in the classroom interaction.

8.2.3 Appraisal signals with different layers of evaluative meanings in the lecture discourse

One utterance can have different layers of evaluative meanings and this phenomenon has been proposed as the 'Russian doll' dilemma (Thompson, 2014b: 49). The findings in this section delve into this semantic phenomenon and seek to specify how particular

layers of evaluative meanings have been integrated in the lecture discourse for real use in the classroom communication. As is evident from the findings of appraisal signals having different layers of evaluative meanings (see Section 4.5 in Chapter 4), the following results are provided. Firstly, judgement meanings of attitude signals when evaluating human behaviour can be overlaid with entertain meanings of engaging dialogical interactions. Secondly, both judgement and appreciation signals can overlap with intensification signals when intensifying a process or a quality. Thirdly, down-scale graduation signals are very likely to project a cline of entertain meanings allowing alternative viewpoints to be discussed. According to the results of this current study, the 'Russian doll' phenomena often involve engagement signals, especially those functioning as entertain signals, to invite other voices. Such entertain signals commonly interact with attitude signals evaluating human behaviours; in other words, when lecturers give their opinions of students' behaviours, they tend to decrease the assertiveness of their statements by adding a cline of engagement meanings to allow alternative viewpoints. Furthermore, such entertain signals are often overlaid with those graduation signals weakening a semantic boundary, by using expressions such as *in a way, sometimes, at least* and *kind of*. In other words, lecturers could open up a dialogic space for student's opinions by using these kind of down-scale graduation signals. Previous study reveals that appraisal research can be seen as a static investigation into evaluative resources with the exception of those devices concerning the system of ENGAGEMENT which could engage others for a negotiation (Huan, 2015). From the above discussions, however, since one utterance can have differing layers of meaning and engagement signals commonly interact with both attitude and graduation signals for opening up dialogic spaces, the appraisal analysis should always consider the interpersonal functions of all the appraisal signals rather than follow this suggested static and dynamic contrast.

Finally, graduation signals functioning to intensify a verbal process or a specific quality can often imply attitude meanings of judgement and appreciation; in other words, words such as *just, very, even, quite* and *a little bit* in the lecture discourse can also

indicate a lecturer's positive and negative opinions towards specific referents. Similarly, Márquez (2017) demonstrates that attitude meanings of affect are often indications of personal judgements. However, whilst it may be easy for an analyst to identify such subtle meanings embedded in the discourse, these varying layers of meanings might not be so immediately obvious to speakers and listeners. Coffin and O'Halloran (2006) also agree that the results of appraisal analysis may not resemble the interpretation of the target audience. As indicated by Eggins and Slade (1997), therefore, appraisal signals should be used with caution and should take into consideration the potentially different interpretations of the evaluative meanings by various hearers.

In summary, the findings and discussions in this section uncover the answers to RQ 1 by considering how appraisal signals are embedded in the lecture discourse of the 12 ELF lectures of this current study. The functions and forms of the three major types of appraisal signal have been thoroughly discussed, i.e., attitude signals, engagement signals and graduation signals. Attitude signals are mainly adjectives and modal verbs concerning judgements of probabilities and human capacity, or appreciations of the valuation of an entity. These attitude signals indicate not only positive and negative evaluations from a personal stance but may also establish a shared community. Engagement signals frequently occur with the use of pronouns, adverbs and questions, conveying a dialogically expansive voice from the lecturers. These engagement signals are evidence of how engaging the lecture discourse can be at a discourse level, even though lecturers also need to maintain their authority in the classroom context. The linguistic forms of graduation signals can be rather diversified, including adverbs, quantifiers, adjectives, prepositions and nouns. The graduation signals are common when lecturers are specifying a semantic focus or emphasising the degree of a quantification. The flexible use of these graduation signals in relation to their no-scale, up-scale and down-scale features facilitates a more efficient use of appraisal signals when modulating the evaluative meanings of the lecture discourse. Furthermore, the discussion highlights the significance of the verbal context in which the appraisal

signals have been applied in the lecture discourse, mainly concerning the identification of a referent, the emergence of the pronoun patterns, the gradability embedded in the co-text and how different appraisal signals interact with each other. In conclusion, appraisal signals are useful linguistic devices to enhance the interactivity of the lecture discourse in use and thereby contribute to the lecturer-student classroom communication.

8.3 Disciplinary-specific features of appraisal signals in ELF academic lectures

This section discusses the discourse features of appraisal signals regarding their disciplinary differences in ELF academic lectures between the social and hard sciences. First of all, classroom discourse is didactic in purpose with teachers always having the dominant role in class (Sinclair, 1987) and classroom interaction has been criticised as having a lack of meaning communication between teachers and students (Nunan, 1987; Thornbury, 1996). Aguilar (2004) also claims that the discourse types of lectures can be considered didactic and expository even they are crucial ways of transmitting clear information and knowledge. However, with the use of appraisal signals abundant in the lecture discourse, the interactivity coded in the lecture discourse could provide a considerable amount of evidence of how lecturers actually apply themselves to express personal attitude and opinions in classroom communications, and these discourse signals are essential cues that students could take to interpret what has been imparted and perhaps engage with the lecturers.

In the context of academic lectures, there is a lack of scholarly attention to the disciplinary-specific use of discourse markers for specified classroom interactions such as lecturers explaining a scientific concept (Tang, 2017; Rappa & Tang, 2018), let alone the discourse choice they make when expressing their personal attitudes and assessments of these concepts. Tang (2017) investigated the evaluative meanings of some metadiscourse markers, including what being classed as an attitude marker

focusing mainly on the teaching content, epistemology markers indicating the source of the information and interpretive markers considering how students might interpret the information being provided. The evaluative metadiscourse in Tang's categories is closely related to the teaching content and course delivery in the classroom, with little attention being paid to the interpersonal teacher-student engagement or to the dynamic of the varying degrees of evaluative meanings being expressed. By contrast, the current study highlights the dialogical engagement and the modulation of the evaluations, which not only convey evaluative meanings on their own but also constantly interact with each other to express different layers of the evaluative meanings. The disciplinary-specific features of appraisal signals and their verbal context will help extend the understanding of how evaluative meanings can be expressed in particular classroom interactions.

Building upon the findings concerning disciplinary-specific features of appraisal signals in humanities and sciences lectures covered in Chapter 5, ELF lecturers in hard sciences made more use of appraisal signals than lecturers in humanities. Moreover, the distinction between their use of graduation signals is large whereas the disparity between their use of engagement and attitude signals is very small. According to Hyland and Tse (2009), the linguistic choices in social science are often associated with attitudes whereas those in hard sciences are commonly used to express engagement features. Based on the results of this current study, however, the major disciplinary difference of the use of evaluative language in ELF academic lectures lies in the usage of graduation signals, concerning how evaluative meanings are expressed on a scale. In Liu (2019)'s recent study analysing the use of intensifiers in academic lectures, they state that there are significantly fewer such discourse devices in the lectures of hard sciences than of soft sciences. The intensifiers in their study are boosters and maximisers that could strengthen a speaker's position or attitude (including words such as *quite*, *very*, *totally* and *particularly*). This current study then made a further investigation into the different types of graduations signals indicating specific functions to modify the scale of evaluative meanings in the lecture discourse.

According to the results presented in Section 5.4, for the different usage of graduation signals by lecturers between humanities and sciences, the former made more use of appraisal signals describing extent of time and space (including frequently used expressions such as *in-phrases*, *now* and *today*) or specifying a semantic focus (including frequently used expressions such as *about*, *other* and *kind of*) whereas the latter used more appraisal signals when intensifying a process (including frequently used expressions such as *just*, *very* and *still*) or quality (including frequently used expressions such as *very*, *more* and *most*), as well as illustrating quantification information regarding size (including frequently used expressions such as *big* and *little*) and number (including frequently used expressions such as *some*, *all* and *more*). Furthermore, the disciplinary differences in the use of appraisal signals concerning quantification of number and intensification of quality are the largest, both having more instances in sciences lectures.

According to the results in Section 5.2, for attitude signals, humanities lecturers made more use of affect signals, judgement signals concerning obligation, usuality and inclination, and appreciation signal regarding textual features. By contrast, sciences lecturers used more judgement signals relating to probability and capacity, and appreciation signals regarding praise and valuation. The disciplinary differences of using judgement signals in relation to probability and capacity and appreciation signals concerning composition of texts and valuation of an object or phenomenon are the largest. Responding to Hu and Choo (2016)'s investigation into the disciplinary differences of evaluative language in teacher feedback, there is a major difference between the soft and hard sciences, the lecturers in the former using twice as many affect signals (such as *sorry*, *care*, *happy*, *interested* and *like*) compared with the latter (with expressions such as *like* and *sorry*). Becher and Trowler (2001) point out that teachers from the domain of humanities and social sciences tend to communicate with personal opinions and interpretations rather than factual information. In the same vein, Hyland and Zou (2021) agree that personal attitudes and stance are often embedded in the spoken discourse of monologic speech regarding subjects of

humanities. This current study, however, further differentiates personal attitudes and aims to explore specific disciplinary differences in how attitudinal meanings are expressed. For judgement signals, humanities lecturers made more use of expressions concerning obligation (such as *should*, *supposed to* and *wrong*), usuality (such as *often*, *always* and *famous*) and inclination (such as *will*, *going to* and *would*), whereas sciences lecturers preferred those regarding probability (such as *can*, *will*, *need* and *may*) and capacity (such as *can*, *good*, *cannot* and *be able to*). For appreciation signals, humanities lecturers used those illustrating textual features most frequently (such as *clear*, *coherent* and *concrete*) whereas those indicating praise (such as *good*, *interesting*, and *fine*) and valuations (such as *important*, *problem* and *success*) are more favoured by sciences lecturers.

With reference to the results in Section 5.3, for engagement signals, lecturers in hard sciences made much more use of entertain signals inviting students' participation than lecturers in humanities but slightly less use of attribute signals explaining the source of information. By contrast, the usage frequency of contract signals such as expressing proclaims, negations and counterarguments between these two groups of lecturers is almost identical. Csomay (2005) states that discourse markers such as *you know* and *I mean* have often been found in soft science classrooms indicating personal stance. Chang (2012) further explains that there is more sophisticated argumentation and negotiation in classes of the soft disciplines and the language they use in class is more persuasive and dialogic than that in the hard sciences. According to the results of this current study, however, much more entertain signals indicating a dialogical space has been found in the lecture discourse of sciences lectures compared with lectures in humanities. For instance, sciences lecturers tend to ask more questions to encourage student participation than do lecturers in humanities. According to Morell (2004), questions can be regarded as elicitation markers to help establish a communicative classroom context. Interestingly, lecturers in both domains have similar word choices when inviting student voices, with frequently used expressions such as *you can*, *if you* + a verb, and the word *like* for exemplification.

In summary, the findings and discussions in this section provide the answers to RQ 2 of this current study, i.e., the disciplinary differences in the use of appraisal signals between lecturers in the soft and hard sciences. The major disciplinary difference in the use of appraisal signals concerns the use of graduation signals. Humanities lecturers tend to use more of such signals to clarify information of time and space or to adjust a semantic boundary. By contrast, sciences lecturers use more of these appraisal signals either to modulate the force of an intensification or to quantify an amount. As to the usage frequency of attitude and engagement signals, the disciplinary difference is marginal. For attitude signals, the evaluative meanings expressed by these two groups of lecturers were determined according to the different referents. Humanities lecturers tend to use more attitude signals to describe personal emotions, modality concerning obligations, usuality and inclination, and appreciation of textual features. By contrast, sciences lecturers seem to pay more attention to judgements of probability and capacity, as well as reacting to a praise and valuation of an entity. For engagement signals, results show that sciences lecturers used much more of such signals to engage student voices whereas humanities lecturers used slightly more of such signals to indicate the source of the information. These differing use of appraisal signals in the lecture discourse mark the disciplinary differences of what to appraise and how lecturers in various domains express their personal attitudes and stance as well as how they engage their students for different communicative purposes. The communicativeness of the lecture discourse can be interpreted through an understanding of how particular evaluative meanings are expressed and modulated by lecturers of different disciplines.

8.4 ELF-specific features of appraisal signals in ELF academic lectures

This section moves onto the discussion of discourse features of the appraisal signals concerning their ELF-related differences between ELF academic lecturers of different L1 backgrounds. First of all, ELF studies in academic spoken language are needed

(Mauranen, 2003; Mauranen et al., 2010b) and academic ELF studies concerning classroom setting have been a major research gap (Björkman, 2008; Smit, 2010). ELF lecturers are also academic ELF speakers and ELF-related discourse strategies are needed for the clarity and efficiency of the classroom communications in EMI academic lectures (Hanusková, 2019). Academic ELF is the classroom language between lecturers and their students in ELF academic lectures, how effectively lecturers can use academic ELF as a contact language (Seidlhofer, 2011) to communicate smoothly with their students is crucial for successful teaching and learning in the ELF classrooms. Secondly, more in-depth qualitative analysis on spoken genres of ELF studies is needed, and this will broaden and deepen our understanding of some general ELF linguistic features (Laitinen, 2020). Analysing the discourse practice of appraisal signals in ELF academic lectures can be beneficial as evaluative language constantly occurs in university settings (Biber, 2006; Hyland & Tse, 2009; Liu & Chen, 2020). They are common linguistic devices carrying rich interpersonal meanings, such as expressing positive and negative attitudes for the effectiveness of mutual understanding, prompting an engaging and collaborative voice to invite student participation, and softening or intensifying the lecturer's authoritative tone so as to build teacher-student solidarity.

According to the results presented in Chapter 6, firstly, among C-ELF, NC-ELF and NS lecturers, there is very little difference in the frequency of attitude signals and their usage of such signals concerning human behaviours and aesthetic evaluations are overwhelmingly higher than those concerning personal feelings and emotions. Secondly, C-ELF and NC-ELF made similar use of engagement signals and the number of these signals is much larger than that have been identified in NS lectures. The majority of the engagement signals identified from these three groups of lecturers are signals functioning to expand dialogical space. Thirdly, NC-ELF and NS lecturers made very similar use of graduation signals, there being a large difference compared with C-ELF lecturers. These three groups of lecturers made the most use of graduation signals concerning quantification information, followed by those emphasising a semantic

boundary and intensifying a process or quality. It is also worth noting that the linguistic forms of these appraisal signals are mainly common core lexes that ELF users should pay attention to, and that these discourse signals are not only useful for academic ELF communication but also for everyday use in real-life situations. As discussed in the above paragraph, clarity and mutual intelligibility are of great significance for successful ELF communication (Mauranen, 2006; Kirkpatrick, 2008; Mauranen et al., 2010a; Kaur, 2012). Efficient application of appraisal signals in ELF academic lectures can be a useful interactional strategy to smooth the classroom communication between lecturers and their students, as evaluative language is closely associated with the interpersonal metafunction (Halliday, 1994) of the language in use. Previous studies suggested some strategies for ELF communication, such as repetition of key words and paraphrasing for clarification (Mauranen, 2006; Kirkpatrick, 2008; Kaur, 2012). Because lecturers are continually making evaluations and expressing personal opinions, understanding the usage of appraisal signals can be particularly important for their ELF classroom communication. When ELF lecturers express personal opinions, they could adopt these ELF-related strategies and pay more attention to the appraisal signals that they are using for clearer transmission of their evaluative meanings.

For attitude signals, firstly, results from Section 6.2 show that the usage of affect signals (words such as *like* and *sorry*) and the judgement signals concerning probability (such as *can* and *will*) and obligation (such as *should* and *need*) is very small between these three groups of lecturers. For judgement meanings of probability, however, the usage frequency between these three groups of lecturers is minimal although they tend to have very different word choices. Secondly, for the judgement signals describing usuality, capacity and inclination, the usage differences between NC-ELF and NS are rather small; by contrast, C-ELF lecturers made much less use of appraisal signals describing usuality (including frequently used expressions such as *always* and *often*) but greater use of those illustrating capacity (such as *can*, *good* and *best*) and inclination (such as *will*, *going to*, *need* and *would like*) than the other two groups of lecturers. Thirdly, the usage frequencies of appreciation signals between these three

groups of lecturers are rather divisive – C-ELF and NS lecturers made very similar use of appraisal signals when praising students' responses whereas NC-ELF's usage of such is much higher (including frequently used expressions such as *good, clearly, interesting, easy* and *clear*); C-ELF and NC-ELF made very similar use of appraisal signals concerning composition of texts (e.g., *coherent, concrete, abstract, basic* and *detail*) whereas NS's usage of such is much lower; and finally, NC-ELF and NS made very similar use of appraisal signals emphasising valuation of an entity whereas C-ELF's usage of such is relatively lower (e.g., *important, good, better, right* and *wrong*). Bjørge (2010) regards expressions such as *excellent, good, and right* as verbal backchannelling in the ELF communication and this can be a useful negotiation skill in the international business community. For the ELF classroom communication between lecturers and their students, however, such expressions are positive or negative appraisal signals associated with assessments and comments responding to student behaviour, or opinions on and evaluations of the teaching material. In such cases, lecturers express their attitudes for the purpose of imparting knowledge and helping students with their learning. However, these expressions are discourse devices to signal attention, support and feedback in both contexts, and ELF classroom discourse should be both educational and communicative.

Based on the results regarding engagement signals from Section 6.3, firstly, C-ELF and NC-ELF lecturers made similar use of appraisal signals concerning engaging other voices, and their usage frequencies are much higher than those by NS lecturers. Secondly, the usage frequency of appraisal signals confirming the sources of information by NC-ELF and NS lecturers is minimal, but C-ELF's usage of such signals is overwhelmingly higher. Thirdly, these three groups of lecturers made very similar use of contract signals when constraining a dialogical possibility. ELF communication highlights interactivity rather than an individual's monologic speech (Firth, 1990) and the effectiveness of successful ELF communication relies on mutual intelligibility between different ELF speakers (Mauranen, 2006). According to the results of this current study, ELF lecturers, including Chinese and those from countries other than

China, tend to use more engagement signals than NS lecturers for the purpose of being dialogically expansive. This may result from the fact that ELF users can be accustomed to being illustrative and explicit in their ELF communications (Seidlhofer, 2004; Metsä-Ketelä, 2016). For instance, NC-ELF lecturers made the most use of engagement signals for the purpose of inviting other voices, with frequently used signals such as questions, the pronoun patterns of *if you + a verb*, *you can* and *do you + a verb*. C-ELF lecturers made the most frequent use of engagement signals concerning the source of the information, including a frequent usage of personal pronouns such as *you*, *we*, *your* and *our*. House (2009) states that expressions such as *you know* can help imply a shared knowledge between ELF speakers so as to engage the audience as part of a conversation. At a discourse level, the use of the second-person pronoun *you* plays a key role for the realisation of the engagement meaning as the speaker explicitly addresses the audience and invites their participation. In such pronoun patterns, i.e., the combination of a first- or second-person pronoun and a common verb, personal attributes always indicate a cline of engagement meaning, especially with the presence of a second-person pronoun.

Results have also been summarised from Section 6.4 concerning the differences of graduation signals used by the ELF lecturers with different L1 backgrounds. Firstly, the usage frequency of graduation signals concerning intensification of process (e.g., *just*, *really*, *very* and *still*) and quality (e.g., *very*, *most*, *more* and *quite*) among these three groups of lecturers is relatively smaller than that of the other GRADUATION subsystems. As graduation signals modulate the up-scaling and down-scaling of an evaluation, they can be useful tools to express specific and pertinent evaluative meanings. Secondly, for graduation signals regarding extent of time and space (e.g., *in*-phrase, *now*, *already*, *always* and *before*) as well as specification of semantic boundaries (e.g., *about*, *other*, *something*, *kind of* and *thing*), the usage by NC-ELF lecturers is the highest, closely followed by NS and, remotely followed by C-ELF lecturers. Thirdly, for appraisal signals concerning quantification information of amount (e.g., *some*, *more*, *all*, *many*, *one of* and *a lot*), the usage frequency between NC-ELF and C-ELF lecturers is very small, but

with the usage by NS lecturer being the highest. Therefore, flexible use of graduation signals can help develop persuasiveness of personal evaluations as they emphasise the force and focus of the evaluative meanings and they are often associated with concrete quantification information. Furthermore, such emphasise can be useful to maintain students' attention and provide cues from a linguistic perspective to help with students' understanding of specific knowledge. Fourthly, vagueness has often been detected in the analysis of graduation signals by all three groups of lecturers (e.g., *closely, very, sometimes, quite a lot* and *in a way*). As Metsä-Ketelä (2016) explained, vague expressions can often occur in ELF communication, and they can be useful devices to smooth the communication explicitly and effectively. Graduation signals possess the function of modulating evaluations; in other words, they help ELF lecturers to express their evaluative meanings on a scale. As explained by Jucker, Smith and Lüdge (2003: 1765-1766), vagueness can help describe a quality "on a scale" and this kind of gradable feature elaborates a referent and enables addressees to process information more effectively in the interaction. Graduation signals contribute to the validity of the given information that could have effective interpersonal impact on how students might digest the information being provided.

In summary, the findings and discussions in this section discover the answers to RQ 3 of this current study, by identifying the different usage of appraisal signals by lecturers having various L1s. Firstly, for attitude signals, the usage frequency among C-ELF, NC-ELF and NS lecturers are similar, even though the word choices of the most-frequently used signals by each group of participants are very different. Secondly, for engagement signals, both C-ELF and NC-ELF lecturers use many more of such signals than NS lecturers, especially engagement signals to invite student voices. Thirdly, for graduation signals, the usage frequency between NC-ELF and NS is marginal whereas that of C-ELF is much lower, particularly the signals concerning the force of quantification information and the focus of a semantic boundary. The different usage of these appraisal signals not only reveals the ELF-specific differences in the use of evaluative language, but also indicates specific ELF-related discourse strategies that

could facilitate the ELF communication in the classrooms. For instance, C-ELF lecturers could pay more attention to the modulation of evaluative meanings concerning quantification and semantic focus if they wish to add clarification to their evaluations. NS lecturers could make more use of engagement signals when communicating with their students, who are also ELF-users in the ELF classroom context, if they intend to provoke more student participation.

8.5 Summary of the chapter

This chapter has presented the discussions concerning all the findings of the current research project. The discussion concerning the functions and forms of appraisal signals in the lecture discourse has first been provided. This part of the discussion reinforced the importance of the co-text when analysing the interpersonal meanings of the appraisal signals in use. The discussion then moved on to the disciplinary-specific and ELF-specific features of lecturers' evaluative language, regarding the use of appraisal signals as a useful discourse strategy to enhance the communicativeness and effectiveness of academic communication in ELF academic lectures.

Chapter 9 The concluding chapter

9.1 Introduction

This is the final chapter of the thesis, and the conclusion of the present research will be drawn. Section 9.2 begins by revisiting the research gaps and summarising the main findings concerning each of the three main research questions. The significance of the findings is then presented considering the pedagogic implications from both the lecturers' and students' perspectives in Section 9.3. Section 9.4 explicates some limitations of the current study and makes some suggestions for future research. Finally, some concluding remarks have been provided in Section 9.5.

9.2 Research gaps and summaries of the research findings

This current research project sets out to explore the use of evaluative language in ELF academic lectures and aims to gain insight into the understanding of appraisal signals embedded in lecture discourse for their disciplinary- and ELF-specific linguistic features. As reviewed in Chapter 1 and Chapter 2, firstly, previous studies on classroom discourse mainly rely on corpora of spoken data and lack annotations for real-time discourse features (Biber, 2006; Hyland & Tse, 2009; Chang, 2012; Liu, 2019; Liu & Chen, 2020). This present research, however, attempted to address the use of evaluative language taking careful consideration of their verbal context in the lecture discourse, such as the referents the evaluative meanings were referring to, some typical linguistic patterns that emerged as being frequently used, and how different appraisal signals interact with each other. Secondly, studies on academic lectures should pay more attention to specific classroom interactions (Tang, 2017; Rappa & Tang, 2018), such as how lecturers express their personal opinions and make different degrees of evaluations for various communicative purposes. Appraisal signals that this current study has focused on highlighted the communicativeness of lecturer's evaluative language in use. Thirdly, this current study has shed new light on the current

research trend of English as an academic lingua franca (Björkman, 2008; Kirkpatrick, 2008; Smit, 2010; Mauranen, 2006, 2012; Ranta, 2017; Kaur, 2012, 2020) using spoken data from ELF academic lectures. ELF lecturers are constantly involved in academic ELF communication and this current study emphasised the importance of using appraisal signals to smooth ELF communication for clarity and mutual intelligibility.

As stated in Chapter 1, this research addresses the following three questions:

RQ1: How are appraisal signals embedded in the lecture discourse of ELF academic lectures?

RQ2: What are the disciplinary-specific features of the appraisal signals in ELF academic lectures between soft sciences and hard sciences?

RQ3: What are the ELF-specific features of the appraisal signals in ELF academic lectures between lecturers of different L1 backgrounds?

To seek answers to the first research question, investigations have been made into the interpersonal semantic choices of the 12 ELF lecturers when they are: 1) signaling their attitudinal feelings in their lecture discourse, 2) signaling engagement meanings in their lecture discourse and 3) signaling the intensity of evaluation in their lecture discourse. Following the APPRAISAL framework (Martin & White, 2005) in the field of systemic functional grammar (Halliday & Matthiessen, 2014), this current study made some modifications to the original framework and established a model of how appraisal signals have been applied in the lecture discourse of ELF academic lectures:



Figure 9-1 A model of using appraisal signal at ELF academic lectures

Based on the research findings and discussions presented in the preceding chapters, this model (See Figure 9-1 above) illustrates how appraisal signals have been utilized in ELF academic lectures and how evaluative meanings can be interpreted in the spoken discourse of this specific academic register. First of all, this model discovered how positive and negative attitudes can be expressed according to specific referents introduced in the lectures. Secondly, this model identified some discourse patterns that have been employed as engagement signals to encourage students' participation in class. Finally, this model highlights the importance of the gradability of evaluative meanings and vagueness that has often been detected in the modulation of the scaling, i.e., the no-scale, up-scale and down-scale features that can be applied to all of the appraisal signals. These three gearwheels represent these three major groups of appraisal signals and how they can be intertwined, with one having consequence on the other, especially the influence of the graduation signals on both engagement and attitude signals.

To uncover the answers to the second research question, this current study has divided the 12 participants into two groups, 6 lecturers of soft sciences and 6 of hard sciences. Investigation has been made into the disciplinary-specific features of their use of appraisal signals and how evaluative meanings have been expressed for the communicativeness of specific classroom interactions. Firstly, humanities lecturers used more affect signals concerning personal emotions and appreciation signals concerning composition of texts than lecturers in hard sciences; by contrast, sciences lecturers used more judgement signals regarding probability and human capacity as well as appreciation signals describing valuation and significance. Secondly, lecturers in hard sciences tend to use much more engagement signals of inviting students' participation than lecturers in social sciences. Thirdly, the biggest disciplinary difference of appraisal signals in these academic lectures lies in the use of graduation

signals, especially those specifying information of amount and intensifying the quality of an entity.

To answer the third research question, this current study has grouped the 12 participants according to their L1 backgrounds: 4 C-ELF (Chinese ELF speaker) lecturers, 4 NC-ELF (non-Chinese ELF speaker) and 4 NS (English native speaker) lecturers. Investigation has then been made from an academic ELF perspective exploring ELF-related strategies of how to apply appraisal signals for effectiveness and clarity of the ELF communication in academic lectures. Firstly, these three groups of lecturers made a few rather different uses of both judgement and appreciation signals: for judgement signals, C-ELF lecturers used far fewer such signals concerning usability but much more use of those regarding capacity and inclination whereas the other two groups of lecturers made similar use of these types of appraisal signals; for appreciation signals, NC-ELF lecturers used many more such signals praising students' performances compared with C-ELF and NS lecturers, and C-ELF and NC-ELF made very similar use of signals concerning composition of a text, both displaying a much higher usage of such signals than NS lecturers. Secondly for signaling engagement meanings, C-ELF and NC-ELF lecturers made similar use of entertain signals to invite alternative viewpoints from students whereas NS lecturers tend to use much less of such appraisal signals; furthermore, C-ELF lecturers made substantial use of engagement signals explaining the sources of information or belonging of an entity whereas the other two groups of lecturers made much less use of such signals. Thirdly, for signaling the intensity of an evaluation, NC-ELF and NS lecturers made similar use of graduation signals concerning extent of time and space as well as semantic boundaries but their use of such appraisal signals is very different from C-ELF lecturers; by contrast, C-ELF and NC-ELF made similar use of appraisal signals concerning quantification information of amount but the usage frequency is very different from NS lecturers.

In summary, the findings of this current study contribute to the discourse strategies of what is appraised in the ELF academic lectures and how it is appraised using evaluative

language of three major types of appraisal signals, i.e., attitude, engagement and graduation signals. The evaluative language should be applied in close relation to lecturers' positive and negative evaluations on the information and knowledge being imparted in class. Lecturers should pay special attention to the engagement functions of the appraisal signals, especially the pronoun patterns in their spoken discourse, as well as the up-scale and down-scale modulation of the assertiveness and vagueness of their evaluative meanings. For the theoretical contributions of this current study, the APPRAISAL framework has been intensively used to investigate lecturers' spoken linguistic choice of evaluative language in the register of ELF academic lectures. First of all, the appraisal signals can be regarded as an efficient and indispensable linguistic device for the realisation of the interactivity of the lecture discourse. Secondly, the different layers of evaluative meanings have been thoroughly examined in this current study: 1) attitude signals for the judgement of human behaviours have always been attached with a dialogical space to allow other viewpoints; 2) attitude signals can sometimes function as intensifiers to modify a process or a quality; 3) graduation signals indicating a down-scale cline of evaluative meanings are often overlaid with engagement meanings to involve others. Thirdly, for some attempts to expand the original framework, pronoun patterns and questions have also been labeled as instances of an engagement signal owing to their dialogical nature and substantial occurrence in the lecture discourse. As to the practical significance of the disciplinary-specific and ELF-specific features of the appraisal signals in academic lectures, this current study made intensive comparisons between groups of lecturers teaching different disciplines of humanities and sciences as well as having differing L1 backgrounds. The communicativeness of the lecture discourse can be enhanced by a flexible use of appraisal signals, and this will also contribute to the clarity and mutual intelligibility of the lecturers' spoken discourse to smooth the ELF communication in the classroom context.

9.3 Significance of the findings and implications of the study

EMI universities have become more and more important in the domain of Chinese higher education. As Sinclair observes (1987), society and its view of education will affect educational institutions and classroom discourse is therefore shaped by such circumstances. EMI classroom discourse can be defined as a structural organization of a language used to realize communication in a second language for the teaching and learning of a disciplinary subject (Al Makoshi, 2014). Lecture discourse, being a specific type of classroom discourse, contains both spontaneous and non-spontaneous language (Blackwell & White, 2018), and, although most of the spontaneous discourse is concurrent with the communicative event happening in the classroom, some discourse strategies can be prepared and organised beforehand. Therefore, from both theoretical and methodological points of view, analysing the interpersonal semantic resources, such as the use of evaluative language in the lecture discourse, will help to develop effective discourse strategies for teaching and learning in EMI universities. The current study considered appraisal signals as an important interpersonal feature of discourse signals in the lecture discourse and intends to make a few pedagogical suggestions concerning both lecturers and their students.

9.3.1 Pedagogic implications from lecturers' perspective

Walsh (2011) suggests that teachers should acquire what he titles Classroom Interactional Competence (CIC) and one of the main features of CIC is to put more emphasis on each particular interaction in class rather than the pedagogic goal of the whole lecture. The use of appraisal signals, therefore, could be an effective discourse strategy to encourage classroom interaction in academic lectures from at least three main perspectives: 1) facilitating the sharing of personal opinions and assessments on the teaching and learning contents of the lecture so as to prompt some genuine in-class communication between teachers and their students, 2) creating a dialogical space to invite student participation, and 3) paying attention to the modulation of

attitude and engagement meanings in the lecture discourse so that evaluative meanings can be expressed more appropriately and effectively towards various specific classroom interactions. Following the theoretical framework of APPRAISAL (Martin & White, 2005), this current study also proposes some specific discourse strategies of how to use appraisal signals to smooth classroom communication in academic lectures. Firstly, appraisal signals expressing intensified attitudinal meanings closely relevant to students' effort and performance can be welcomed by students. Secondly, pronoun patterns such as 1st2nd pronM (*I would like..., we may... and you need...*), 1st2nd pronV (*I think..., I mentioned..., and if you choose...*) and 1st2nd pron_Q (*Are you..., Can you..., and What's your opinion...*) are highly engaging. Thirdly, appraisal signals with an up-scale modulation often occur when intensifying a process or a quality, whereas they usually have no scale features when describing time and space. In comparison, appraisal signals having both up-scale and down-scales features are common when emphasizing amount or specifying a semantic boundary. Fourthly, more attention should be paid to balance vagueness for precision and over-elaboration (Li, 2017: 106) when modulating an evaluation.

Furthermore, the current study depicts a picture of the EMI academic lectures from an academic ELF perspective; therefore, it also sheds new light on the investigation of appraisal signals in academic ELF communication of the EMI context. Among the newly established EMI universities in mainland China, there are many national and international faculty having different social, political and educational backgrounds who are now working at Chinese EMI universities (Zhang, 2018). There is no doubt that the lecture discourse is thereby highly influenced by this multinational and multicultural situation of the EMI universities. Therefore, EMI academic lecturers should give full consideration to both discipline-specific and ELF-specific developments of their language in use. Considering EMI teachers' content teaching and academic development in the higher education context, Dimova and Kling (2018) investigated into an oral English certification test for EMI university lecturers. They found out that lecturers tend to be rather confident in their disciplinary-specific

knowledge and vocabulary but much less so in the use of common-core vocabulary, especially when explaining new or difficult disciplinary contents. Appraisal signals are highly associated with the use of common-core vocabulary, and how they can be applied to elaborate and clarify lecturers' evaluative meanings towards what is being imparted in class and what personal attitude and stance they need to adopt to smooth the classroom communication. This current study foregrounds the communicative significance of the use of appraisal signals and regards them as a key discourse strategy for lecturers to convey their views and perhaps expound upon what needs to be emphasised.

Regarding teachers' developments as ELF speakers in the academic context, Luo (2017: 9) suggests that 'professional development and teacher preparation programs' should be established and to help improve teachers' ELF-related skills and their ELF instruction. Macaro and Han (2020: 219) recommended the adoption of EMI certification and the corresponding professional development programs. They acquired teachers' own perspective through 133 survey results and 12 semi-structured interviews; they discovered that teachers generally support the idea of being pedagogically certified as an EMI educator with qualifications on 'not only English proficiency, teaching skills through L2 but also skills of instruction in respective academic disciplines'. However, they also emphasize the importance of having official involvement from government such as the formulation of specific policies and from institutions as a requirement in terms of employment, evaluation and promotion. The use of appraisal signals this current study have been focusing on concerns lecturers' own language system and how they tend to express their views in the academic speech community. The linguistic training of professional development programs should pay attention to the importance of appraisal signals as an ELF-related skill, as this current study has demonstrated that such discourse signals, which constantly occur in EMI / ELF academic communication, are essential linguistic devices for expressing personal and academic judgements for various communicative purposes. Furthermore, lecturers share an ELF community and the evaluative language they use

is related to the community values within their shared networks. In this case, some official involvement from institutions and government may be necessary for the long-term development of specific ELF communities.

9.3.2 Some pedagogic implications from students' perspective

EMI universities integrate both disciplinary and language learning in their curriculum (Hu & Lei, 2014). Previous studies have shown that using English as the medium of instruction for content courses, such as scientific disciplines of Computer Science, Engineering, and Medicine, can lead to students' inefficiency in lecture comprehension, academic communication and assessment; and the exposure to English that students receive in those content courses is not sufficient to equip them as competent English language users for scholarly activities in the academic environment (Al Zumor, 2019). Considering students' learning effectiveness, Chinese EMI universities normally have some English foundation courses known as English for Academic Purposes (EAP) to prepare students for the study of their academic subjects. These EAP courses mainly focus on English for specific purposes within the academic community and on English literacy skills (Li and Ruan, 2015), which are not embedded in regular content-based teaching and learning. Evans and Green (2007) made a large-scale investigation into 5000 undergraduate students in an EMI university in Hong Kong exploring their language difficulties in the EAP courses in terms of listening, speaking, reading and writing. They found that inadequate receptive and productive vocabulary use seems to be one of the major challenges almost all of the 5000 students face in their study, including both disciplinary-specific and common-core vocabulary; thus, EAP courses should maintain substantial focus on the teaching and learning of these technical and non-technical lexis and this can be a powerful remedy for students' learning ineffectiveness in the EMI academic environment.

EAP courses should equip students with discipline-specific language use and student needs should be more clearly identified in terms of different disciplines. Uchihara and

Harada (2018) indicate that a lack of technical vocabulary has a serious negative impact on EMI students. However, they found that students who have a large aural vocabulary would consider themselves to be better proficient English users in productive language skills and would usually be confident in speaking. Therefore, as Lau and Gardner (2019) emphasized that, EAP courses should be targeted and tailored for effective disciplinary learning and dominant learner preferences. Lecturers in this current study are academic lecturers teaching various subjects in the domain of humanities and sciences. The appraisal signals they used are discipline-specific language in use relating to a specific academic domain. Even though the current PhD research focus exclusively on the interpersonal functions of the appraisal signals, the evaluative meanings being analysed also concerns strongly the ideational reflections to the disciplinary-specific materials being provided in the lectures. For example, some attitude signals are used to describe textual features of a translation sample or a scientific report, and some graduation signals highlight the quantification details of time and space. These appraisal signals indicate discipline-specific features of the evaluative language and are linguistic cues that can facilitate students' understanding of the disciplinary content. Therefore, the referents being appraised in the lecture discourse can be useful teaching materials for the EAP course design.

EAP courses should also help students with their common-core vocabulary for everyday communication. Given the abundant use of appraisal signals in the lecture discourse, it is also important to raise students' awareness of the use of such non-technical lexes so that they can perceive the lecturer's evaluative meanings more effectively. Furthermore, teaching students how to make use of these appraisal signals in speaking for their own communicative purposes could also be beneficial. As summarised earlier in this section, appraisal signals are also common-core vocabulary and it might be that EAP courses could provide students with some training in the usage of evaluative language. For example, the frequently used attitude signals and graduation signals identified from the lecture discourse can be included in the EAP course of listening and speaking, helping students to capture key information more

effectively and express their own ideas more accurately and appropriately. Engagement signals can also be covered in the EAP course of speaking. According to the results of this current study, academic lecturers tend to make frequent use of engagement signals, and it will be very helpful if students can recognise such engagement meanings encoded in the lecture discourse and perhaps engage more with the lecturers to promote a more communicative classroom context.

9.4 Limitation and future research

This current study also has some limitations that can be further justified. Firstly, this current study is overall qualitative, providing descriptive generalisations of evaluative language use in academic lectures. Statistical tests can be added for the contrastive studies of the disciplinary and ELF-related differences. Secondly, the gradability of appraisal signals relating to modality has not been discussed; however, modal verbs such as *can*, *will*, *would* and *could* (indicating attitude of judgements), and modal adjuncts such as *already* (indicating the proximity of time), *just* and *still* (mainly for adjusting a focus) have been included. Thirdly, this current study is concerned with lecturers' appraisal resources in the lecture discourse and focuses exclusively on the linguistic aspects of lecturers' evaluative language in use. It cannot be denied that personal attributes can be an influential factor determining lectures' choice of appraisal signals. Therefore, a more defined appraisal analysis could be devised to include more detailed demographic information about the lecturers, and perhaps the involvement of a larger number of participants to provide a more rigorous study of the appraisal analysis. If the number of participants can be increased, there will be more evaluative language items to be discovered so that the APPRAISAL discussion can be more reliable. It might also be interesting to see whether lecturers are aware of the evaluative meanings they are expressing and how they perceive the interpersonal functions of the appraisal signals embedded in their lecture discourse. This may help to identify more practical discourse strategies that are not only based on semantic choices of the lecturers, but also on the psychological motivations and acts that may

help to express evaluative meanings more clearly and effectively. Fourthly, since appraisal signals have been regarded as a useful interpersonal device in the teacher-student communication, it is also important to identify whether students are aware of the lecturer's evaluative language and how they perceive the functions of these appraisal signals in the classroom communication. Adding student's perceptions and interpretations for the analysis of lecturers' evaluative language in use can certainly contribute to the validity of the appraisal analysis and perhaps maximize the effectiveness of such discourse signals from the perspectives of both teaching and learning.

There are also some limitations concerning the study of academic lectures and ELF-related strategies. Firstly, this current study has focused on the use of evaluative language throughout the whole lecture without considering different stages of a lecture and the genre-based differences that may regulate or modulate the use of evaluative language for various lecturer-student interactions. It is undeniable that the major part of the classroom interaction happens during the actual lecture, but teacher-student interaction could be further explored according to the various stages of a lecture, i.e. the warm-up stage, the in-class stage and the right-after-class stage. Although the required length of a lecture may vary in different institutions, lecturers should be prepared to take and answer any questions before and after the formal lecture. For example, students may approach their lecturers with questions after class and this kind of face-to-face interaction, which is likely to contain a sizable amount of evaluative language, should also be counted as part of the lecture discourse. More specifically, the appraisal analysis of such lecture discourse can be conducted according to different forms of interaction such as informal chat, discussion or argument, and for various communicative purposes of the teaching such as being operative, interactive and informative.

From the ELF perspective, apart from the verbal features of ELF communication, it will also be interesting to explore how ELF users manipulate evaluative meaning with non-

verbal language, even though ELF research very often disregarded nonverbal resources (Konakahara, 2020). For ELF communication, or rather any communication, one can utilize nonverbal displays such as facial expressions, gestures, glances and raised voices to demonstrate different meanings (Konakahara, 2015). For example, facial expressions such as smile works well in the support of an explanation or to show some kind of acknowledgement. Different volume of voice, such as smiley voice, soft voice or raised voice, may project different evaluative meanings as well. Bjørge (2010) also agrees that non-verbal manifestations such as nodding can be used quiet frequently to signal meanings in ELF context, which is often followed by verbal items such as *mhm* and *okay*, but not exclusively regarded as the English language (Bjørge, 2010). Furthermore, participants in this current study are academic ELF users in an EMI university in China. The uniqueness of the ELF / EMI context can be more intensively reviewed when analysing lecturers' semantic choices of their evaluative language, such as the multilingual / cultural backgrounds of both lecturer and student participants, the different inter-culturally communicative goals for various purposes and the discourse conventions based on cultural and educational backgrounds.

9.5 Concluding remarks

This current study concentrated specifically on the in-class lecture discourse of EMI lecturers, also being academic ELF users having various L1 backgrounds, to determine the semantic differences of their use of appraisal signals. APPRAISAL provides extensive resources to construe feelings and evaluations through both lexis and grammar, which are unwieldy to deploy (Martin & White, 2005); but frequently-used structures and patterns can be drawn and summarized with consideration given to the specific context in which the evaluative language is used. The appraisal signals on which this current study has focused can be regarded as useful linguistic devices to smooth the classroom communication of ELF academic lectures considering their disciplinary-specific and ELF-specific discourse features, including those concerning the evaluation of common referents in the classroom context and others closely associated with a

disciplinary content. The suggested model for how to use these signals highlights 1) the appropriacy of using positive and negative attitude signals for the evaluation of specific referents, 2) the communicative voice of some frequently-used engagement patterns in the lecture discourse, 3) the clarity of evaluative meanings in terms of their no-scale, up-scale and down-scale features and 4) the flexible use of interacting these signals with one another. From a theoretical point of view, this current research has addressed the importance of using this appraisal signal model in specific academic registers, gaining insight into utilising the framework of APPRAISAL for the analysis of spoken data in the field of SFL. For the practical significance of the study, however, these discourse strategies of using appraisal signals will be beneficial not only for ELF academic lecturers' everyday teaching and their linguistic development, but also eventually for the promotion of academic ELF communication in the EMI education community.

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Appendix A

The most frequently used appraisal signals by EMI lecturers in humanities and hard sciences

Appendix A-1 The most frequently used attitude signals by EMI lecturers in humanities

Appendix A-2 The most frequently used attitude signals by EMI lecturers in hard sciences

Appendix A-3 The most frequently used engagement signals by EMI lecturers in humanities

Appendix A-4 The most frequently used engagement signals by EMI lecturers in hard sciences

Appendix A-5 The most frequently used graduation signals by EMI lecturers in humanities

Appendix A-6 The most frequently used graduation signals by EMI lecturers in hard sciences

Appendix A-1 The most frequently used attitude signals by EMI lecturers in humanities (Frequency – token counts per 1000 words)

System	Attitude signals	freq.	Lecture extract
AFFECT	<i>sorry</i>	0.4	<i>I am sorry to everyone who was in the Friday, sorry, the Thursday tutorial,...</i>
	<i>care</i>	0.2	<i>I used to be a journalist, so I care about titles, outlines.</i>
	<i>happy</i>	0.2	<i>Happy that I know I have no questions about the word count.</i>
	<i>interested</i>	0.2	<i>He's also interested in philosophy, as you have noticed from this novel.</i>
	<i>like</i>	0.2	<i>If you like Korean dramas, why do you like them? What about them appears to you?</i>
JUDGEMENT VERACITY	<i>will</i>	1.7	<i>Mark Zuckerberg will say, Facebook is just a platform.</i>
	<i>can</i>	1.6	<i>You can just imagine you are the actress.</i>
	<i>could</i>	1.2	<i>So, this example could be applied to many other things.</i>
	<i>maybe</i>	1.1	<i>These are maybe cattle being transported.</i>
	<i>have to</i>	1.0	<i>So there have to be some significant updates.</i>
JUDGEMENT PROPRIETY	<i>should</i>	1.0	<i>And of course, you should refer to at least one work of theory or criticism.</i>
	<i>supposed to</i>	0.2	<i>It's the same with this, almost any assessment, any assignment, understand what you're supposed to do.</i>
	<i>wrong</i>	0.2	<i>Thus, a lie is wrong, because its effect is to mislead.</i>
JUDGEMENT NORMALITY	<i>often</i>	0.6	<i>He doesn't often show up in person with many interviews.</i>
	<i>always</i>	0.5	<i>So Costello's message is heard and then commented on by her son, John, and who doesn't always agree with his mother.</i>
	<i>famous</i>	0.3	<i>Elizabeth Costello, the famous writer and we introduced her as she delivers a speech on animal rights.</i>
JUDGEMENT CAPACITY	<i>can</i>	2.1	<i>So in this way children can easily understand the content of the Bible.</i>
	<i>cannot</i>	0.4	<i>I cannot give you a better answer than that.</i>
	<i>can't</i>	0.3	<i>Somehow you can't retrieve the full form of it.</i>
	<i>familiar</i>	0.3	<i>Are you guys familiar with the Arab spring?</i>

System	Attitude signals	freq.	Lecture extract
JUDGEMENT TENACITY	<i>will</i>	0.9	<i>I will give you a hint. It's about the dress that she was wearing.</i>
	<i>going to</i>	0.8	<i>I'm going to show you more examples of slips of the tongue.</i>
	<i>would</i>	0.4	<i>I would also explain the difference between person and persona.</i>
	<i>gonna</i>	0.3	<i>I'm gonna read out some parts of the reading for today.</i>
APPRECIATION REACTION	<i>good</i>	0.8	<i>Yes, very good. It resembles a report, and that's a very good analogy.</i>
	<i>interesting</i>	0.6	<i>This just came up over the weekend. I thought it was a little bit interesting.</i>
	<i>simple</i>	0.3	<i>It is a simple bridging problem, a problem of knocking together a bridge.</i>
	<i>clear</i>	0.2	<i>So I think that it's clear by now that yes, we still do need professional training for professional journalists.</i>
	<i>clearly</i>	0.2	<i>Clearly, I think understanding and analysis is the most important.</i>
	<i>great</i>	0.2	<i>So those of you on bigger button please go to...Oh, Leo has actually seen it, great.</i>
	<i>difficult</i>	0.2	<i>you will know that this novel presents some interesting, difficult, ethical problems.</i>
APPRECIATION COMPOSITION	<i>different</i>	0.3	<i>So, they are very different from American dramas in that sense.</i>
	<i>clear</i>	0.2	<i>Any questions about the brief? Or is it clear? I think this one is pretty clear, right?</i>
	<i>coherent</i>	0.2	<i>And a second rule a target text must be internally coherent.</i>
	<i>concrete</i>	0.2	<i>a concrete form for words that we intend to use to fill in the slots in this structure that we have built.</i>
APPRECIATION VALUATION	<i>important</i>	1.0	<i>Family members and family relationships have very important effect on the narratives.</i>
	<i>wrong</i>	0.8	<i>So, in this case, phoneme assignment has gone wrong.</i>
	<i>problem</i>	0.6	<i>This has been a big problem for video games until recent times.</i>
	<i>right</i>	0.5	<i>there's not really a right answer here.</i>

Appendix A-2 The most frequently used attitude signals by EMI lecturers in hard sciences

System	Attitude signals	freq.	Lecture extract
AFFECT	<i>like</i>	0.4	<i>I really like life science.</i>
	<i>sorry</i>	0.3	<i>Let's go to figure two. Next one, what's your name again, sorry?</i>
JUDGEMENT VERACITY	<i>can</i>	3.3	<i>The more people can be saved, the lower the damage.</i>
	<i>will</i>	2.6	<i>You will encounter it, if you read the research reports, very often.</i>
	<i>need</i>	2.3	<i>But if you need to know them, here they are.</i>
	<i>may</i>	1.3	<i>if I am busy, I may not reply immediately, but I will try to.</i>
	<i>would</i>	0.8	<i>It would be a huge expense.</i>
JUDGEMENT	<i>need</i>	1.1	<i>You need to do a little bit better.</i>
PROPRIETY	<i>should</i>	0.9	<i>Yeah, and they pray that they should obey the rule of the nature.</i>
	<i>have to</i>	0.3	<i>Legally binding means that people have to do what is stipulated there.</i>
JUDGEMENT NORMALITY	<i>always</i>	0.6	<i>although early stage is easier, the later you always have to learn new things.</i>
	<i>often</i>	0.2	<i>parents may often at least when they are very small, they dress them in the same cloth.</i>
	<i>usually</i>	0.2	<i>The rash usually starts on the face, and then it spreads to the rest of the body.</i>
	<i>normally</i>	0.2	<i>Normally, we don't have any base map here, except you upload it yourself.</i>
JUDGEMENT CAPACITY	<i>can</i>	5.4	<i>You can basically help.</i>
	<i>good</i>	0.4	<i>I am not good at programming.</i>
	<i>cannot</i>	0.3	<i>I cannot follow what you mean.</i>
	<i>be able to</i>	0.3	<i>but is everybody able to see the presentation?</i>
JUDGEMENT TENACITY	<i>will</i>	1.3	<i>I will talk about this a bit more in a week seven.</i>
	<i>gonna</i>	0.7	<i>We gonna see what is the immune system.</i>
	<i>going to</i>	0.4	<i>And navigation, we are going to use it here.</i>
APPRECIATION	<i>good</i>	1.5	<i>Good question. What do you think?</i>
REACTION	<i>interesting</i>	0.4	<i>Okay, so that's interesting, interesting example, can be good example to argue.</i>
	<i>clearly</i>	0.3	<i>This is a very simple experiment clearly showing that things are nutrient limited in lakes.</i>
	<i>fine</i>	0.3	<i>That is totally fine. Ok? Just keep me updated.</i>
	<i>difficult</i>	0.3	<i>How how is the English in the paper? Easy to read? Difficult? Medium?</i>
	<i>easy</i>	0.3	<i>How how is the English in the paper? Easy to read? Difficult? Medium?</i>

System	Attitude signals	freq.	Lecture extract
APPRECIATION COMPOSITION	<i>detail</i>	0.3	<i>It assumes that readers already knows the base plan, so it doesn't go into more detail.</i>
	<i>basic</i>	0.3	<i>And also you will get familiar with all those basic concepts related to GPS.</i>
	<i>clear</i>	0.2	<i>that seems to be quite clear evidence.</i>
APPRECIATION VALUATION	<i>important</i>	1.5	<i>So the tools and the technology are extremely important.</i>
	<i>different</i>	1.4	<i>they're at different hierarchical levels.</i>
	<i>better</i>	0.7	<i>the water can infiltrate much better.</i>
	<i>problem</i>	0.5	<i>They involve some biological problem.</i>
	<i>success</i>	0.4	<i>This was a a kind of, still discussed as a big success of the medical approach.</i>

Appendix A-3 The most frequently used engagement signals by EMI lecturers in humanities

System	Engagement signals	freq.	Lecture extract
EXPAND	a question	3.6	<i>Any questions about that?</i>
ENTERTAIN	<i>like</i>	3.3	<i>So we have, kind of like what we saw with Hollywood last week, right?</i>
	<i>you can</i>	2.2	<i>You can just imagine you are the actress.</i>
	<i>if you + a verb</i>	2.1	<i>if you agree with this, and we're gonna talk about this a little bit more today and also the tutorial.</i>
	<i>you know</i>	2.0	<i>But you know like in comics or in novels, when you read, you only read a text.</i>
EXPAND ATTRIBUTE	<i>you</i>	11	<i>it's for you to like balance out pros and cons and try to make distinctions.</i>
	<i>we</i>	5.5	<i>We made it to the 21st century in this module.</i>
	<i>your</i>	2.5	<i>Thanks for your attention.</i>
	<i>say</i>	1.3	<i>Mark Zuckerberg will say, facebook is just a platform.</i>
	<i>our</i>	1.1	<i>We can use some simple language because our target readers are students.</i>
CONTRACT PROCLAIM	<i>of course</i>	0.7	<i>And of course this has been incredibly influential on western society.</i>
	<i>call</i>	0.6	<i>let's talk about the Korean wave or Hallyu as often it's called.</i>
	<i>I want</i>	0.5	<i>I want you to look at this s, what is this s? Tell me.</i>
	<i>clearly</i>	0.2	<i>Clearly, I think understanding and analysis is the most important.</i>

System	Engagement signals	freq.	Lecture extract
CONTRACT	<i>not</i>	5.9	<i>And she's not shy about telling John this.</i>
DISCLAIM	<i>don't</i>	2.9	<i>when you compare to china, that doesn't sound like a lot.</i>
	<i>no</i>	1.1	<i>There's no real solid points about the arguments.</i>
	<i>nothing</i>	0.3	<i>Yeah, there's nothing to be ashamed of.</i>
	<i>cannot</i>	0.3	<i>We cannot change the original layout.</i>
	<i>can't</i>	0.3	<i>Somehow you can't retrieve the full form of it.</i>

Appendix A-4 The most frequently used engagement signals by EMI lecturers in hard sciences

System	Engagement signals	freq.	Lecture extract
EXPAND	a question	4.4	<i>Why is that a big increase starting in AD 740, 960?</i>
ENTERTAIN	<i>you can</i>	2.0	<i>You can compare just family members.</i>
	<i>if you + a verb</i>	1.6	<i>If you look at oxygen, saturated from the surface, then it climbed, why does the oxygen climb with them?</i>
	<i>do you</i>	1.0	<i>Do you know any of the symptoms?</i>
	<i>like</i>	1.0	<i>some symptoms of schizophrenia, especially things like hallucinations, delusions...</i>
EXPAND ATTRIBUTE	<i>you</i>	5.0	<i>You see tropical rainforest is number two, so you're almost right.</i>
	<i>we</i>	2.7	<i>And then we have on page five, a history of reviews and amendments.</i>
	<i>your</i>	1.4	<i>What's your name I should ask first.</i>
	<i>our</i>	0.6	<i>So that we can increase the accuracy of our measurement.</i>
	<i>say</i>	0.3	<i>There's a certain section here the author is trying to say too much too fast too quickly.</i>
	<i>yourself</i>	0.3	<i>You guys should go over by yourself.</i>
	<i>my</i>	0.3	<i>I have my phone number here. You can save it.</i>
CONTRACT PROCLAIM	<i>of course</i>	0.3	<i>Now of course assuming that there is the genetic influence.</i>
	<i>I want</i>	0.2	<i>I want to hear your point of view.</i>
	<i>call</i>	0.2	<i>So the way we can study this is what's called concordance rates.</i>
CONTRACT	<i>not</i>	2.7	<i>But water, that's not an environmental factor.</i>
DISCLAIM	<i>don't</i>	1.6	<i>they don't know it will be a secondary explosion.</i>
	<i>no</i>	0.6	<i>There are no bad questions or bad answers.</i>

System	Engagement signals	freq.	Lecture extract
	<i>but</i>	0.4	<i>There's some other side effects that are more serious but are very rare.</i>
	<i>nothing</i>	0.2	<i>They have one big lake and put a little plastic dam in between and dump a bunch of phosphorus on the North end, and nothing on the south end.</i>
	<i>cannot</i>	0.2	<i>Some diseases cannot be prevented, so can only be treated after a person gets sick.</i>

Appendix A-5 The most frequently used graduation signals by EMI lecturers in humanities (no-scale, up-scale and down-scale abbreviated as n., u. and d.)

System	Graduation signals	freq.	Lecture extract	Scales
INTENSIFICATION	<i>just</i>	1.4	<i>We can just have some unspecified forms thought in our mind.</i>	u.
PROCESS	<i>actually</i>	0.5	<i>you can actually choose hmm any academic work.</i>	u.
INTENSIFICATION	<i>very</i>	2.9	<i>this is a very influential model in the speech production field.</i>	u.
QUALITY	<i>more</i>	0.6	<i>So America's biggest, most powerful book publisher is about to get even bigger and more powerful.</i>	u.
	<i>most</i>	0.5	<i>Let's talk about the most important thing first, which is the essay brief.</i>	u.
	<i>a little bit</i>	0.4	<i>You may be a little bit hmm tense.</i>	d.
QUANTIFICATION EXTENT	<i>In-phrase</i>	3.1	<i>In 2005, the ministry of culture and tourism also launched a tourist friendly multilingual website. the group of powerful men in Germany in the middle of twenty century</i>	n.
	<i>now</i>	1.7	<i>Now, when you compare to china, that doesn't sound like a lot.</i>	n.
	<i>today</i>	0.8	<i>So that is all for today's lecture.</i>	n.
	<i>already</i>	0.7	<i>We have already tagged the morpheme information.</i>	n.
	<i>often</i>	0.6	<i>He doesn't often show up in person with many interviews.</i>	d.
	<i>sometimes</i>	0.5	<i>And she sometimes appears to reject logic in her argument.</i>	d.
	<i>always</i>	0.5	<i>you can always drop by to discuss anything that you are confused with.</i>	u.
	<i>before</i>	0.5	<i>It's 29 days and 3 hours to go before the deadline.</i>	n.
	<i>still</i>	0.5	<i>So today we are still focusing on functional theories.</i>	u.
QUANTIFICATION	<i>little</i>	0.3	<i>You know prongs? The the little sticks on a fork.</i>	n.
MASS	<i>big</i>	0.2	<i>You have to have a very big brain to enable you to do that.</i>	n.
QUANTIFICATION	<i>some</i>	3.1	<i>we should use some simple words.</i>	n.
NUMBER	<i>all</i>	1.7	<i>all the American cartoons of the 1930s and 1940s.</i>	u.
	<i>more</i>	1.2	<i>we'll talk about it more next week.</i>	u.
	<i>one of</i>	1.2	<i>He's one of the most acclaimed living authors in English.</i>	n.

System	Graduation signals	freq.	Lecture extract	Scales
FOCUS	<i>another</i>	1.2	We look at another example.	n.
	<i>about</i>	6.0	We talked about melodrama last week.	n.
	<i>other</i>	2.3	Let's finally look at some of the other stylistic features of the novel.	n.
	<i>kind of</i>	2.0	They are kind of superhero.	d.
	<i>something</i>	1.7	Something you might want to think about, the form of the novel.	n.
	<i>any</i>	1.1	You might have a facebook account or another social media account. But, any big corporation has one, too.	u.

Appendix A-6 The most frequently used graduation signals by EMI lecturers in hard sciences

System	Graduation signals	freq.	Lecture extract	Scales
INTENSIFICATION PROCESS	<i>just</i>	1.9	Just looking at this data, what kind of conclusions could you draw?	u.
	<i>very</i>	0.4	The water runs off very quickly.	u.
	<i>still</i>	0.3	So neuron anti-psychotics still got side effects.	u.
	<i>really</i>	0.3	So it doesn't really matter which one is the group leader.	d.
	<i>well</i>	0.3	Everybody is well coordinated.	u.
INTENSIFICATION QUALITY	<i>very</i>	3.6	And then tropical rainforest is very wet.	u.
	<i>more</i>	1.3	software is is a lot more cost-effective.	u.
	<i>most</i>	0.6	I think understanding and analysis is the most important.	u.
	<i>better</i>	0.6	I think vaccine is better .	u.
	<i>quite</i>	0.5	It's quite curious technique.	u.
QUANTIFICATION EXTENT	<i>In-phrase</i>	2.6	You see that all over the place, even in China these days.	n.
	<i>now</i>	1.4	Now let's go through one by one.	n.
	<i>already</i>	1.0	We have already discussed that a little bit.	n.
	<i>always</i>	0.6	although early stage is easier, the later you always have to learn new things.	u.
	<i>sometimes</i>	0.5	It happens sometimes .	n.
QUANTIFICATION MASS	<i>later</i>	0.5	We'll come back to that issue a little bit later .	n.
	<i>big</i>	0.5	human impacts and organic impacts on big rivers in the world.	n.
	<i>little</i>	0.2	a tiny little pond and infiltrating the soil.	n.
QUANTIFICATION NUMBER	<i>larger</i>	0.2	then if you have a way point larger than 10 meters	u.
	<i>some</i>	3.4	some species are going to be very successful in invading very rapidly.	u.
	<i>all</i>	3.3	you walk through all the trials and track yourself.	n.
	<i>more</i>	2.5	And then cold water can hold more oxygen.	u.

System	Graduation	freq.	Lecture extract	Scales
	signals			
	<i>many</i>	1.3	<i>There's many unknowns with this kind of stuff.</i>	u.
	<i>a lot of</i>	1.3	<i>you're not gonna have a lot of rainfall.</i>	u.
FOCUS	<i>about</i>	4.2	<i>but think about environmental factors.</i>	n.
	<i>kind of</i>	2.0	<i>is it a kind of bioinformatics?</i>	d.
	<i>other</i>	2.0	<i>And the other one is statistics.</i>	n.
	<i>any</i>	1.4	<i>Do you do you know any of the symptoms?</i>	u.
	<i>things</i>	1.3	<i>I learnt three things, only three things.</i>	n.

Appendix B

The most frequently used appraisal signals by C-ELF, NC-ELF and NS lecturers

Appendix B-1 The most frequently used attitude signals by C-ELF lecturers

Appendix B-2 The most frequently used attitude signals by NC-ELF lecturers

Appendix B-3 The most frequently used attitude signals by NS lecturers

Appendix B-4 The most frequently used engagement signals by C-ELF lecturers

Appendix B-5 The most frequently used engagement signals by NC-ELF lecturers

Appendix B-6 The most frequently used engagement signals by NS lecturers

Appendix B-7 The most frequently used graduation signals by C-ELF lecturers

Appendix B-8 The most frequently used graduation signals by NC-ELF lecturers

Appendix B-9 The most frequently used graduation signals by NS lecturers

Appendix B-1 The most frequently used attitude signals by C-ELF lecturers

System	Attitude signals	freq.	Lecture extract
AFFECT	<i>like</i>	0.5	<i>I often like to read.</i>
	<i>sorry</i>	0.4	<i>You pick the professional. This is wrong. Sorry.</i>
	<i>care</i>	0.3	<i>what we care more about in the field of psycholinguistics.</i>
	<i>interested</i>	0.2	<i>So if you are interested in functional theories, you can have some further readings about these two scholars.</i>
JUDGEMENT	<i>will</i>	3.4	<i>Who knows what will happen in ten years.</i>
VERACITY	<i>need</i>	2.8	<i>So, you probably still need to look up at the screen.</i>
	<i>can</i>	1.6	<i>You can have some further readings about these two scholars.</i>
	<i>may</i>	1.1	<i>We may have different ways to suit different purposes, even on the same original text.</i>
	<i>have to</i>	0.6	<i>Or you have to change the height in your settings constantly.</i>
JUDGEMENT PROPRIETY	<i>should</i>	1.3	<i>Those are just too basic. You guys should go over by yourself.</i>
	<i>need</i>	1.0	<i>You need to understand this, because it will help you to make the right decision.</i>
	<i>have to</i>	0.4	<i>you know the program you admitted into are curriculum you have to study.</i>
JUDGEMENT NORMALITY	<i>always</i>	0.5	<i>let me know if you have any questions, any suggestion, always just feel free.</i>
	<i>often</i>	0.2	<i>So one example, I often like to read is, Lv, our previous graduate.</i>
JUDGEMENT CAPACITY	<i>can</i>	5.6	<i>So in this way children can easily understand the content of the Bible.</i>
	<i>good</i>	0.7	<i>You guys already are very good programmer.</i>
	<i>best</i>	0.4	<i>we all try our best to make it successful.</i>
JUDGEMENT TENACITY	<i>will</i>	2.7	<i>So I will give you five to ten minutes to discuss, and I will ask some groups to present.</i>
	<i>going to</i>	1.6	<i>I'm going to produce a sentence now, so I need all the words I need.</i>
	<i>need</i>	0.8	<i>Before doing this one, we need to make groups first.</i>
	<i>would like</i>	0.3	<i>I would like to share two things might be interesting.</i>
APPRECIATION REACTION	<i>good</i>	0.7	<i>And then click on layers, or you already have it. Ok. Good.</i>
	<i>difficult</i>	0.4	<i>I think this assignment is a little bit difficult for you to think about in such a short time.</i>

System	Attitude signals	freq.	Lecture extract
	<i>simple</i>	0.4	<i>So the language for children, we should use some simple words or child-like expressions...</i>
	<i>interesting</i>	0.3	<i>Yeah, it's kind of the very interesting part and also set up where you can configure your Terrasync software.</i>
APPRECIATION COMPOSITION	<i>coherent</i>	0.4	<i>And a third one, a target text must be coherent with the source text.</i>
	<i>concrete</i>	0.4	<i>But when it comes to actually pronouncing it, actually retrieving the concrete form of this word, you are stuck.</i>
	<i>abstract</i>	0.3	<i>I think Skopos theory is a little bit abstract and vague.</i>
	<i>basic</i>	0.3	<i>there are some basic underlying rules of Skopos theory I put it here.</i>
APPRECIATION VALUATION	<i>wrong</i>	1.4	<i>So you have identified the wrong stress pattern.</i>
	<i>different</i>	1.2	<i>So you need to, basically you guys know different ways of thinking.</i>
	<i>important</i>	1.1	<i>And this, this is the Skyplot, which is quite useful and important.</i>
	<i>right</i>	0.7	<i>use these instructions to help you make all the settings right.</i>
	<i>similar</i>	0.5	<i>Similar thing will happen in biology.</i>

Appendix B-2 The most frequently used attitude signals by NC-ELF lecturers

System	Attitude signals	freq.	Lecture extract
AFFECT	<i>like</i>	0.3	<i>It's okay if you do not like papers.</i>
	<i>sorry</i>	0.2	<i>Zoom in, oh sorry. OK. So these are some of the specific requirements.</i>
	<i>happy</i>	0.2	<i>Happy that I know I have no questions about the word count.</i>
	<i>care</i>	0.2	<i>I used to be a journalist so I care about titles, outlines.</i>
JUDGEMENT VERACITY	<i>can</i>	1.9	<i>IT engineers that can either from series engineering or military engineering...</i>
	<i>will</i>	1.8	<i>Who would protect the people and will develop a vaccine?</i>
	<i>would</i>	1.7	<i>You, as a reader, would be more persuaded that this is a good report.</i>
	<i>need</i>	1.6	<i>But if you need to know them, here they are. OK.</i>
	<i>maybe</i>	1.1	<i>maybe you could try to understand or to check later how long it took.</i>

System	Attitude signals	freq.	Lecture extract
	<i>have to</i>	1.1	So you have a more time to do whatever you have to do , to improve one last time at your group projects.
JUDGEMENT	<i>should</i>	1.0	What's your name I should ask first.
PROPRIETY	<i>need</i>	0.6	they need to have the authority to do that.
	<i>have to</i>	0.2	Nothing else can go wrong, really, you just have to do the work.
	<i>bad</i>	0.2	these animals represent human characters, human virtues, or human bad qualities.
	<i>supposed to</i>	0.2	Easy marks to to get, easy to get high marks in those categories as long as you just do what you're supposed to do .
JUDGEMENT	<i>always</i>	0.7	he was and he would be always famous for the number ten.
NORMALITY	<i>normal</i>	0.4	They can't escape now there's a situation when they want to be like a normal and kind of girl next door style.
	<i>usually</i>	0.3	The reports are not usually published by a publishing house, right?
	<i>often</i>	0.2	It seems to me to be and this is what you often see with technology.
JUDGEMENT	<i>can</i>	4.3	The more you can show demonstrate that you can engage with the readings up until this week.
CAPCACITY	<i>cannot</i>	0.5	if you guys can follow the paper, or cannot follow the paper...
	<i>can't</i>	0.3	Simply I can't hear you.
JUDGEMENT	<i>will</i>	0.6	in ten minutes, we will have our deserved break.
TENACITY	<i>gonna</i>	0.5	And I'm gonna ask you a couple of questions.
	<i>would</i>	0.3	So, I would also explain the difference between person and persona.
	<i>going to</i>	0.2	what he said, first you tell the audience what you're going to tell them.
	<i>have to</i>	0.2	So they had to like, get that machine and it took a long time I have to say.
APPRECIATION	<i>good</i>	1.8	very good . So this is one of the very important consequences.
REACTION	<i>clearly</i>	0.5	Yeah, clearly not a quality college students like you guys, since you know more than this already.
	<i>interesting</i>	0.5	It actually might be interesting to study this.
	<i>easy</i>	0.4	So for you guys, it's easy . You're 4th year students now.

System	Attitude signals	freq.	Lecture extract
	<i>clear</i>	0.3	<i>it's not even clear whether they are actually Chinese or they could be Mongolian or from somewhere else.</i>
APPRECIATION COMPOSITION	<i>clear</i>	0.3	<i>Instead, it is meant to convey information in a very clear way.</i>
	<i>short</i>	0.3	<i>Short conclusion, reference list. Right?</i>
APPRECIATION VALUATION	<i>important</i>	1.8	<i>Exercise is important, but equally important is to have trained actors, people who know exactly what to do.</i>
	<i>different</i>	1.0	<i>And how can this be done? By engaging in different types of exercising.</i>
	<i>better</i>	0.8	<i>So what? A shallow lake? But won't the river would even be better?</i>
	<i>productive</i>	0.4	<i>So swamp forest and marsh is the most productive.</i>
	<i>problem</i>	0.4	<i>there's nothing wrong unless, until television starts to do politics. That's the problem.</i>

Appendix B-3 The most frequently used attitude signals by NS lecturers

System	Attitude signals	freq.	Lecture extract
AFFECT	<i>sorry</i>	0.5	<i>I am sorry to everyone who was in the Friday, sorry, the Thursday tutorial, and in the first section of Friday tutorial because I made a big mathematical error.</i>
	<i>hate</i>	0.3	<i>And you make up your own mind about whether or not he hates her.</i>
	<i>emotionally</i>	0.3	<i>Sometimes they bring us closer that makes us feel emotionally involved in the novel.</i>
	<i>cry</i>	0.2	<i>And she reads a novel by Paul West, cries spontaneously.</i>
	<i>like</i>	0.2	<i>If you like Korean dramas, why do you like them?</i>
JUDGEMENT	<i>can</i>	4.0	<i>So you can have more active effect.</i>
VERACITY	<i>will</i>	1.6	<i>very soon within 5 or 10 years, people will stop buying physical media games and we'll just download it.</i>
	<i>might</i>	1.4	<i>So what conclusion might even draw from that?</i>
	<i>could</i>	1.4	<i>It could be that they have more similar experiences.</i>
	<i>may</i>	1.1	<i>So they may cause or give a predisposition like a vulnerability.</i>
JUDGEMENT PROPRIETY	<i>should</i>	0.6	<i>Of what your parents want from you or what people inside your gender should do.</i>

System	Attitude signals	freq.	Lecture extract
	<i>wrong</i>	0.3	Also, says for action to lie, its nature is wrong because it's mean and because it's cowardly.
	<i>hypocritical</i>	0.2	But then we learned later that she has already slept with this novelist herself many years ago. So someone hypocritical .
JUDGEMENT NORMALITY	<i>often</i>	0.9	we'll get into what are often viewed as the appeals of Korean dramas.
	<i>always</i>	0.4	let's think about context as we always do.
	<i>usually</i>	0.3	And this uh usually attracts about 20,000 people each year.
	<i>personal</i>	0.3	So, it's not about personal desires or motivations. It's about obeying those laws.
JUDGEMENT CAPACITY	<i>can</i>	1.3	I can not do maths.
	<i>sick</i>	0.5	So natural immunity happens when you get sick .
	<i>be able to</i>	0.4	So by getting those small doses that your immune system is able to learn and get the information necessary for the next time you get that infection.
	<i>flawed</i>	0.4	Just to finish, John's observations of his flawed mother.
	<i>familiar</i>	0.3	Parkinson's disease, familiar with Parkinson's disease?
JUDGEMENT TENACITY	<i>gonna</i>	0.9	And so we're gonna watch a little bit of it right now.
	<i>would</i>	0.6	I would like to say, I am sorry to everyone who was in the Friday, sorry, the Thursday tutorial.
	<i>will</i>	0.3	So we will come back to that, another discussion of that.
	<i>going to</i>	0.2	So this is some of the diseases that we're going to be looking at this class.
APPRECIATION REACTION	<i>interesting</i>	0.8	What's the most interesting kind of comparison?
	<i>good</i>	0.6	So the good news is that when you get vaccinated, you are also protecting the unvaccinated people around you.
	<i>difficult</i>	0.3	we are being left to make up our own minds and to consider what are difficult
	<i>better</i>	0.2	I think vaccine is better .
	<i>extreme</i>	0.2	and also the more extreme situation, there is some danger.
	<i>terrible</i>	0.2	What a terrible crime, to treat human beings like cattle!
APPRECIATION COMPOSITION	<i>detail</i>	0.4	So for this purpose we can convey the overall meaning but omit some detail .

System	Attitude signals	freq.	Lecture extract
	<i>different</i>	0.2	<i>So they are very different from American dramas in that sense.</i>
APPRECIATION VALUATION	<i>different</i>	0.9	<i>Now there are different ways that there could be problems.</i>
	<i>problem</i>	0.9	<i>Now there are different ways that there could be problems.</i>
	<i>important</i>	0.7	<i>But we also have terrestrial to air, TV and you have film production. Right? An important part of Korean media exports.</i>
	<i>good</i>	0.5	<i>Anything else that is good simply derives from this idea of good will.</i>

Appendix B-4 The most frequently used engagement signals by C-ELF lecturers

System	Engagement signals	freq.	Lecture extract
EXPAND ENTERTAIN	<i>you can</i>	4.9	<i>I will upload it and you can print it and bring it with you.</i>
	<i>a question</i>	4.0	<i>And what kind of translation methods and strategies shall we adopt?</i>
	<i>if you + a verb</i>	2.9	<i>If you want to discuss with me, just send me email.</i>
	<i>you need</i>	2.3	<i>You need to check their curriculum very carefully.</i>
	<i>like</i>	1.9	<i>So we do have some insects which like mosquitoes.</i>
EXPAND	<i>you</i>	16.8	<i>Is it acrocots? You're not sure.</i>
ATTRIBUTE	<i>we</i>	8.7	<i>We propose storage by meaning, words that have similar meanings are stored closer to each other.</i>
	<i>your</i>	4.2	<i>So you have some idea in your head and you know what it is.</i>
	<i>our</i>	2.8	<i>We have to modify our stage two to build a syntactic frame.</i>
	<i>my</i>	1.3	<i>This is my second thought. C'est la vie.</i>
CONTRACT	<i>I want</i>	0.6	<i>I want you to look at this s, what is this s? Tell me.</i>
PROCLAIM	<i>sure</i>	0.2	<i>it's not perfect, I am sure, there are a lot problems.</i>
CONTRACT	<i>not</i>	4.3	<i>Meaning is not simply just the semantics.</i>
DISCLAIM	<i>don't</i>	3.6	<i>I did not put s to indicate plural.</i>
	<i>no</i>	1.0	<i>If no question, we just move on.</i>
	<i>cannot</i>	0.3	<i>we cannot overlook the importance of the source text.</i>
	<i>can't</i>	0.3	<i>Somehow you can't retrieve the full form of it.</i>

Appendix B-5 The most frequently used engagement signals by NC-ELF lecturers

System	Engagement signals	freq.	Lecture extract
EXPAND	a question	8.3	Why we don't have any biomes there?
ENTERTAIN	<i>if you + a verb</i>	3.5	If you look at terrestrial systems, remember we look at the water balance.
	<i>you can</i>	3.4	You can check it on YouTube or any other service where these things are available .
	<i>like</i>	3.1	It doesn't look like an essay.
	<i>do you</i>	2.4	Did you learn anything new out of this figure?
EXPAND	<i>you</i>	10.3	Pick the society that you belong to, so it's up to you .
ATTRIBUTE	<i>we</i>	3.2	We have knowledge about topics and give background and context.
	<i>your</i>	2.2	basically, you dive into an adventure and your senses focus on that.
	<i>say</i>	1.0	And Jiang Xin is also online. Ok. Good. She says , yes.
	<i>I say</i>	0.8	Remember I said before, water at 4 degree Celsius has the highest density.
CONTRACT PROCLAIM	<i>I want</i>	0.7	I want to show you just quick examples of pop-culture.
	<i>of course</i>	0.7	Of course , all the people who are working in this field know what the hazard is.
	<i>call</i>	0.5	Relocating them temporarily. This is called evacuation, right?
	<i>clearly</i>	0.5	Clearly because of the technology of that period.
	<i>sure</i>	0.2	We have one from Cynthia, so one here is missing for sure .
	<i>generally</i>	0.2	Which is generally called the promulgation document.
	<i>not</i>	0.2	This is not really applied to you.
CONTRACT DISCLAIM	<i>don't</i>	3.4	It doesn't take into account the human vulnerability.
	<i>no</i>	1.5	So he's no longer active in the army.
	<i>nothing</i>	0.5	It's already there. There's nothing I could do about it.
	<i>cannot</i>	0.5	Then they cannot get CO2 into the leaf.

Appendix B-6 The most frequently used engagement signals by NS lecturers

System	Engagement signals	freq.	Lecture extract
EXPAND	a question	5.7	What about the role of the focaliser?
ENTERTAIN	<i>like</i>	2.9	Does that sound like somebody you just mentioned?
	<i>some</i>	1.5	They involve some biological problem.
	<i>let's</i>	1.3	So let's start with measles.
	<i>do you</i>	1.3	Did you know any identical twins?

System	Engagement signals	freq.	Lecture extract
	<i>I think</i>	1.3	I think it's meaning a sense of what is right and what is wrong.
EXPAND ATTRIBUTE	<i>we</i>	5.5	We talked about melodrama last week in reference to Hollywood.
	<i>you</i>	4.9	Those of you online, please contribute.
	<i>your</i>	1.9	You get from your textbooks, list of examples of medications.
	<i>say</i>	1.1	This is Elizabeth speaking. "Cogito, ergo sum" Descartes famously said .
CONTRACT PROCLAIM	<i>of course</i>	1.0	So the formation of the brain of course is the development and formation.
	<i>call</i>	0.8	So the way we can study this is what's called concordance rates.
	<i>obviously</i>	0.2	Obviously , this is her son. John is the focaliser.
CONTRACT DISCLAIM	<i>not</i>	5.4	It is not a good idea to interrupt the narrative too often.
	<i>don't</i>	2.2	They don't have 1.5 billion people.
	<i>but</i>	1.3	The vaccine is not 100 percent safe, but I think it's safer than the natural immunity.
	<i>no</i>	1.0	That's no consolation to the animals that are slaughtered.
	<i>cannot</i>	0.2	The natural mother for some reason cannot take care of the baby.
	<i>rather than</i>	0.2	Environmental influence rather than the genetic influence.

Appendix B-7 The most frequently used graduation signals by C-ELF lecturers

System	Graduation signals	freq.	Lecture extract	Scales
INTENSIFICATION	<i>just</i>	2.2	Just cross the power Tower. On the top, top right.	u.
PROCESS	<i>really</i>	0.4	you guys don't really care.	u.
	<i>very</i>	0.4	you can very easily learn the other stuff.	u.
	<i>even</i>	0.3	So we can even count more if we conduct different translation projects.	u.
	<i>easily</i>	0.3	you can find job, well-paid job very easily .	u.
INTENSIFICATION	<i>very</i>	2.6	She mentioned a very important point.	u.
QUALITY	<i>more</i>	0.8	you can think about which one is more convincing.	u.
	<i>quite</i>	0.6	when the GPS satellite is quite weak.	u.
	<i>better</i>	0.4	the program will be better .	u.
	<i>a little bit</i>	0.4	I think this assignment is a little bit difficult for you.	d.

System	Graduation signals	freq.	Lecture extract	Scales
QUANTIFICATION	<i>now</i>	1.3	<i>we are now at functional theories No. 2.</i>	n.
EXTENT	<i>already</i>	1.3	<i>you have an idea in your head already.</i>	n.
	<i>In-phrase</i>	1.2	<i>This is something I learnt in 2008.</i>	n.
	<i>today</i>	1.0	<i>And that's not the concern for today.</i>	n.
	<i>sometimes</i>	0.8	<i>but sometimes they can be one person.</i>	d.
QUANTIFICATION	<i>larger</i>	0.3	<i>we talked about those satellite close to horizon will produce larger errors</i>	u.
MASS	<i>little</i>	0.3	<i>I am translating a little book.</i>	n.
QUANTIFICATION	<i>all</i>	4.1	<i>all the words in your mental lexicon.</i>	u.
NUMBER	<i>some</i>	4.0	<i>we can also add some visual aids.</i>	n.
	<i>many</i>	1.5	<i>So many scholars thought this kind of jargons are too complicated.</i>	u.
	<i>each</i>	1.2	<i>And also each group be a backup for the other one.</i>	u.
	<i>more</i>	1.1	<i>we have more players.</i>	u.
	FOCUS	<i>about</i>	3.9	<i>The first one is about statistical modelling.</i>
	<i>other</i>	2.1	<i>We'll learn two other functional theories, one is Skopos theory, and another one is Translatorial Action theory.</i>	n.
	<i>any</i>	1.6	<i>If you have any questions, just raise it.</i>	u.
	<i>kind of</i>	1.5	<i>This is a kind of fruit.</i>	d.
	<i>something</i>	1.5	<i>you know this word means somebody's perception of something.</i>	n.

Appendix B-8 The most frequently used graduation signals by NC-ELF lecturers

System	Graduation signals	freq.	Lecture extract	Scales
INTENSIFICATION	<i>just</i>	1.5	<i>I just want to make it clear about the spelling.</i>	u.
PROCESS	<i>still</i>	0.5	<i>We still need to have this contingency plans in order to know how to act in case this disasters take place.</i>	u.
	<i>louder</i>	0.4	<i>You've got to speak louder.</i>	u.
	<i>completely</i>	0.3	<i>I completely, clearly see it gets a lot greener.</i>	u.
	<i>well</i>	0.3	<i>In the sense that it is very well structured, very well organized.</i>	u.
INTENSIFICATION	<i>very</i>	4.5	<i>it's a very dramatic story.</i>	u.
QUALITY	<i>most</i>	0.9	<i>let's talk about the most important thing first.</i>	u.
	<i>more</i>	0.6	<i>temperate lakes are more productive than tropical lakes</i>	u.
	<i>better</i>	0.5	<i>I cannot give you a better answer than that.</i>	u.
	<i>pretty</i>	0.5	<i>It's pretty simple, in a way.</i>	u.
QUANTIFICATION	<i>In-phrase</i>	4.0	<i>in Canada, in northern Canada, where the air is pretty clean and there's no agriculture.</i>	n.
EXTENT				

System	Graduation signals	freq.	Lecture extract	Scales
	<i>now</i>	1.7	Now , recently, but I don't know if you have ever bought a video game.	n.
	<i>already</i>	0.7	They are already be known characters.	n.
	<i>always</i>	0.7	And temperature was always pretty good in Suzhou.	u.
	<i>before</i>	0.7	Some of you have seen this before in my class.	n.
QUANTIFICATION	<i>big</i>	0.6	There are a bunch of big rivers.	n.
MASS	<i>little</i>	0.3	put a little plastic dam in between.	n.
QUANTIFICATION	<i>some</i>	2.5	because some of these games are after stories.	n.
NUMBER	<i>more</i>	2.2	You might create more severe weather in the North.	u.
	<i>all</i>	2.0	So not all social media accounts are equal.	u.
	<i>many</i>	1.4	Russia, too, they stopped agriculture in many areas.	u.
	<i>one of</i>	1.1	It's one of the most influential ideas.	n.
	<i>a lot</i>	1.1	It's not a lot you have to write down.	u.
FOCUS	<i>about</i>	5.5	What do you think about the structure of the document?	n.
	<i>other</i>	2.2	What else? For what other reason?	n.
	<i>something</i>	1.7	take something like Facebook revolutions.	n.
	<i>kind of</i>	1.7	So that was kind of a discussion.	d.
	<i>thing</i>	1.5	I will show you just a few products, a few things .	n.

Appendix B-9 The most frequently used graduation signals by NS lecturers

System	Graduation signals	freq.	Lecture extract	Scales
INTENSIFICATION	<i>just</i>	1.3	So let's just get familiar with terms on this page.	u.
PROCESS	<i>actually</i>	0.6	Has anyone in class or on big blue button actually seen this one?	u.
	<i>still</i>	0.5	at least some genetic influence, still remains the question of which genes.	u.
	<i>completely</i>	0.4	Now they did not completely deregulate.	u.
	<i>very</i>	0.3	The Korean film, TV music industries and cultural industries are doing very well.	u.
	<i>even</i>	0.3	although she doesn't even call it farm.	u.
	<i>well</i>	0.3	The Korean film, TV music industries and cultural industries are doing very well .	u.
	<i>effectively</i>	0.3	vaccine protect us from infections, they help fight infections, fast and effectively .	u.
INTENSIFICATION	<i>very</i>	2.1	Very simple terms, what is right and what's wrong.	u.
QUALITY	<i>more</i>	1.5	the things of Korean dramas are more diversified.	u.
	<i>quite</i>	0.6	Quite notorious comparison actually.	u.
	<i>even</i>	0.4	John feels embarrassed, ashamed, even disgusted at times.	u.

System	Graduation signals	freq.	Lecture extract	Scales
	<i>highly</i>	0.3	<i>So it's a highly infectious viral illness caused by morbillivirus.</i>	u.
	<i>most</i>	0.3	<i>What's the most interesting kind of comparison?</i>	u.
QUANTIFICATION	<i>In-phrase</i>	2.8	<i>There's censorship in the US.</i>	n.
EXTENT	<i>now</i>	1.6	<i>Thinking about literary techniques now.</i>	n.
	<i>often</i>	0.9	<i>we'll get into what are often viewed as the appeals of Korean dramas.</i>	u.
	<i>already</i>	0.7	<i>the audience already know about this horrors.</i>	n.
	<i>today</i>	0.6	<i>let's talk today about the Korean wave.</i>	n.
	<i>later</i>	0.5	<i>The psychological symptoms may not show, for until more than 10 years later.</i>	n.
	<i>still</i>	0.5	<i>This was a a kind of, still discussed as a big success of the medical approach.</i>	u.
QUANTIFICATION	<i>big</i>	0.2	<i>I made a big mathematical error.</i>	n.
MASS	<i>largest</i>	0.2	<i>the nation's third-largest publisher</i>	u.
QUANTIFICATION	<i>some</i>	3.5	<i>the brain are connected with some symptoms of schizophrenia.</i>	n.
NUMBER	<i>more</i>	2.1	<i>I'm gonna pick up some more details about this in week seven.</i>	u.
	<i>one of</i>	1.7	<i>He's one of the most acclaimed living authors in English.</i>	n.
	<i>all</i>	1.6	<i>but take a look at all the other preachers</i>	u.
	<i>another</i>	1.3	<i>Another complicating factor we need to come back to.</i>	n.
FOCUS	<i>about</i>	5.8	<i>most of them are about animal welfare.</i>	n.
	<i>kind of</i>	2.8	<i>What kind of literary techniques does he use?</i>	d.
	<i>other</i>	2.0	<i>The other school, the Deontological.</i>	n.
	<i>the same</i>	1.3	<i>then again people will react to them in the same way.</i>	n.
	<i>any</i>	1.2	<i>Do you do you know any of the symptoms?</i>	u.
	<i>just</i>	1.1	<i>we're gonna look at it from a more of a public health perspective, just sort of.</i>	u.
	<i>actually</i>	1.1	<i>So hybrid is actually a term that comes from biology.</i>	u.