

A Contrastive Study of Rhetorical Move Structure of English Medium Instruction Lectures Given by Native English and Chinese Lecturers

Lin Deng^a, Anchalee Wannaruk^{b*}

^a lindeng20100101@163.com, School of Foreign Languages, Suranaree University of Technology, Thailand

^b wannaruk@sut.ac.th, School of Foreign Languages, Suranaree University of Technology, Thailand

*Corresponding author: wannaruk@sut.ac.th

APA Citation:

Deng, L. & Wannaruk, A. (2021). A contrastive study of rhetorical move structure of English medium instruction lectures given by native English and Chinese lecturers. *LEARN Journal: Language Education and Acquisition Research Network*, 14 (2),451-477.

Received
23/03/2021

Received in
revised form
14/05/2021

Accepted
30/06/2021

Keywords
genre analysis,
rhetorical move
structure,
English medium
instruction,
lectures

Abstract

This study aims to compare the rhetorical move structure of English Medium Instruction (EMI) lectures given by native English and Chinese lecturers. Two specialized corpora were therefore accordingly created with transcripts of twelve science-oriented lectures selected from MICASE and the BASE corpus and twelve science-oriented EMI lectures collected at a Chinese university, respectively. Adopting the Swalesian genre analysis framework, this study examines the moves/steps of EMI lectures in the two corpora. Then, the conventionality and frequency of moves/steps were quantified and analyzed to capture statistical variations. In addition, semi-structured interviews were conducted with four Chinese EMI lecturers to probe into their discursive practices from an emic perspective. Statistical variations were apparent in several moves and steps, which could be mainly attributed to Chinese EMI lecturers' concern for the program quality, dense course syllabus requirements, a lack

	of specific English for EMI teaching, as well as the emergence and influence of new social media. The study argues for well-targeted teacher training for non-native English lecturers and more teacher autonomy in course syllabus design.
--	---

1. Introduction

English as a Medium of Instruction (EMI) courses and programs have been experiencing substantial growth in Chinese higher education in the last two decades. Since the debut at the turn of the century, EMI has been recommended as a breakthrough strategy to “develop a global perspective in the Chinese university students, enhance their command of English, and provide access to cutting-edge knowledge in the West” (Hu, Li & Lei, 2014, p. 29).

However, research on EMI has mainly focused on theoretical and policy discussions, whereas empirical studies on real EMI classroom happenings have been generally lacking (Hu & McKay, 2012). Little is known about the actual practices in EMI classrooms in Chinese higher education, e.g., actual extent of English use in the classroom, quality of EMI teaching materials, EMI course evaluation, which invite concerns about the overall quality of EMI in China (Hu, 2009). Despite high English proficiency among Chinese EMI lecturers, they still reported challenges regarding communicating disciplinary knowledge in English (Hu & Lei, 2014; Hu, Li & Lei, 2014). It stands to reason that such difficulty might be related to something in the instruction process of the disciplinary content through the English medium. English for Specific Purposes (ESP) researchers generally agree that the problem lies mainly at the discourse level (e.g., Chaudron & Richards, 1986; Olsen & Huckin, 1990), where classroom instructions are expected to be organized in ways that effectively convey the communicative purposes of the lecture genre. Chinese EMI lecturers might be excessively overwhelmed by various issues involved while delivering disciplinary content in English that they overlooked the schematic organization of the lecture genre, or they simply were not linguistically equipped to deliver EMI lectures in a structured and meaningful manner.

Given the common difficulties experienced among Chinese EMI lecturers, the present study intends to do a contrastive analysis of the rhetorical move structure of EMI lectures between native English and Chinese lecturers. It expects to provide a realistic discursial landscape of

what transpires in university EMI lectures in China. Furthermore, a contrastive analysis of the rhetorical move structure of EMI lectures will reveal systematic differences embodied in instructional preferences between native English and Chinese EMI lecturers that until now remain largely unknown, or relatively equivocal. This is pedagogically invaluable for EMI education in the international higher education contexts. Non-native English EMI lecturers, pre-service and in-service novice lecturers, in particular, will benefit from such comparisons.

Specifically, the study intends to: 1) investigate the rhetorical move structure of EMI lectures given by native English and Chinese lecturers and 2) examine the substantial variations in rhetorical move structure of EMI lectures given by native English and Chinese lecturers.

2. Literature Review

2.1 The Swalesian Genre Analysis

The Swalesian genre analysis has been concerned with both text (spoken and written) structure properties and their communicative functions within social contexts. According to Swales (1990), a genre is a class of communicative events that are recognized and employed by specific discourse communities with shared communicative purposes. Essentially semantic-driven, genres are categories of texts, realized by conventionalized moves/steps and linguistic expressions, to accomplish social actions of particular discourse communities.

Despite slight differences in the definition of 'moves' and 'steps' among ESP researchers (e.g., Bhatia, 1993; Kanoksilapatham, 2005; Nwogu, 1997; Yang & Allison, 2003), most tend to conceptualize a 'move' as a distinctive communicative act to achieve a communicative purpose through a segment of text, while a 'step' usually acts as a component of a 'move', providing more detailed linguistic means of realizing the rhetorical function of a 'move'. Though a move may vary in length from a single sentence to several paragraphs, it generally contains one central theme, as remarked by Swales and Feak.

Move is a functional term that refers to a defined and bounded communicative act that is designed to achieve one main communicative objective. (2000, p. 35)

Due to the theoretical eclecticism and practical applicability, genre analysis has been widely used in analyzing rhetorical move structure and linguistic features of a variety of written genres such as research articles (e.g., Nwogu, 1997; Wannaruk & Amnuai, 2016), dissertations (e.g., Kwan, 2006), abstracts (e.g., Pho, 2008), proposals (e.g., Flowerdew, 2016), research reports (e.g., Flowerdew & Wan, 2010), and business letters (e.g., Bhatia, 1993).

2.2 Genre Analysis of Academic Lectures

Despite much research on written data, genre studies on spoken data have been relatively few. Academic lectures, as a genre proper with their specific communicative purposes and characteristic content and style, have been given less attention. Nonetheless, in light of the paramount pedagogical significance and the structured nature of lectures, some (although very limited) research was conducted to examine the rhetorical move structure of lecture introductions (Lee, 2009; Thompson, 1994), lecture closings (Cheng, 2012), as well as entire lectures (Deroey & Taverniers, 2012; Lee, 2016; Young, 1994).

Adopting Swales' (1990) move analysis framework, Thompson (1994) identified two moves (functions) of lecture introductions, including *Setting up the Lecture Framework* and *Putting Topic in Context*. It was found that lecture introductions did not possess a preferred rhetorical sequence. Apart from the two moves in Thompson (1994), Lee (2009) also reported the move *Warming up* in lecture introductions.

Cheng (2012) devised the framework of 'stages' and 'strategies' to analyze the rhetorical structure of lecture closings. A stage generally refers to the up-level sequential process of lecture closings, while a strategy is similar to a move in genre analysis. No preferred sequences of strategy were discernable in either large or small class lecture closings.

In terms of lectures in their entirety, Young (1994) found a consistency of macro-structure across disciplines and between native and non-native lecturers in university lectures. However, Deroey and Taverniers (2012) reported disciplinary variations in the realization and prominence of the rhetorical functions of *informing* and *evaluating*.

In addition to research on academic lectures, some researchers also conducted genre analysis of English for Academic Purposes (EAP) lessons. Lee (2016) adopted the Swalesian genre analysis framework to

examine EAP lessons and found that lecturers generally had devised and internalized a stable lesson framework that might help organize the lessons in a logical, navigable, accessible, and meaningful manner.

These studies identified a series of rhetorical moves/strategies/functions and typical lexico-grammatical features that lecturers employ in building coherent lecture discourse, which may help improve lecture comprehension among students and enhance teaching effectiveness. They all recognized the pedagogical benefits of identifying rhetorical move structure and linguistic patterns.

However, most of the research has focused on lectures given by native English lecturers. No genre study has been conducted to examine EMI lectures given by native Chinese lecturers. Furthermore, previous studies have been generally confined to move analysis of texts, while very few have paid attention to examining lecture discourse from an emic perspective. The present study intends to fill the research gaps through a contrastive analysis of the rhetorical move structure of EMI lectures between native English and Chinese lecturers supplemented by semi-structured interviews of lecturers' insider view on their discursive practices.

3. Methodology

3.1 Data Collection

EMI programs generally involve non-language disciplines (Dearden, 2014) and most EMI programs in China are science-oriented. Therefore, only science-related lectures were selected. Since academic lectures are generally topic-oriented, monologic lectures, where the lecturer monopolizes the floor of classroom discourse and focuses on content/topic instruction, were selected. With reference to Michigan Corpus of Academic Spoken English (MICASE)¹, the interactivity level of monologic lectures was stipulated at 100-450 words per turn (WPT) (Simpson-Vlach & Leicher, 2006). In addition, the legitimate class size in Chinese universities is typically 30 students, and the actual EMI class size in Chinese universities is generally less than that. For reference concerns, small lectures with 40 or fewer students from MICASE and the British Academic Spoken English (BASE) corpus² were chosen.

MICASE is an academic spoken language corpus of contemporary university speech collected within the microcosm of the University of Michigan in Ann Arbor between 1997 and 2002. It contains data from a range of 152 speech events at the university, 62 of which are lectures. The BASE corpus is a collection of academic spoken data recorded at the Universities of Warwick and Reading between 1998 and 2005. It consists of 160 lectures and 39 seminars collected in a variety of university departments across four broad disciplines. Twelve 'science-oriented', 'mostly monologic', 'small lectures' from MICASE and the BASE corpus were selected to form the Corpus of native English Lecturers (CEL), which contains a total of 105,052 running words.

Nevertheless, it is noteworthy that EMI lectures in Chinese universities are frequently delivered in a code meshing medium of both English and Chinese (Bolton & Botha, 2015; Hu & Duan, 2018). Therefore, EMI lectures of native Chinese lecturers are confined to lectures given to international students where only English is used in classroom instruction. Twelve lectures given by native Chinese lecturers were collected at a polytechnic university in the northwestern province of Shaanxi, China, to form the Corpus of native Chinese Lecturers (CCL). The university was selected due to its suitability regarding representing the commonality of universities in China in areas of various comprehensive strengths, as indicated by the national rank in 2017 (329th among 817 four-year public universities). CCL is a collection of 'science-oriented', 'mostly monologic', 'small lectures' given to international students by Chinese EMI lecturers. It has a total of 56,556 running words. Given the different corpus sizes between CCL and CEL, the present study conducted log-likelihood tests to normalize and compare move/step frequency. The lectures used for CCL come from the classroom teaching videos shot between 2016 and 2018. The lecture videos were transcribed by the researcher and checked for accuracy by four disciplinary researchers.

3.2 Data Analysis

Lee's (2016) model was used as the starting point for move identification because it adopted the Swalesian genre analysis framework, which is also the theoretical orientation of the present study, and it involved analysis of entire classroom sessions. However, Lee's (2016) research is an examination of language classes, whose major purposes

involve facilitating language learning through classroom activities such as repetition and substitution drills, pair work, role-playing, and games. Unlike the activity-orientation of language classes, university lectures are more topic-oriented, and thus are more concerned with content dissemination. Therefore, the framework of Lee (2016) was fine-tuned to serve the research object of university lectures. Three major phases were identified in CCL and CEL lectures, viz., *Opening Phase*, *Theme Network Building Phase*, and *Closing Phase*, each with several moves and steps.

The present study identifies moves/steps according to the communicative functions lecturers intend to achieve. The move length may vary from several sentences to one sentence or even a few words, resulting in multi-functional sentences, whereby more than one communicative purpose appears to be realized within that sentence. In such cases, the sentence was coded as one single move/step with reference to the most prominent communicative purpose (Hirano, 2009; Holmes, 1997; Ozturk, 2007). Each move/step type was provided with a concrete example illustrating the communicative function of that particular discourse segment in the RESULTS section.

Move coding involves two independent coders, including the researcher (the first author) and a doctoral student in the field of applied linguistics. The researcher randomly selected three lecture transcripts (25%) from both CCL and CEL, and tried to identify as many moves/steps as possible with reference to Lee (2016), and formulated an initial coding scheme. Then the researcher explained in detail the coding scheme to the second coder. After that, the second coder used the initial scheme to analyze the six lectures the researcher had analyzed. Any resulting disagreement of the move/step assignment, as well as inclusion or exclusion of move/step types, were negotiated. In addition, definitions/descriptions of each move/step were presented and fine-tuned until a final coding scheme was created. Utilizing the final coding scheme, the two coders independently coded another three lecture transcripts (25%) from CCL and CEL to check inter-coder reliability in move identification. The Cohen's kappa value reaches as high as 0.948, a compelling indication of almost perfect agreement between the two coders. Any further disagreement of the move/step assignment was discussed with a third coder (a genre analysis expert) until a consensus was reached. Then the researcher independently coded all the remaining lecture transcripts.

When all the moves and steps were coded, a customary follow-up step enacted was to determine the conventionality of moves/steps. Despite various move conventionality typology (dichotomy v.s. trichotomy) and cutoff frequency (e.g., Kanoksilapatham, 2011; Lee, 2016; Nwogu, 1997), the present study adopted the conventional v.s. optional dichotomy and set the cutoff at 75% (i.e., 9 out of 12 lectures) given the real-time nature of lectures. A move/step must occur in 75% of all lectures to be categorized as conventional, whereas any move/step with a distribution below that is rendered optional. Then, the conventionality and frequency of moves/steps between native English and Chinese lecturers were compared and analyzed.

On the basis of text analysis results, semi-structured interviews (APPENDIX A) were conducted with four Chinese EMI lecturers (APPENDIX B) concerning their conceptualization of specific moves and steps. Though the guiding questions were given as YES/NO questions, in most cases the interviewees would offer the reasons why they performed/avoided certain discursive practices under discussion. Otherwise, the researcher would explicitly ask them to give more explanation. The interviews were conducted in Chinese, and translated into English by the researcher. The interview results expect to triangulate the findings from move analysis of EMI lectures.

4. Results

This section reports on the rhetorical moves identified in CCL and CEL. The conventionality and frequency of each move and step were compared through log-likelihood calculator³ to investigate substantial variations between the two corpora. However, it must be noted that log-likelihood tests in the present study examined only those moves/steps that are conventional in at least one of the two corpora involved. It was of little sense comparing the frequency of two optional moves/steps, since any outlier value in either corpus might lead to an ostensibly significant difference. In addition, for the sake of convenience, all moves and steps were labeled in short forms. For example, *M2S1* refers to *Move 2 Step 1*. The source of each example is given in parenthesis at the end. For example, (CEL_12) indicates an example extracted from lecture 12 in CEL. The last thing to notice involves orthographic transcription conventions in

the BASE corpus, where the number in square brackets indicates the time of pause (seconds) and the spellings are not case sensitive.

A total of twelve moves were identified in CCL and CEL. Consistent with Young (1994), native English lecturers and Chinese lecturers share all moves and most steps. In addition, no sequential rhetorical move pattern was identified, which is congruent to the findings of Thompson (1994) and Cheng (2012). However, though lectures are generally pre-planned and well-structured, they are to a large extent affected by real-time classroom dynamics, such as lecturers' temporary adjustment of the lecture process. Substantial variations with regard to conventionality and frequency were found in several moves and steps. The following sections present comparisons of all moves and steps in individual phases of EMI lectures in CCL and CEL.

4.1 Rhetorical Move Structure in the Opening Phase in CCL and CEL

The Opening Phase serves to orient students to the lecture by signaling the official start, informing students of lecture-related issues, and setting up lecture agenda. Three moves were identified, including ***M1 Getting Started***, ***M2 Warming Up*** and ***M3 Setting Up Lecture Agenda***.

M1 Getting Started signals the official start of a lecture, and it is often realized by a combination of discourse markers, greetings, directives, and rhetorical questions.

1) *okay why don't we get started (CEL_12)*

M2 Warming Up is realized by four steps, including ***M2S1 Leading in***, ***M2S2 Recalling previous lecture(s)***, ***M2S3 Looking ahead***, and ***M2S4 Housekeeping***.

M2S1 Leading in prepares students for the lecture with issues directly or indirectly related to the lecture.

2) *You know when you normally walk in a famous area, and you see some nice, you know, landscapes, normally you will be attracted by different kind of rocks. ... so what is rocks? (CCL_02)*

M2S2 Recalling previous lecture(s) is generally employed by lecturers to present contents of previous lecture(s) to refresh students' memory.

3) *we've looked so far, at the design of fishes, the way they feed, and those kinds of issues, and we started last time thinking about food... (CEL_08)*

M2S3 Looking ahead functions to inform students of the upcoming lecture(s).

4) *this week and next you're gonna see some extensions where we look at alternative I-O point locations in the rack. (CEL_10)*

M2S4 Housekeeping is used to make class management announcements, and offer reminders.

5) *alright as you see we've got a slightly unusual event today we're being taped, and uh, basically we'll just pretend they're not here... (CEL_12)*

M3 Setting Up Lecture Agenda is used to brief contents to be covered in the lecture. Two steps were identified, including **M3S1 Announcing/Clarifying lecture theme** and **M3S2 Providing lecture scope**.

M3S1 Announcing/Clarifying lecture theme is used to explicitly introduce the lecture theme to students.

6) *Today we will talk about Chapter Four, igneous rocks. (CCL_02)*

M3S2 Providing lecture scope enumerates contents to be covered in the lecture.

7) *...this class we just learn the four parts: geological resources, nonmetallic mineral resources, metals and ore, and how ore forms. (CCL_03)*

Table 1.

Moves/Steps in the Opening Phase of EMI Lectures

Moves	Conventionality		Frequency ^a		LL critical value G2 ^b
	CCL	CEL	CCL	CEL	
M1 Getting Started	12 (100%)	5 (42%)	12	5	+ 8.91*
M2 Warming Up	7 (58%)	12 (100%)	13	29	- 0.31

<i>M2S1 Leading in</i>	6 (50%)	0 (0%)	8	0	N/A
<i>M2S2 Recalling previous lecture(s)</i>	3 (25%)	9 (75%)	3	11	- 1.23
<i>M2S3 Looking ahead</i>	0 (0%)	3 (25%)	0	4	N/A
<i>M2S4 Housekeeping</i>	1 (8%)	8 (67%)	2	14	N/A
<i>M3 Setting Up Lecture Agenda</i>	12 (100%)	12 (100%)	22	18	+ 6.65*
<i>M3S1 Announcing/Clarifying lecture theme</i>	11 (92%)	8 (67%)	12	13	+ 1.78
<i>M3S2 Providing lecture scope</i>	9 (75%)	4 (33%)	10	5	+ 6.21*

Note. ^a Frequency refers to the number of moves/steps that are identified. ^b The log-likelihood (LL) critical value G2 itself is always a positive number. However, indicators '+' and '-' are inserted to show overuse and underuse of corpus 1 (in this case CCL) relative to corpus 2 (in this case CEL). *p < 0.05, critical value G2 ≥ 3.84. N/A means such comparison is not applicable.

Table 1 shows the rhetorical move structure in the Opening Phase. According to table 1, CCL and CEL share similarities and differences in terms of conventionality and actual frequency of moves/steps. While **M3** is conventional in both corpora, **M1** and **M2** enjoy different conventionality status. Log-likelihood comparisons suggest significantly more use of **M1** and **M3S2** in CCL than in CEL.

4.2 Rhetorical Move Structure in the Theme Network Building Phase in CCL and CEL

As the body session of academic lectures, the Theme Network Building Phase consists of a series of recursive moves/steps that lecturers employ to help build a lecture theme network. Essential to this phase are the concepts of 'theme' and 'topic'. A theme reveals the essence of a lecture, upon which teaching was centered, whereas topics constitute the main points essential for building up the lecture theme. A lecture theme is usually supported by several topics. Generally, a typical lecture deals with one theme, which is often indicated by the lecture title.

There are six moves identified in the Theme Network Building Phase, including **M4 Introducing the Topic**, **M5 Elaborating on the Topic**,

M6 Building Theme Network, M7 Making Aside, M8 Housekeeping, and M9 Checking Comprehension & Consolidating Learning.

M4 Introducing the Topic is generally used to introduce topics germane to the lecture theme and is often realized by explicit commissives or rhetorical questions.

8) *what about prognostic indicators [1.2] well [3.2] one of the [0.6] best prognostic indicators still [1.2] is the level of your C-D-four count [3.7] (CEL_06)*

M5 Elaborating on the Topic is concerned with various strategies lecturers adopt to get across the topics. As the most important part of academic lectures, **M5** is realized by nine different steps.

M5S1 Explaining terms is used to give a detailed explanation of the technical terms involved.

9) *Ok, geological resource can **be defined as** concentration of naturally occurring solid, liquid, or gas material... (CCL_03)*

M5S2 Highlighting importance serves to stress the significance of the topic. It is often symbolized by the use of adjectives denoting importance, such as 'important', 'critical', 'key', and comparative/superlative adjectives.

10) *water is probably **the most important** system looked at [0.5] mainly because as I said [0.4] we are [0.6] we consist largely of water...(CEL_01)*

M5S3 Presenting background knowledge revolves around presenting background knowledge germane to the topic. It is often realized through a series of factual statements or real-world experience essential for understanding the topic.

11) *Yeah, em, at that time the Earth was controlled by all kind of dinosaurs, in the ocean, in the land, in the air, atmosphere, all kinds of...(CCL_01)*

In excerpt 11), the lecturer talked about the omnipresence of dinosaurs to prepare for the instruction of geological features of the Jurassic period.

M5S4 Demonstrating the topic involves demonstrating or rephrasing theories, mechanisms, motivations, methods, processes,

procedures, and results related to the topic, sometimes with examples and statistics.

12) *here are some figures* for [0.6] southern Africa [0.9] looking at prevalence rates [0.5] in different [0.3] states different provinces...just look how fast [0.7] the epidemic is spreading...(CEL06)

M5S5 Providing caveats is used to explicitly articulate caveats related to the topic. It is often realized by the use of such verbs and auxiliaries as 'remember', 'note', 'need', 'have to', etc.

13) Then **remember** also er, not all the fracture material can be universal, for each reservoir...Then you **need** redesign it. And then you can use it. (CCL_08)

M5S6 Making comments allows lecturers to share their understanding of and comments on the topic. This step is usually realized through the use of such adjectives as 'different', 'critical', or comparative/superlative adjective forms.

14) so this is generally regarded as the **best** solution it's not always [0.3] a **practical** solution particularly if you're [0.5] er in a rocky area...(CEL_04)

M5S7 Summing up the topic serves to summarize the topic to consolidate learning. This step is often explicitly indicated by verbs denoting summary, such as 'summarize', 'review', etc.

15) So let's **review** what we said, igneous rocks... (CCL_02)

M5S8 Initiating co-building lecture involves questions raised and answered by both lecturers and students to co-build the lecture so as to enhance learning. It generally consists of several rounds of turn-taking between lecturers and students.

16) nm0881: that that you that you measure only once per day from a rain gauge [0.4] I mean certainly on a site like ours [0.2] they're only read once a day [0.5]

sm0882: **yeah you you [0.2] you then for the standard five inch gauges but the**

nm0881: mm

*sm0882: **there are [0.9] automatic loggers which actually do what the***

nm0881: yeah well I understand you [0.4] so these these are what so so at some sites they would be measured twice a day but say on our [0.3] our climatological web [0.6] climatological site [0.4] we'll only use them once a day [0.5] (CEL_04)

In excerpt 16), the lecturer (*nm0881*) actively responded to student (*sm0882*)'s contribution (indicated by bolded cut-in lines) in class about the times of rain gauge measurements through several rounds of negotiation. In this way, the lecturer and students co-build lecture content and thus consolidate learning.

M5S9 Pinning down and/or clarifying the topic is used to confirm and clarify the topic. This step is often realized through the use of such expressions as 'What I want to say', or 'what I'm doing', etc.

*17) **What I want to say**, because the parameters here is the common parameters we have, have been seen, so here I will not, I will not want to er explain again. And **what I want to say** is that... (CCL_09)*

M6 Building Theme network functions to help build a whole knowledge network that serves the lecture theme. This move connects topic nodes in the theme network to help enhance the knowledge system of the course. It is realized through three different steps, including **M6S1 Referring to previous lecture/other source**, **M6S2 Specifying subsequent/future content**, and **M6S3 Connecting/Comparing topics**.

M6S1 Referring to previous lecture/other source involves creating a theme network by connecting the present lecture with previous lecture sessions or knowledge from other sources. It makes connections between earlier parts and the present part of the lecture, between the present lecture and the previous ones, as well as contents from other sources such as textbooks, research articles, or academic monographs.

*18) We already, **we've already studied about it before**. And when these kinds of rocks in mantle or upper mantle or lower crust, when it's melted, then the magma is formed. And **we also mentioned** another content... (CCL_02)*

M6S2 Specifying subsequent/future content is used to reserve a node in the theme network by specifying subsequent/future content that may support the theme of the present lecture. This step is usually indicated by verb phrases and time phrases showing plans of the future, i.e., 'we are going to', 'in section X' and 'later'.

19) *So this is technology probably **we are going to** talk **in section three**. I think **we're going to** talk about that. (CCL_08)*

M6S3 Connecting/Comparing topics is used to connect or compare topics. This step is often realized through comparative adjective phrases.

20) *the the key thing here [0.3] is to see the **parallel** [0.4] here between linear [0.3] particle motion [0.3] and rotational motion [0.7] and we did a very **similar** thing...(CEL02)*

M7 Making Aside refers to classroom talk less germane to lecture content but may be conducive to understanding the topic, as well as building and maintaining teacher-student rapport. Essentially, aside is peripherally related to the lecture contents, but it does not include small talk to buffer the serious classroom atmosphere.

21) *uh now I drew this by hand because I was having trouble getting my, uh, graphing calculator to allow me to take, the image it produced for the graph and then put it in the power point show. but hopefully this is a good enough, approximation that you can see, how the processing time increases. (CEL_12)*

The purpose of 21) is not to inform students of the lecturer's trouble with graphing a calculator. Instead, the lecturer intended to get students to notice the increment of processing time through the aside of hand-drawn graphs.

M8 Housekeeping is used to make class management announcements, offer reminders, and give recommendations to students. These trivial things were subsumed under the same category since they generally are less directly related to the content.

22) ***can I remind you** that we've got [0.4] the tutorial tomorrow...(CEL_03)*

M9 Checking Comprehension & Consolidating Learning serves to check on students' comprehension as well as to consolidate learning. Since checking comprehension levels and consolidating learning are essentially

intertwined, it makes little sense to impose an artificial dichotomy to split it into two individual moves/steps.

23) okay...? *any other questions?* <PAUSE:08> (CEL_10)

Table 2

Moves/Steps in the Theme Network Building Phase

Moves	Conventionality		Frequency ^a		LL critical value G2 ^b
	CCL	CEL	CCL	CEL	
<i>M4 Introducing the Topic</i>	12 (100%)	12 (100%)	112	162	+ 4.07*
<i>M5 Elaborating on the Topic</i>	12 (100%)	12 (100%)	420	664	+ 6.59*
<i>M5S1 Explaining terms</i>	7 (58%)	5 (42%)	16	12	N/A
<i>M5S2 Highlighting importance</i>	1 (8%)	4 (33%)	1	6	N/A
<i>M5S3 Presenting background knowledge</i>	12 (100%)	12 (100%)	58	101	+ 0.17
<i>M5S4 Demonstrating the topic</i>	12 (100%)	12 (100%)	270	320	+29.48*
<i>M5S5 Providing caveats</i>	3 (25%)	10 (83%)	9	43	- 8.03*
<i>M5S6 Making comments</i>	7 (58%)	12 (100%)	19	74	- 9.47*
<i>M5S7 Summing up the topic</i>	5 (42%)	9 (75%)	9	14	+ 0.17
<i>M5S8 Initiating co-building lecture</i>	8 (67%)	12 (100%)	36	58	+ 0.44
<i>M5S9 Pinning down and/or clarifying the topic</i>	2 (17%)	11 (92%)	2	36	- 19.54*
<i>M6 Building Theme Network</i>	11 (92%)	12 (100%)	55	156	- 7.76*
<i>M6S1 Referring to previous lecture/other Source</i>	8 (67%)	12 (100%)	13	72	- 16.60*
<i>M6S2 Specifying subsequent/future content</i>	4 (33%)	8 (67%)	8	30	N/A
<i>M6S3 Connecting/ Comparing topics</i>	11 (92%)	11 (92%)	34	54	+ 0.50
<i>M7 Making Aside</i>	2 (17%)	9 (75%)	4	19	- 3.51
<i>M8 Housekeeping</i>	3 (25%)	10 (83%)	3	40	- 19.00*

<i>M9 Checking Comprehension & Consolidating Learning</i>	5 (42%)	6 (50%)	8	31	N/A
--	---------	---------	---	----	-----

Note. ^a Frequency refers to the number of moves/steps that are identified. ^b The log-likelihood (LL) critical value G2 itself is always a positive number. However, indicators '+' and '-' are inserted to show overuse and underuse of corpus 1 (in this case CCL) relative to corpus 2 (in this case CEL). *p < 0.05, critical value G2 ≥ 3.84. N/A means such comparison is not applicable.

Table 2 indicates that all moves/steps in the Theme Network Building Phase appear in both CCL and CEL. However, there are differences in terms of conventionality and frequency. ***M4***, ***M5***, and ***M6*** are conventional, but ***M7***, ***M8***, and ***M9*** are optional in CCL. In contrast, all moves are conventional in CEL. On the other hand, log-likelihood comparisons reveal significantly more use of ***M4*** and ***M5S4***, but less use of ***M5S5***, ***M5S6***, ***M5S9***, ***M6S1***, and ***M8*** by Chinese lecturers than their English counterparts.

4.3 Rhetorical Move Structure in the Closing Phase in CCL and CEL

The Closing Phase serves to summarize the lecture, get students to cool down, and say farewell. Three moves were identified in this phase, including ***M10 Wrapping Up Lecture***, ***M11 Cooling Down***, and ***M12 Ending Lecture***.

M10 Wrapping Up Lecture is used to make summaries of the lecture content. It is realized by listing the major contents of the lecture. Though sharing some commonalities with ***M5S7 Summing up the topic***, ***M10*** is a summary of major contents of the whole lecture while the ***M5S7*** generally gives a recap of an individual topic.

24) so we've talked about [1.2] radiolysis [0.3] using scavengers of organic systems [0.3] and I've finished up by talking a bit about water...(CEL_01)

M11 Cooling Down serves to attend to course-related matters and/or to discuss future lectures. It consists of two steps, including ***M11S1 Housekeeping*** and ***M11S2 Looking ahead***.

M11S1 Housekeeping is used to assign homework and offer homework-related reminders.

25) *And the last part about the partial melting, and I think I won't talk about this here and that's kind of your homework... (CCL_02)*

M11S2 Looking ahead presents students with a preview of upcoming lectures.

26) *next week we'll talk about uh human populations and, allometry. (CEL_11)*

M12 Ending Lecture declares the ending of the lecture. It consists of two steps, including **M12S1 Dismissing class** and **M12S2 Farewell**.

M12S1 Dismissing class signals the ending of the lecture.

27) *Ok. That's all today. (CCL_12)*

M12S2 Farewell ends the lecture with farewell and/or gratitude.

28) *thanks very much indeed (CEL06)*

Table 3

Moves/Steps in the Closing Phase of EMI lectures

Moves	Conventionality		Frequency ^a		LL critical value G2 ^b
	CCL	CEL	CCL	CEL	
M10 Wrapping Up Lecture	7 (58%)	2 (17%)	8	2	N/A
M11 Cooling Down	8 (67%)	10 (83%)	13	19	+ 0.44
<i>M11S1 Housekeeping</i>	5 (42%)	5 (42%)	6	7	N/A
<i>M11S2 Looking ahead</i>	5 (42%)	9 (75%)	7	12	+ 0.03
M12 Ending Lecture	12 (100%)	12 (100%)	15	16	+ 2.34
<i>M12S1 Dismissing class</i>	8 (67%)	10 (83%)	8	12	+ 0.22
<i>M12S2 Farewell</i>	7(58%)	3 (25%)	7	4	N/A

Note. ^a Frequency refers to the number of moves/steps that are identified. ^b The log-likelihood (LL) critical value G2 itself is always a positive number. However, indicators '+' and '-' are inserted to show overuse and underuse of corpus 1 (in this case CCL) relative to corpus 2 (in this case CEL). *p < 0.05, critical value G2 ≥ 3.84. N/A means such comparison is not applicable.

Table 3 reveals that all moves/steps in the Closing Phase appear in both CCL and CEL. Again, differences were found in conventionality and frequency. While **M10** (optional) and **M12** (conventional) enjoy the same conventionality in the two corpora, **M11** is optional in CCL, but conventional in CEL. No statistical difference was found in any move/step in the Closing Phase in the two corpora.

5. Discussion

In view of the results presented above, substantial differences were found in the rhetorical move structure in the Opening Phase and the Theme Network Building Phase in CCL and CEL. Different from findings on written data (Kanoksilapatham, 2015), variations were found at both move and step levels between native English and Chinese lecturers.

In the Opening Phase, **M1** and **M3S2** display substantial variations in CCL and CEL.

M1 Getting Started was observed in all CCL lectures, but it only occurred in five CEL lectures. There is significantly more use of **M1** and in CCL than in CEL. This significant difference could be due to the persistence in the completeness of lecture procedures and forms among native Chinese lecturers, which was confirmed by the interview data. In contrast, native English lecturers do not seem to be concerned as much in this aspect.

Chinese EMI lecturers also used significantly more **M3S2 Providing lecture scope** to explicitly proclaim the lecture scope even though it was generally given in PowerPoint slides, as indicated in the teaching videos. This variation could come down to the Chinese EMI lecturers' concern for international students and program quality, which can be illustrated in the statement below.

I feel concerned since many of the students do not have solid background either in discipline knowledge or the English language. Some of them are demotivated, and they sometimes have little idea of the course progress.
(Interviewee D)

Though it might seem a bit redundant to verbally repeat the PowerPoint slide content, all four interviewees acknowledged the importance of **M3S2** since it gave a purview of lecture content.

In the Theme Network Building Phase, *M4*, *M8*, as well as several steps in *M5* and *M6*, display substantial variations in CCL and CEL. Specifically, there are significantly more *M4*, *M5S4*, but less *M5S5*, *M5S6*, *M5S9*, *M6S1*, and *M8* identified in CCL than in CEL.

More usage of *M4 Introducing the Topic* could be attributed to the syllabus design of the EMI courses in Chinese universities. All interviewees complained about the excessive content stipulated in the course syllabus. The statement below well illustrates such discontent.

Perhaps out of the concern for international program quality, the teaching affairs administration of the university stipulated too much content in the syllabus. Therefore, I don't really have much choice, but to try my best to cover as much content as possible. (Interviewee C)

Interview data revealed two-folded factors leading to more use of *M5S4 Demonstrating the topic* by the Chinese lecturers than the English lecturers. On the one hand, as mentioned in the discussion of *M4*, lecturers were compelled to cover as much content as possible, hence more content demonstration. On the other hand, interviewees B, C, and D mentioned that they feel obliged to demonstrate more on related topics since they were genuinely concerned with international students' academic background and were thus uncertain whether they had made themselves understood by the international students.

Log-likelihood comparisons also reveal significantly less use of the three steps of *Move5* in CCL than in CEL, viz., *M5S5 Providing caveats*, *M5S6 Making comments*, and *M5S9 Pinning down and/or clarifying the topic*. This contradicts the interview data since all four interviewees contended it essential to warn students of key information, share with students their understanding of the content, and clarify what they discussed in class. One possible explanation could be that some Chinese EMI lecturers might be less equipped to achieve such communicative functions in the English medium. This was not due to low English proficiency in a general sense, but could be attributed to lack of specific English discourse skills to deliver EMI lectures in appropriate English, something similar to the construct 'English-for-Teaching' in English Language Teaching (ELT) research where teachers are expected to teach English in English (Freeman, 2017; Freeman et al., 2015; Richards, 2017).

Chinese lecturers might have paid less attention to connecting knowledge in and between lectures and from other sources, leading to much less use of *M6S1*. All four interviewees articulated that they could not always refer to previous lectures or other sources due to time allocation limits in class. Though Thompson (1994) found this step in 33% (6/18) of the lectures she examined, the present study identified this step as conventional in CEL lectures. Diachronically, English lecturers might have turned to pay more attention to connecting present lectures with previous ones or other resources. In contrast, Chinese lecturers might be confined to instilling as much textbook content as possible, as was stipulated in the course syllabi.

M8 Housekeeping is similar in function to *M2S4 Housekeeping*, but more inclusive since *M8* also entails giving recommendations. There was significantly less *M8* in CCL than in CEL. This could be related to the availability of new social media. All interviewees mentioned that such course-related issues as class time/venue change, office hours, paper deadline, after-class tutorial, and suggested reading were generally informed to students through social media in advance. In contrast, during the time when MICASE (1997-2002) and BASE (1998-2005) were collected, social media might not be so accessible to lecturers and students, thus more need for CEL lecturers at that time to do such housekeeping in class.

No statistical difference was identified in any move/step in the Closing Phase between CCL and CEL, suggesting a similar rhetorical move structure in this phase between native Chinese and English lecturers.

6. Conclusion

The present study aims to compare rhetorical move structure in EMI lectures given by English and Chinese lecturers. Twelve moves were found to recursively occur in CCL and CEL, though no sequential rhetorical move patterns were identified. Substantial variations were identified in moves/steps in the Opening Phase and the Theme Network Building Phase. Factors such as concern for the program quality, dense course syllabus requirements, lack of English for EMI teaching (rather than low English proficiency in a general sense), as well as wider access to social media may have caused such variations.

The examination of variations in rhetorical move structure of EMI lectures is both theoretically and pedagogically significant. The move

structure model proposed in the present study further demonstrates the power and applicability of the ESP genre analysis approach. Pedagogically, the variations revealed are particularly relevant for EMI education in China and other non-Anglophone countries or regions. Training enhancement programs to specifically improve English for EMI teaching (rather than general English proficiency) are suggested. In particular, lecturers should be trained with the appropriate language to remind students of key information, share their comments, clarify topics, and connect knowledge from different sources. In addition, it is also essential that lecturers should have more voice in course syllabus design.

However, a few intrinsic limitations of the study need highlighting. First, the corpora used for the research are relatively small. Only 24 lectures are used to make manageable the genre analysis of EMI lectures. Therefore, caution should be applied when interpreting the research results. Second, since the native English lectures are selected from the ready-made corpora of MICASE and the BASE corpus, it is impossible to get access to lecturers to conduct interviews on their motivation and/or confirmation of certain moves/steps. Well-coordinated international projects are conducive to contrastive studies of EMI lectures across cultures inasmuch as assisting in ensuring the synchronicity and contemporariness of data so that the results transpire to be of a more theoretical and pedagogical value.

Acknowledgements

The authors would like to thank the anonymous LEARN Journal reviewers for their insightful suggestions and comments.

About the Authors

Lin Deng: a PhD candidate in English Language Studies in the School of Foreign Languages, Institute of Social Technology, Suranaree University of Technology, Thailand. He received his MA degree in Linguistics and Applied Linguistics from Xi'an International Studies University, China. His research interests include genre analysis, corpus linguistics, and English for Specific Purposes.

Anchalee Wannaruk: an Associate Professor at the School of Foreign Languages, Institute of Social Technology, Suranaree University of Technology, Thailand. She received a PhD in Second Language Acquisition

and Teacher Education from the University of Illinois at Urbana-Champaign. Her main interests include spoken discourse analysis, sociolinguistics, pragmatics, and corpus linguistics.

Endnotes

¹ MICASE is an on-line searchable collection of transcripts of academic speech events recorded at the University of Michigan. <https://quod.lib.umich.edu/m/micase/>.

² The British Academic Spoken English (BASE) corpus was developed at the Universities of Warwick and Reading, under the directorship of Hilary Nesi, with Paul Thompson. <http://www.warwick.ac.uk/go/base/>.

³ Log-likelihood calculator is a web-based wizard which is provided by Paul Rayson (University of Lancaster) to compare the normalized frequency of items between corpora of different sizes. <http://ucrel.lancs.ac.uk/llwizard.html>.

References

- Bhatia, V. K. (1993). *Analysing genre: Language use in professional settings*. Longman.
- Bolton, K., & Botha, W. (2015). English in China's universities: Past and present. *World Englishes*, 34(2), 190-210. <https://doi.org/10.1111/weng.12133>.
- Chaudron, C., & Richards, J. (1986). The effect of discourse markers and the comprehension of lectures. *Applied Linguistics*, 7(2), 113-127. <https://doi.org/10.1093/applin/7.2.113>.
- Cheng, S. W. (2012). "That's it for today": Academic lecture closings and the impact of class size. *English for Specific Purposes*, 31(4), 234-248. <https://doi.org/10.1016/j.esp.2012.05.004>.
- Dearden, J. (2014). *English as a medium of instruction-a growing global phenomenon*. https://www.britishcouncil.org/sites/default/files/e48_4_emi_-_cover_option_3_final_web.pdf
- Deroey, K. L., & Taverniers, M. (2012). Just remember this: Lexicogrammatical relevance markers in lectures. *English for Specific Purposes*, 31(4), 221-233. <https://doi.org/10.1016/j.esp.2012.05.001>.

- Flowerdew, J., & Wan, A. (2010). The linguistic and the contextual in applied genre analysis: The case of the company audit report. *English for Specific purposes*, 29(2), 78-93. <https://doi.org/10.1016/j.esp.2009.07.001>.
- Flowerdew, L. (2016). A genre-inspired and lexico-grammatical approach for helping postgraduate students craft research grant proposals. *English for Specific Purposes*, 42, 1-12. <https://doi.org/10.1016/j.esp.2015.10.001>.
- Freeman, D. (2017). The Case for teachers' classroom English proficiency. *RELC Journal*, 48 (1), 31–52. <https://doi.org/10.1177/0033688217691073>.
- Freeman, D., Katz, A., Garcia Gomez, P., & Burns, A. (2015). English-for-teaching: Rethinking teacher proficiency in the classroom. *ELT Journal*, 69(2), 129–39. <https://doi.org/10.1093/elt/ccu074>.
- Hirano, E. (2009). Research article introductions in English for specific purposes: A comparison between Brazilian Portuguese and English. *English for Specific Purposes*, 28(4), 240-250. <https://doi.org/10.1016/j.esp.2009.02.001>.
- Holmes, R. (1997). Genre analysis and the social sciences: An investigation of the structure of research article discussion sections in three disciplines. *English for Specific Purposes*, 16(4), 321-337. [https://doi.org/10.1016/S0889-4906\(96\)00038-5](https://doi.org/10.1016/S0889-4906(96)00038-5).
- Hu, G. (2009). The craze for English-medium education in China: Driving forces and looming consequences. *English Today*, 25(4), 47–54. <https://doi.org/10.1017/S0266078409990472>.
- Hu, G., & Duan, Y. (2018). Questioning and responding in the classroom: A cross-disciplinary study of the effects of instructional mediums in academic subjects at a Chinese university. *International Journal of Bilingual Education and Bilingualism*, 22(1), 1-19. <https://doi.org/10.1080/13670050.2018.1493084>.
- Hu, G., & Lei, J. (2014). English-medium instruction in Chinese higher education: A case study. *Higher Education*, 67(5), 551-567. <https://doi.org/10.1007/s10734-013-9661-5>.
- Hu, G., & McKay, S. L. (2012). English language education in East Asia: Some recent developments. *Journal of Multilingual and Multicultural Development*, 33, 345–362. <https://doi.org/10.1080/01434632.2012.661434>.

- Hu, G., Li, L., & Lei, J. (2014). English-medium instruction at a Chinese University: Rhetoric and reality. *Language Policy*, 13(1), 21-40. <https://doi.org/10.1007/s10993-013-9298-3>.
- Kanoksilapatham, B. (2005). Rhetorical move structure of biochemistry research articles. *English for Specific Purposes*, 24(3), 269-292. <https://doi.org/10.1016/j.esp.2004.08.003>.
- Kanoksilapatham, B. (2011). Civil engineering research article Introductions: Textual structure and linguistic characterization. *The Asian ESP Journal*, 7(2), 55-84.
- Kanoksilapatham, B. (2015). Distinguishing textual features characterizing structural variation in research articles across three engineering sub-discipline corpora. *English for Specific Purposes*, 37, 74-86. <https://doi.org/10.1016/j.esp.2014.06.008>.
- Kwan, B. S. C. (2006). The schematic structure of literature reviews in doctoral theses of applied linguistics. *English for Specific Purposes*, 25, 30-55. <https://doi.org/10.1016/j.esp.2005.06.001>.
- Lee, J. J. (2009). Size matters: an exploratory comparison of small-and large-class university lecture introductions. *English for Specific Purposes*, 28(1), 42-57. <https://doi.org/10.1016/j.esp.2008.11.001>.
- Lee, J. J. (2016). "There's intentionality behind it...": A genre analysis of EAP classroom lessons. *Journal of English for Academic Purposes*, 23, 99-112. <https://doi.org/10.1016/j.jeap.2015.12.007>.
- Nwogu, K. N. (1997). The medical research paper: Structure and functions. *English for specific purposes*, 16(2), 119-138. [https://doi.org/10.1016/S0889-4906\(97\)85388-4](https://doi.org/10.1016/S0889-4906(97)85388-4).
- Olsen, L. A., & Huckin, T. H. (1990). Point-driven understanding in engineering lecture comprehension. *English for Specific Purposes*, 9(1), 33-47. [https://doi.org/10.1016/0889-4906\(90\)90027-A](https://doi.org/10.1016/0889-4906(90)90027-A).
- Ozturk, I. (2007). The textual organisation of research article introductions in applied linguistics: Variability within a single discipline. *English for Specific Purposes*, 26(1), 25-38. <https://doi.org/10.1016/j.esp.2005.12.003>.
- Pho, P. D. (2008). Research article abstracts in applied linguistics and educational technology: A study of linguistic realizations of rhetorical move structure and authorial stance. *Discourse Studies*, 10, 231-250. <https://doi.org/10.1177/1461445607087010>.

- Richards, J. C. (2017) Teaching English through English: Proficiency, pedagogy and performance, *RELC Journal*, 48 (1), 7–30. <https://doi.org/10.1177/0033688217690059>.
- Simpson-Vlach, R. C., & Leicher, S. (2006). *The MICASE handbook: A resource for users of the Michigan corpus of academic spoken English*. University of Michigan Press.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge University Press.
- Swales, J., & Feak, C. (2000). *English in today's research world: A writing guide*. University of Michigan Press.
- Thompson, S. E. (1994). Frameworks and contexts: A genre-based approach to analyzing lecture introductions. *English for Specific Purposes*, 13(2), 71-86. [https://doi.org/10.1016/0889-4906\(94\)90014-0](https://doi.org/10.1016/0889-4906(94)90014-0).
- Wannaruk, A., & Amnuai, W. (2016). A comparison of rhetorical move structure of applied linguistics research articles published in international and national Thai journals. *RELC Journal*, 47(2), 193–211. <https://doi.org/10.1177/0033688215609230>.
- Yang, R-Y. & D. Allison (2003). Research articles in applied linguistics: moving from results to conclusions. *English for Specific Purposes*, 22(4), 365-385. [https://doi.org/10.1016/S0889-4906\(02\)00026-1](https://doi.org/10.1016/S0889-4906(02)00026-1).
- Young, L. (1994). University lectures - macro-structure and micro-features. In J. Flowerdew (Ed.), *Academic listening: Research perspectives* (pp. 159-175). Cambridge University Press.

Appendix A

Guiding Questions for Semi-structure Interviews

1. Do you always officially announce the start of lectures?
2. Do you always provide explicit lecture scope to students?
3. Do you always cover as much content as possible?
4. Do you always demonstrate each topic to the utmost?
5. Do you always provide caveats?
6. Do you always make comments?
7. Do you always clarify what you said while lecturing?
8. Do you always refer to previous lectures or knowledge from other sources?

9. Do you always do housekeeping during lecturing, e.g., make class management announcements, offer reminders, and give recommendations?

Appendix B

General Information of Interviewees

Interviewees	Professional title	English speaking country experience	Education background	EMI teaching experience
A	Professor	18 months	PhD	5 years
B	Lecturer	8 months	Master	12 years
C	Associate Professor	12 months	PhD	10 years
D	Associate Professor	12 months	PhD	5 years