

Original Paper

A Corpora-based Study of Engagement Markers in Chinese and English Research Article by Same Chinese Scholars

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Abstract

Drawing upon Hyland's (2005a) reader engagement modal, this study investigates both the similarities and differences in the frequency of engagement markers across different linguistic contexts by constructing corpora of Chinese-English research articles by the same Chinese scholars. It is found that there are statistically significant differences in the use of engagement markers between two corpora and Chinese scholars use engagement markers more frequently and strategically in English. They employ more personal asides to solicit reader collusion and questions to lead the reader in English research articles. Additionally, they also favor reader mentions, which reflects they prioritize interactive communication with readers in English research articles. Beyond these differences, the study also reveal notable similarities in two corpora. Findings indicate that scholars adopt appeals to shared knowledge with comparable frequency and avoid second-person pronouns in Chinese and English research articles due to the similar writing conventions. The research results are of great significance for deepening the understanding of the cultural differences and academic writing in bilingual context and enhancing the Chinese scholars' ability of international academic writing.

Keywords

engagement markers, comparison, research articles, corpora, Chinese scholars

1. Introduction

Research articles (RAs hereafter) not only serve to transmit academic information but also embody the interpersonal relationship between authors and readers (Kopple, 1985; Crismore & Steffensen, 1993; Hyland 1998), with the latter serving as a key factor for influencing the quality of RAs (Hyland & Jiang, 2016a). The successful realization of interpersonal communication in RAs often requires authors to accurately judge the readers, interpret the resources of the articles and predict the readers' reactions,

which always involves the use of “interactional metadiscourse” (Hyland, 2005b, p. 37, 2017; Yang, 2007; Bal-Gezegin, 2016; Birhan, 2021; Lasagabaster & Bier, 2025). Engagement, a subcategory of interactional metadiscourse, represents a reader-oriented aspect of interaction, concerning the ways authors rhetorically acknowledge the presence of their readers in a text (Zou & Hyland, 2020). Nowadays, existing researches on engagement mainly focus on comparisons among different cultures, which mainly describe how national academic writing conventions and sociocultural contexts influence the selection of engagement markers (e.g., Zarei & Mansoori, 2007; Sun & Tong, 2015), and different disciplines, which typically categorize disciplines into Humanities and Social Sciences to explore the influence of interdisciplinary differences on the frequency of engagement markers in RAs, (e.g., Hyland & Tse, 2004; Hyland, 2005a; Bu et al., 2025). Furthermore, there are also numerous studies suggest that various academic levels may result in different frequency of engagement markers in RAs, and second language learners constitute the primary research population (e.g., Hyland, 2004, 2010; Zhou, 2012; Qin & Chen, 2013; Xu, 2013; Leea & Deakin, 2016). While these studies on engagement have yielded detailed insights, further research is still needed with regard to its study of theoretical framework, Chinese-English comparison, and the selection of corpora.

Against this backdrop, the study will construct two self-compiled corpora of Chinese-English RAs authored by same Chinese scholars to reveal the adaptive adjustments in their use of engagement markers when composing RAs in both Chinese and English. By providing textual evidence regarding the authorial engagement preference between bilingual corpora, this study can first offer specific methodological insights for corpus selection in related fields and enrich the application of related theoretical framework on Chinese-English comparison. Meanwhile, Chinese scholars are faced with increasing pressure to publish RAs in international refereed journals in English (Mu et al. 2015; Xiaole et al. 2021), so this study can help Chinese students and scholars deepen their systematic understanding of the differences of academic preferences and cultural traditions between English and Chinese and enhance their academic writing competence in English.

2. Literature Review

2.1 Engagement and Relevant Researches

Engagement refers to a major way that writers respond to potential negatability of their claims by intervening to engage actively or position readers, focusing their attention, recognizing their uncertainties including them as discourse participants and guiding them to interpretations (Hyland, 2001), which should be clearly distinguished from engagement proposed by Martin and White (2005), the sub-system of the appraisal framework. In fact, engagement in (White, 2002), is a system that can best describes the effective/less than effective negotiation of writer-reader interaction to create a contrastive stance in argumentation (Wu, 2007), which is closer to the concept of stance, the writer-oriented strategy, within in Hyland’s (2005a) interactional framework (Hyland & Jiang, 2016; Dontcheva-Navratilova, 2021), which stands writer’s expression of personal attitudes and assessments

of the status of knowledge in a text (Hyland & Jiang, 2016b).

Previous studies on engagement in RAs have provided compelling evidence that cultural backgrounds, disciplinary conventions and academic proficiency exert a significant impact on the frequency of engagement markers occurrences. Regarding disciplinary influences, some RAs have mainly involved the analysis and study of the influences of different disciplines on engagement markers from both synchronic perspectives (e.g., Hyland, 2005a; Sahragard & Yazdanpanahi, 2017; He & Yan, 2021) and diachronic perspectives (e.g., Hyland & Jiang, 2016, 2018; Deng et al., 2021). Cross-cultural RAs about engagement markers have established the English language as the primary reference benchmark, and Spanish-English comparisons (e.g., Lafuente - Millán, 2014; Mur-Duenñas, 2011) have constituted one of the most prevalent linguistic dyads (Hyland et al., 2021). In addition, other studies have examined comparison between Persian-English (e.g., Zarei & Mansoori, 2007; Abdi, 2009), Turkish-English (e.g., Akbas, 2012; Kirişçi & Duruk, 2022), Arabic-English (e.g., Alghazo et al., 2021), Czech-English (e.g., Dontcheva-Navratilova, 2021) and Chinese-English (e.g., Kim & Lim, 2013; Sun & Tong, 2015). The last line of RAs have investigated how the frequency of engagement markers have been effected by different academic level and these studies have focused on three primary comparative pairings: second language learners versus native English speakers (e.g., Gai & Wang, 2022; Ajideh et al., 2024; Wu, 2025), expert scholars versus second language learners (e.g., Zhou, 2012; Qin & Chen, 2013; Khoshshima, 2018; lou & Wang, 2019), and second language learners at different proficiency levels (e.g., Hyland, 2004, 2010; Xu, 2013; Leea & Deakin, 2016).

2.2 Engagement between English and Chinese Academic Research

In the English-Chinese comparative studies on interactional metadiscourse, however, most research has focused on stance devices, and a number of explicit conclusions have been drawn. For instance, Chinese scholars publishing in Chinese-medium journals are more likely to convey authority and credibility (Hu & Cao, 2011; Yang, 2013; Chen & Zhang, 2017); the dominance of scientism in Chinese thought has elevated positivism to the ideal research paradigm, potentially accounting for the prevalence of boosters in its RAs (Hu & Cao, 2011; Gong et al., 2021); Chinese authors may be more inclined to blend their individual self into a group identity influenced by a collectivist culture (Gong et al., 2021). By contrast, the English-Chinese comparative studies on engagement markers remain relatively underdeveloped, with relevant research findings being fragmented. A representative contribution to this field is Mu et al. (2015), which proposed that the reason for the lowest frequency of engagement markers in Chinese-English academic corpora in the fact that the academic genre needs to be objective and impersonal in persuasion. Nevertheless, the study is limited in that it relied heavily on Hyland (2005a), which is a broad or unmodified version about the study of reader engagement (Bu et al. 2025) and the discussion pertaining to engagement markers is relatively insufficient. In contrast to the cursory discussion of reader engagement above, Wu (2010) built a corpus, consisting of 70 experimental or data-based researches (35 in English and Chinese, respectively) in the field of linguistics and applied linguistics to discuss the different distribution of engagement in detail, which

also made an innovative contribution by classifying and discussing appealing to shared knowledge, a subcategory of engagement, whose significance had merely been emphasized in prior RAs (Bu & Wu, 2024). Subsequently, drawing on this study's analytical framework for engagement markers and findings from other relevant researches, Bu et al. (2025) have reorganized and developed a more comprehensive research framework and explored how authorial identity is constructed through reader engagement resources between soft and hard disciplines. However, the RAs above selected the English-Chinese RAs, coming from two heterogeneous groups of writers as their corpora, overlooking the fact that such individual factors as gender, experience, ethnicity, class and so on may influence how we understand our disciplinary participation and how we want to interact with our colleagues (Tse & Hyland, 2009), resulting in different frequency of engagement markers.

To sum up, most of the English-Chinese RAs on reader engagement still have three limitations. Firstly, previous researches were based on theoretical framework proposed by Hyland (2005a), lacking systematic discussions on the internal subcategories of engagement. Secondly, existing studies failed to take individual variables into consideration, that is, they ignore the potential impact of individual factors on the use of engagement markers. Thirdly, the focus of contrastive studies between Chinese and English has mostly been on reader stance, so there is a relative lack of contrastive analysis on reader engagement.

2.3 The Present Study

To overcome the above limitations, this study is grounded in the reader engagement frameworks proposed by Hyland (2005a), Bu and Wu (2024), and Bu et al. (2025). We also construct corpora of Chinese and English RAs authored by the same group of Chinese scholars in the field of applied linguistics to avoid the influence of individual factors in order to systematically examine the distribution characteristics of engagement markers in bilingual RAs, and analyze the influences exerted by different cultures and readership and academic conventions. The ultimate objectives are to strengthen foreign scholars' understanding of the cultural differences embedded in Chinese and English academic RAs, enhance the academic writing competence of Chinese students and scholars and contribute to dissemination effectiveness of academic achievements by Chinese scholars.

3. Methodology

3.1 Research Questions

This study aims to address the following two research questions:

- (1) What is the overall frequency distribution of engagement markers by the same Chinese scholars in Chinese and English RAs?
- (2) What are the similarities and differences in the frequency distribution of the subcategories of engagement markers by the same Chinese scholars in Chinese and English RAs? and what are the possible reasons for these similarities and differences?

3.2 Corpora Used in the Study

This research is based on two corpora: the Chinese RAs corpus (CC), containing around 435,995 words and the English RAs corpus (EC), about 344,314 words. There are 50 RAs each in the Chinese and English corpora, all from same 13 Chinese influential scholars and the selected RAs often are published in journals indexed by Chinese Social Sciences Citation Index (CSSCI), such as *Foreign Language Teaching*, *Foreign Language Teaching and Research*, and *Foreign Language Research* or Social Sciences Citation Index (SSCI), such as *Applied Linguistics*, *Journal of English for Academic Purposes*, and *Journal of Pragmatics*. Meanwhile, to avoid the singularity of the data, each scholar is allowed to select no more than five articles in both Chinese and English. Only the title, abstract and main text information are retained in two corpora and acknowledgments, references, figures and other supplementary materials are removed to ensure pure and coherent RAs.

3.3 Analytical Framework

The study adopts Hyland's (2005a) reader engagement modal as its fundamental framework, as it reorganize accurately the categories of engagement based on previous taxonomies (Mu et al. 2015), and has been widely used in recent studies such as Xue and Li (2025), Liu and Chen (2025). Then, the study also incorporates the supplements proposed by Bu and Wu (2024) and Bu et al. (2025) to achieve a more detailed and nuanced analysis of reader engagement. Therefore, engagement can be categorized as follows (see Table 1).

Table 1. Analytical Framework (Hyland 2005a; Bu & Wu 2024; Bu et al., 2025)

Engagement	Subcategories	English examples	Chinese examples
Reader mentions	Inclusive pronouns	reader we, our, us	我们, 我们的
	Exclusive pronouns	reader one, ones, reader your, you	读者, 大家, 各位 你, 你们
Directives	Imperative	let, see, consider, note	让, 参见, 注意, 留意
	Obligation modals	must, need to, should	必须, 需要, 需, 应该
	It is +adj+to do	It is important\necessary\essential to do	值得一提的是, 需要注意的是
Appeal to shared knowledge	Logic reasoning	apparently, obvious, obviously, of course	众所周知, (我们都)知道
	Routine condition	normally, usual, routinely	常见的, 常规的
	Tradition and typicality	common, traditionally, typical	普遍的, 传统的, 典型的
Personal asides	Informative asides	(the definition is...), i.e.	(即定义为...)
	Evaluative asides	(which is great...)	(它是非常...)
	Textual asides	(see table 2)	(见表 2)
Questions	Real question	what, how, why	怎样, 如何, 什么
	Rhetorical question	should we, have you	难道

3.4 Research Procedure

All downloaded RAs are converted into plain text format for subsequent corpus processing and analysis. For the Chinese RAs, word segmentation and part-of-speech tagging are performed by using CorpusWordParser, a specialized Chinese lexical analysis tool. The outputs of word segmentation and tagging are subjected to cross-validation by three experts within corpus linguistics to ensure the accuracy and reliability of the processing results.

Subsequently, Antconc 4.3.1 is used to count the number of the occurrences of engagement markers in EC and CC in accordance with above-noted analytical framework. During this process, particular attention should be paid to identifying and excluding those concordances that do not serve the function of reader engagement. For instance, when retrieving “()”, which function as personal asides in Hyland (2005a), such concordances should be excluded based on Wu (2010) as those located at the end of sentences, those used for abbreviations, citations, data annotation. Furthermore, Given that Hyland’s (2005a) reader engagement model was developed based on English corpus, we sought to identify Chinese engagement markers that correspond to their English counterparts by observing the specific context and referring to items documented in the existing RAs (e.g., Wu 2010; Mu et al. 2015).

For quantitative analysis, we first convert the raw frequencies of engagement markers into the normalized frequencies (per 10,000 words/characters) for ease of comparison because of the variations in the scale of the corpora. Next, the log-likelihood test is used to calculate significance in the frequency differences between EC and CC, in order to avoid data errors caused by subjective misjudgment. For qualitative analysis, we mainly utilize the KWIC (key words in context) tools within Antconc 4.3.1 software to examine how specific engagement markers are deployed in bilingual context to manage authorial engage with readers in Chinese and English RAs.

4. Data Analysis

4.1 The overall Frequency Distribution of Engagement Markers

According to Table 2, It is found that the overall number of engagement markers in EC is higher than that in CC (LL=138.21, $P<0.01$), a finding consistent with the research conducted by Mu et al. (2015), which indicates that such rhetorical choices are influenced by the linguistic and cultural expectations of the intended discourse community. Despite the difference in overall frequency, both corpora exhibit a similar trend in the internal distribution of engagement markers: questions account for the smallest proportion, whereas directives constitute the largest in EC and CC, which reflects some universal pursuits in RAs writing. These above findings, however, are confined to the overall distribution. What are the specific similarities and differences within each subcategory, and what accounts for them? These questions will be explored in the next section.

Table 2. Distribution of Engagement Features

Engagement	EC		CC		LL	P
	Raw	Normalized (per 10, 000)	Raw	Normalized (per 10, 000)		
Reader mentions	285	8.28	237	5.44	22.99	0.00
Personal asides	781	22.68	474	10.87	165.52	0.0*
Directives	960	27.88	1014	23.26	16.13	0.0*
Appeals to shared knowledge	564	16.38	647	14.84	2.93	0.09
Questions	119	3.46	89	2.04	14.31	0.0*
Totals	2709	78.68	2471	56.67	138.21	0.0*

4.2 Engagement Markers Subcategories: Similarities, Differences, and Possible Reasons

4.2.1 Reader Mentions

Inclusive reader pronouns, that is, the first-person plural form are the most frequently occurring in this subcategory (see table 3), with its frequency in EC being higher than that in CC ($P < 0.01$). “We\我们 (we)” always be considered as a device to bring explicitly readers into the discourse (Hyland 2005a) and the resource to construct the identity of the interlocutor to narrow the distance from readers and foster an intimate rapport with them (Sun, 2020; Hyland & Zou, 2021; Wu, 2025). It was also found that native English authors, compared to Chinese authors, often place greater emphasis on interacting with potential readers by establishing a communicative space for dialogue (Qin & Mu, 2017), which may represent English academic convention pay more attention to writer-reader interaction in RAs. In this study, Chinese scholars tend to prioritize interactive communication with readers by increasing the use of “we” in the process of writing English RAs, which indicate they consciously enhance the interactivity and dialogue with potential readers to follow the interactional norms of the English academic community in English RAs.

Additionally, we annotate “我们 (we)” before such modal verbs as “应该 (should)”, “必须 (must)” as inclusive we, referring to Mu et al. (2015). It is found that “我们 (we)\we” both collocate most frequently with modal verbs of possibility, accounting for 35.90% and 29.49% respectively of their respective total occurrence frequencies. The modal verbs of possibility can be used to mitigate authorial commitment to knowledge claims or conclusions (Hu & Cao, 2015), which aligns with the *Doctrine of the Mean* in traditional Chinese culture, which emphasizes that *going beyond is as wrong as falling short* and *fullness invites decline* (Wei, 2021), which may influence the construction of Chinese RAs. These characteristics are manifested in the fact that Chinese scholars often adopt a cautious and restrained attitude in their academic expression in Chinese. That is, Chinese scholars often deploy “我们(we)+modal verbs of possibility” to temper the authorial and assertive tone and reserve certain space for future modification (see example 1).

Example (1)

由此，我们可以较有把握地确立该词的消极语义韵。

(Thus, we can reasonably establish that the word carries a negative semantic prosody.)

Table 3. The Distribution of Reader Pronouns

Reader pronouns	EC		CC		LL	P
	Raw	Normalized(per 10000)	Raw	Normalized (per 10000)		
Inclusive reader pronouns	217	6.30	117	2.68	58.63	0.0*
Exclusive reader pronouns	68	1.97	120	2.75	4.91	0.03
Totals	285	8.28	237	5.44	22.99	0.0*

Second-person pronouns (i.e., 你 (“you” in singular form)、你们 (“you” in plural form), you, your), are absent in both CC and EC. Second-person pronouns can be easily contrasted with first-person singular, which may implicate a stark detachment between the author and the reader and clearly undermine attempts to construct a joint intellectual journey (Hyland & Jiang 2016). Moreover, RAs are considered as formal texts that carry rigorous knowledge and convey objective viewpoints, but second-person references tend to be more colloquial in style (Lou, 2022, p. 56). Both Chinese and English RAs, therefore, need to avoid such colloquial expressions as “you, your, 你 (“you” in singular form)” to preserve their inherent objectivity and formality in RAs.

Among exclusive reader mentions, “reader\读者(reader)”, serving to directly address the reader, show the highest frequency of occurrence, with respective densities of 3 and 2 per 10,000 words\characters, which is broadly consistent with the research data reported by Ädel (2006, p. 86). These findings indicate that Chinese scholars pay identical attention to the direct concern and mention of the reader’s identity and clearly convey information to specific reader group in the academic exchanges between the two cultures. Indefinite personal pronouns exhibit a relatively low frequency of occurrence compared to direct reader pronouns. The employment of indefinite personal pronouns can contribute to greater objectivity and better compliance with academic norms in academic writing (Biber et al., 1989). This relative low-frequency phenomenon arises not from the lack of awareness of academic norms among Chinese scholars, but possibly from the interference of Chinese linguistic sentence patterns. The subjectless sentence structure is a predominant feature of Chinese, where the subject is often omitted when the referent is ambiguous or unnecessary (Xue, 1998). Furthermore, Chinese generally avoid employing non-definite personal pronouns when referring to human agents (Lou & Wang, 2019).

4.2.2 Directives

As shown in Table 4, both imperatives and the modals of obligation occur with the highest frequency in CC and EC, which aligns with the findings of Hyland (2002), which primarily function to guide readers

toward a specific action and reflect the author's confidence in scholarly interaction with readers (Hyland, 2002). These suggest that Chinese scholars, whether in domestic or international contexts, have developed a certain degree of conviction in their academic judgments, demonstrating mature command of scholarly discourse and argumentative confidence through long-term accumulation of expertise.

Table 4. The Distribution of Directives

Directives	EC		CC		LL	<i>P</i>
	Raw	Normalized	Raw	Normalized		
	(per 10000)		(10000)			
Imperatives	470	13.65	502	11.51	7.00	0.0*
The modals of obligation	412	11.97	484	11.10	1.25	0.26
It is+adj+to do	78	2.67	28	0.64	37.82	0.0*
Totals	960	27.88	1014	23.26	16.13	0.0*

In table 4, there is no significant difference in the frequency of the modals of obligation between EC and CC (LL=1.25, $P > 0.01$). The modals of obligation share great semantic similarity in Chinese and English academic writing (Wang, 2025), with the core goal to clearly require, emphasize necessity, and guide readers' cognition. Such Chinese characters as “应\应该 (should), 必须\须 (must)” and the English words “should, must” etc., have no essential differences in semantic meaning and functional orientation. This can be used to explain why there is basically a certain correspondence between CC and EC about the modals of obligation in Table 5. Furthermore, this frequency of obligatory modal words had dropped to 7.3 tokens per 10,000 words, exhibiting a continuous downward trend according to Hyland and Jiang (2016), which is significantly lower than the corresponding frequency in EC and CC (see table 4). The possible reasons for such results may include differences in corpora as well as influences stemming from Chinese social and cultural contexts. It is well known that Chinese society places a strong emphasis on individuals' obligations and sense of responsibility toward family, community, and the nation (Cheng & Qiu, 2007). Consequently, expressions such as “我们应该\必须\要 (we should\must\need)” frequently appear in Chinese writing, reflecting a perceived imperative to fulfill these duties, which may exert an influence on the writing of international RAs, resulting in the increasing frequency of obligatory modal words. For example, “must” in example (2) means the mandatory responsibility and obligation imposed on students and “should” in example (3) emphasizes the professional responsibilities of teachers, which demonstrate that the Chinese scholars often reinforce the strong connection between different communities and their corresponding obligations and responsibilities through the use of obligatory modal verbs.

Example (2)

Students **must** effectively articulate their perspectives while conforming to argumentative essay conventions.

Example (3)

EFL instructors **should** not only emphasise students' sociopragmatic contextual features, but also focus on learners' pragmalinguistic accuracy.

Table 5. The Distribution of High-frequency Modal Verbs

Order	EC			CC		
	Obligatory modal verbs	Raw	Normalized (per 10000)	Obligatory modal verbs	Raw	Normalized (per 10000)
1	should	228	6.62	需要(need)	174	3.99
2	do not	78	2.27	应(should)	87	2.00
3	must	48	1.39	需(need)	66	1.51
4	need to	37	1.07	必须(must)	48	1.10
5	have to	12	0.35	要求(ask)	39	0.89
6	has to	6	0.17	应该(should)	36	0.83
7	ought	3	0.09	有必要(have to)	13	0.30

As presented in Table 6, such imperative verbs as “see, 见 (see), 参见 (see)” constitute the highest proportion in EC and CC, which can be considered as imperative verbs with textual-function according to Hyland (2002), which are often used to guide readers to another part of the text or to another text. It is found that the majority of these verbs are enclosed in parentheses in two corpora. That is because directive or imperative language are potentially risky devices which are often regarded as bald-on-record threats to face (Brown & Levinson 1987), which means that authors tend to be very cautious when using imperative verbs. Therefore, such expressions tend to be citational in the soft fields, a less threatening role than those that explicitly tell readers how to interpret an argument, for example, by placing them in parentheses or footnotes, in order to reduce the commanding and threatening nature of the imperative language itself.

Table 6. The Distribution of High-frequency Imperatives

Order	EC			CC		
	Imperatives	Raw	Normalized (per 10000)	Imperatives	Raw	Normalized (per 10000)
1	see	258	7.49	见(see)	99	2.27
2	note	42	1.22	参见(see)	34	0.78
3	consider	20	0.58	详见(see)	28	0.64

4	use	16	0.46	考虑(consider)	18	0.41
5	look at	14	0.41	掌握(master)	16	0.37
6	develop	13	0.38	注意(note)	15	0.34
7	compare	8	0.23	解决(solve)	10	0.23
8	turn	7	0.20	进行(conduct)	9	0.21
9	find	7	0.20	有(have)	9	0.21
10	select	6	0.17	开展(develop)	8	0.18

It can be seen from Table 4 that the frequency of the “It is + adjective +to do” structure in EC is higher than that in CC, and the difference between the two is significant ($P < 0.01$). This is because such a structure constitutes a conventionalized fixed form in English, which is generally acquired at the preliminary stage of English learning, and further consolidated through repeated practice in academic writing for Chinese scholars. The structure “It is important to do” ranks as the most frequently occurring in EC, and it is often collocated with cognitive verbs such as note, understand, etc., which can serve to remind readers of the significance of a certain viewpoint, and demonstrate the author’s confidence in their argumentation (Xu, 2013). However, in CC, the structure “需要注意\留意\指出的是 (It is necessary to note\point out)” is the most frequently used, which specifically indicates the necessity of a certain matter and remind readers by means of euphemistic devices. It can thus be observed that same scholars exhibit varying degrees of epistemic confidence when drafting articles in different environments, which may primarily stem from the influence of “modesty norms” when authors write in Chinese. Specifically, they often employ expressions such as “需要...的是 (it is necessary...), 值得...的是 (it is worthwhile)” to avoid making direct and subjective assertions about the value of an argument, thereby mitigating potential disapproval from readers or peers.

4.2.3 Appeals to Shared Knowledge

Table 7 demonstrates that the frequency difference of shared knowledge in CC and EC is not significant ($P > 0.01$), which can, to some extent, reflect the author’s level of confidence in the reader’s recognition of shared cognitive ground (Hyland & Jiang, 2016). Thus, these indicate that Chinese scholars have already developed a relatively mature understanding of the characteristics of international and domestic readerships.

Table 7 indicates that logic reasoning is absent in CC. Logic reasoning mainly serves to signal agreed reasoning and imply the information that readers already know or readily accept, thus involving readers as participants in the journey to an agreed outcome (Hyland & Zou, 2019). Such as “Clearly” in example (4), as a typical marker to logic reasoning, functions to construct a shared proposition, thereby advancing the argument efficiently. The reduced use of logic reasoning by Chinese scholars in CC may be attributed to the writing conventions between English and Chinese. As noted by previous contrastive linguistics research: English, with its rich morphological and syntactic markers, tends to emphasize concrete, definite structures, facilitating clear, logical, and linear thinking. In contrast, Chinese, with its

sparse cohesive devices and implicit relationships, allows a more flexible, open-ended interpretation, reflecting a cognitive tendency toward abstract, holistic thinking (Wang, 2025).

According to this view, English, as a hypotaxis-dominant language, often require scholars to externalize logical relations through explicit connectives and syntactic markers (e.g., clearly, obviously). Therefore, Chinese scholars tend to make the process of logical reasoning explicit in order to ensure the completeness and persuasiveness of the argumentation, as exemplified in (5). Chinese, by contrast, as a parataxis-dominant language, omits overt logical markers and relies on context, which often makes scholars unconsciously adopt a more implicit and elliptical writing style in Chinese RAs. If readers are still guided using obvious logical-reason markers in Chinese, this may prompt skepticism or be misinterpreted as the author's intentional manipulation of cognition.

Example (4)

Clearly, the frequencies of discourse structure features can be taken as genre-specific characteristics and they can be used to perform quantitative analysis in genre studies

Example (5)

However, the task was **obviously** irrelevant to the pedagogical objectives she set for the lesson.

Table 7. The Distribution of Appealing to Shared Knowledge

Appeals to shared knowledge	EC		CC		LL	P
	Raw	Normalized (per 10000)	Raw	Normalized (per 10000)		
Logic reasoning	75	2.18	0	0	122.71	0.0*
Routine condition	67	1.97	110	2.52	2.86	0.09
Tradition and typicality	422	12.26	537	12.32	0.01	0.93
Totals	564	16.38	647	14.84	2.93	0.09

There is no significant difference in the occurrence frequency of routine condition between CC and EC (LL=2.86, $P > 0.01$). This reveals that Chinese scholars tend to rely on the readers' familiarity with common knowledge to ensure the rationality of the argumentation process in writing Chinese-English RAs, for example, “普遍 (common)” in example (5) and “normally” in example (6) are used to serve to signal established consensus to the reader, thereby facilitating quick agreement and avoiding redundancy from repetitive elaboration.

Relevant diachronic research has shown that although the overall use of shared knowledge in international articles has exhibited a declining trend across both hard and soft disciplines, tradition and

typicality has mostly shown an upward tendency (Hyland & Jiang, 2016). This phenomenon is further corroborated by the present study, in which tradition and typicality account for the highest proportion in both CC and EC. We contend that the primary reason may be the development of interdisciplinary research and collaborative innovation, which has broadened the readership of applied linguistics (Jiang & Hyland, 2020). Meanwhile, applied linguistics is explanatory in nature, and the viewpoints and conclusions are conveyed by relying on traditional or commonly accepted typical characteristics unlike hard disciplines which guide readers to accept viewpoints through objective experiment (Hyland, 2001). Therefore, applied linguistics often need to employ more tradition and typicality in argumentation to enhance the credibility and acceptability of authors' claims when addressing increasingly diverse readerships. For example, "typically" in example (7) indicates the typical character of "This activity", which makes the viewpoint of "form-oriented exercise" for "this activity" more convincing.

Example (5)

在教学实践中教师**普遍**认为“学习学术英语之前，学生需要掌握英语的基本语法、词汇和语音知识”。

(In teaching practice, teachers **generally** believe that “before learning academic English, students need to master the basic grammar, vocabulary, and phonetic knowledge of English.”)

Example (6)

A xiehouyu **normally** follows or precedes something said or some statement, which serves as the topic, and the saying is a kind of comment about the topic.

Example (7)

This activity was **typically** a form-oriented exercise, when Marian asked one student to answer a question after listening to a conversation.

4.2.4 Questions

Questions have the lowest frequency of occurrence in both corpora (see table 2), which is consistent with Hyland (2001). Questions can be considered as the strategy of dialogic involvement (Hyland, 2001) and the rhetorical device, bringing interlocutor into a discourse arena (Webber, 1994, p. 266). “Although almost all of them are rhetorical in the sense that the writer is not looking for an answer but an effect, questions can turn a one-sided exposition into a dialogue” (Hyland & Zou, 2019). The higher frequency of questions in EC ($P > 0.01$), therefore, suggests that Chinese scholars are more inclined to invite reader alignment through such dialogic devices in English RAs, to adapt to the rhetorical norms of English academic writing. That is because English writing emphasize “anticipating the opposition”, influenced by Greek dialogical rhetorical tradition, where a dialogue works as the best means for seeking truth (Liu, 2005).

It is clear that all questions are rhetorical questions in EC and CC (see table 8). As we all know, real questions that expect no audience response are content-oriented, which are hardly use in RAs (Wu et al., 2025), while rhetorical questions that present an opinion as an interrogative to position the reader to construct involvement are audience-oriented, which often simultaneously initiating and closing the

dialogue (Hyland & Jiang, 2016). Thus, rhetorical questions often imply a cooperative effort to address a common problem (Jiang & Hyland, 2025), so that scholars are more willing to use them to persuade readers to embrace their viewpoints. For example (8) (9), the author does not ask for responses from readers; instead, the questions act as hooks, which anticipate a potential query in the reader's mind, thereby drawing them into a dialogue. Above examples show that rhetorical questions can be considered as a powerful strategy for managing the author-reader relationship in order to secure the reader's engagement and lead them to a predetermined conclusion, thereby making the specialized knowledge more accessible and the argument more compelling.

Example (8)

(11) However, does it mean passage (2) is more ecologically beneficial (Stibbe, 2015) than passage (1)? The answer may run counter to expectations in the light of a combination of the principles of proximity and conscience. In terms of proximity, the dog Chico to the anonymous writer is both spatially and emotionally closer than the passerby's dog to Cassey.

Example (9)

研究者普遍接受 Sinclair (2004) 的观点, 倾向于在复合词项内部来判断语义韵。如李文中(2019: 84-86)提出, “我们应当把语义韵的讨论严格限制在扩展意义单位(复合词项)的分析中”, “既要观察语义倾向, 还要观察序列中同现的其他元素, 如类联接和搭配。”但这么做果真没有问题吗? 我们来看 naked eye 复合词项。

Table 8. The Distribution of Questions

Question	EC		CC		LL	P
	Raw	Normalized (per 10000)	Raw	Normalized (per 10000)		
Real questions	119	3.46	89	2.04	36.45	0.0*
Rhetorical questions	0	0	0	0	0	0
Totals	119	3.46	89	2.04	36.45	0.0*

4.2.5 Personal Asides

Table 9 indicates that the total number of personal asides in EC exceeds that in CC, with a statistically significant difference between the two ($P < 0.01$), which is consistent with the results reported by Wu (2010). Personal asides often add more to the writer-reader relationship than to the propositional development of the discourse, and are mainly used to solicit reader collusion (Hyland, 2001). This suggests that Chinese scholars tend to view readers as collaborators when writing English RAs, placing greater emphasis on interactivity, whereas Chinese RAs may prioritize the content of objectivity and conciseness.

Table 9 shows that informative asides account for the highest proportion within the category of personal asides, which is consistent with the findings reported by Wu et al. (2025). Furthermore, the frequency of informative asides is higher in the EC compared to the CC, with a statistically significant difference observed between the two ($LL=129.35$, $P>0.01$). This might be due to the increasing diversity of the international readership (Hyland & Jiang 2018). As scholars engage in international writing, they may conduct more detailed background explanations and logical supplements in order to convince various readers. For example, the informative asides in example (10), when removed, do not affect the coherence of the content or the logical progression of the argument, but it will cause reading difficulties for the readers. The informative asides that function as an example in CC (32.27%) are more frequent than those in EC (27.39%), which might reflect scholars' familiarity with their domestic readership, whereby they recognize that certain terminology grounded in a shared knowledge can be efficiently communicated with readers through representative examples without requiring further explanatory elaboration. For example, “搭配错误” and “语言使用地道” in example (11) can be easily associated and understood by Chinese readers. However, international readership tends to be more diverse and lacks a shared contextual background, which may hinder their ability to perceive the relevance between illustrative examples and specialized terminology. Consequently, scholars often compensate by providing additional explanatory elaboration on the terminology itself. For example, “Evaluation” in example(12) can be understood by mostly readers, but authors still provided additional explanations to further clarify this point.

Example (10)

The first set of examples (Analysis 1) includes only two substantive elements: the Evaluation (**i.e., the evaluative adjective**) and the Target (i.e. the entity or situation being evaluated).

Example (11)

中国学生英语笔语语料库代表较高水平学习者的写作, 因此其中的语言问题大多集中在语言使用的地道性(如搭配错误)和准确性(如介词使用错误)。

(The Corpus of Chinese Learner English represents the writing of advanced learners, so most language issues within it are concentrated in the idiomaticity (**such as collocation errors**) and accuracy (such as preposition usage errors) of language use.)

Example (12)

The first set of examples (Analysis 1) includes only two substantive elements: the Evaluation (**i.e., the evaluative adjective**) and the Target (i.e. the entity or situation being evaluated).

Emotive attitude markers are often used in these asides, indicating writers' readiness to acknowledge and respond to an active readership (Wu, 2010). As shown in Table 9, Evaluative asides do not appear in either CC or EC. This may be attributed to the fact that academic writing is generally regarded as a formal genre that values rigor and objectivity (Han & Zhang, 2025), while in the Chinese academic context, expressions with affective or evaluative connotations are often perceived as undermining

objectivity in RAs (Du, 1981). Therefore, Chinese scholars tend to avoid using evaluative asides in both Chinese and English articles.

As shown in Table 9, the frequency of textual asides is higher in the EC than in the CC, with a statistically significant difference between the two ($LL=38.06$, $P<0.01$). Textual asides are used to guide readers to locate a certain part or chapter within the text (Bu & Wu 2024), and the authors always employs explicit discourse-oriented such lexical items as “see”, “参见 (see)”, “见 (see)” to guide readers in revisiting prior content, navigating to relevant sections, or focusing on key information. For example, the author strategically interrupts the narrative flow to direct readers to the referenced table, enabling them to access further detailed information in example (13) (14). This approach facilitates a more informed engagement with the argument, thereby strengthening the persuasiveness of the author’s viewpoint. This observation suggests that, when writing for English RAs, scholars place greater emphasis on ensuring the acceptability of their viewpoints to readers within an unfamiliar linguistic context, so they often employ frequently textual asides to pause the ongoing discussion and instead introduce other content of the text to persuade the target readers. However, the authors are accustomed to their native rhetorical conventions and feel relatively confident, when writing Chinese articles, so they often favor a cohesive, uninterrupted prose style, which allows them to present their reasoning fluidly while asserting their academic stance.

Example (13)

The results of Spearman’s rank correlations (**see Table S4 in Supplementary Material for statistics**) showed that the 15 indices were significantly correlated with the text level, with eight correlations having very large effect sizes.

Example (14)

中国英语学习者使用在主位结构中的 so(见图 2)远高于英语本族语者。

(Chinese English learners use “so” in thematic structures (**see Figure 2**) far more frequently than native English speakers do.)

Table 9. The Distribution of Personal Asides

Personal asides	EC		CC		LL	P
	Raw	Normalized (per 10000)	Raw	Normalized (per 10000)		
Informative asides	544	15.80	313	7.18	129.35	0.0*
Evaluative asides	0	0	0	0	0	0.0*
Textual asides	237	6.88	161	3.69	38.06	0.0*

Totals	781	22.68	474	10.87	165.52	0.0*
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5. Conclusion

The study mainly examines how the same group of Chinese applied linguistic scholars used engagement markers in their Chinese and English RAs by self-constructing corpora.

Firstly, the study explores the overall frequency of engagement markers in Chinese and English RAs, which shows that the overall frequency of engagement markers is significantly higher in English RAs than in their Chinese counterparts. This finding demonstrates that Chinese scholars tend to employ engagement markers more frequently to manage author-reader interaction.

Secondly, it investigates the frequency distribution of engagement markers at its subcategory level, to discover their similarities, differences, and primary causes. It is found that the same group of Chinese scholars adopt similar engagement strategies in both Chinese and English shaped by shared academic cognition. For instance, second-person pronouns are generally avoided in EC and CC due to their overly colloquial nature; the modals of obligation have a certain correspondence between CC and EC because they share great semantic similarity in Chinese and English academic writing; evaluative asides do not appear in either CC or EC, which be attributed to the fact that academic writing is generally regarded as a formal genre that values rigor and objectivity, etc.. Moreover, the study also reveals that Chinese scholars also employed different engagement devices when writing RAs in Chinese compared to English, which can be traced to the influences of different culture, readership, and writing conventions rooted in the Chinese and English context. For instance, the higher frequency of questions in EC due to the influence of Greek dialogical rhetorical tradition; informative asides is higher in the EC because of the increasing diversity of the international readership; “It is + adjective +to do” structure in EC is higher than that in CC, because such a structure constitutes a conventionalized fixed form in English, etc..

The finding that Chinese scholars can adapt to distinct linguistic and cultural norms by modulating their engagement resources across English and Chinese RAs holds significant theoretical and practical implications. Theoretically, our research significantly expands the current landscape about the study of reader engagement. While previous researches had primarily focused on the analytical framework proposed by Hyland (2005a), in which engagement resources were merely broadly categorized, this study grounds on a refined and integrated framework for reader engagement to distinguish subtle functional nuances. This nuanced classification not only enhances the theoretical precision of engagement strategies but also provides a more robust analytical framework for future contrastive rhetoric studies between Chinese and English. Furthermore, our study focus on the comparative analysis of reader engagement within homogeneous groups, which exclude individual variables such as gender and ethnicity, so it can allow for a clearer identification of how cultural contexts and academic norms influence the way of authors engage in RAs. This approach, based on controlling individual variables, strengthens the internal validity and explanatory power of the findings, which offers a new

analytical perspective and theoretical reference for related domain. From a practical point of view, as our research elucidates the characters of reader engagement in Chinese and English RAs, these insights can be applied to develop academic writing ability for Chinese students and scholars. For example, When writing international papers, Chinese scholars should foster cultural and academic confidence to avoid excessive co-occurrence of the first person and possible modality successively, which may otherwise lead to readers' doubts and reducing the validity of authors' arguments.

Despite of the above findings, the present study is constrained by the limited selection of metadiscourse features, discipline examined and educational backgrounds of these Chinese scholars. Future studies may choose such interactive metadiscourse features and stance features as evidentials, frame markers, boosters, hedges and investigate various disciplines. In addition, although our research has endeavored to precisely examine the impact of cultural and writing convention differences on bilingual writing, it have a limitation regarding the potential influence of study-abroad experience on the Chinese authors, which may introduce Anglo-American rhetorical conventions into the English RAs (Wu, 2013). Future studies, therefore, may need to pay attention to distinguish between scholars with and without oversea academic experience, which is more exactly to clarify the extent to which reader engagement references occur in international academic writing. Finally, while this study has examined how the Chinese scholars' reader engagement preferences in their English and Chinese RAs are influenced by different sociocultural contexts and readership and academic conventions, future studies might need to explore other factors that involve in the process of international publication, such as journal requires and preferences, journal reviewers and so on. These research directions, in general, can help people have a more comprehensive understanding of the differences of metadiscourse features in Chinese and English RAs, and help Chinese scholars and students in different disciplines improve their ability to write international articles and increase the success rate of their international articles' publication.

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References

- Abdi, R. (2009). Projecting cultural identity through metadiscourse marking; A comparison of Persian and English research articles. *Journal of English language teaching and learning*, 1(212), 1-15.
- Ädel, A. (2006). *Metadiscourse in L1 and L2 English*.
- Ajideh, P., Ansarin, A. A., Zohrabi, M., & Nouri, Z. (2024). An analysis of interactive and interactional metadiscourse: Native vs. non-native author dichotomy. *Teaching English as a Second Language Quarterly (Formerly Journal of Teaching Language Skills)*, 43(2), 31-48.
- Akbas, E. (2012). Interactional metadiscourse in turkish postgraduates' academic texts: a comparative study of how they introduce and conclude. *i-manager's Journal on English Language Teaching*, 2(3), 35-45.
- Alghazo, S., Salem, M. N. A., & Alrashdan, I. (2021). Stance and engagement in english and arabic

- research article abstracts. *System*, 103.
- Bal-Gezegin, B. (2016). A corpus-based investigation of metadiscourse in academic book reviews. *Procedia-Social and Behavioral Sciences*, 232, 713-718.
- Biber, D., & Finegan, E. (1989). Styles of stance in English: Lexical and grammatical marking of evidentiality and affect. *Text-interdisciplinary journal for the study of discourse*, 9(1), 93-124.
- Birhan, A. T. 2021. An exploration of metadiscourse usage in book review articles across three academic disciplines: a contrastive analysis of corpus-based research approach. *Scientometrics*, 126(4), 2885-2902.
- Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language usage* (No. 4). Cambridge university press.
- Bu, Z. T., & Wu, Y. J. (2024). Exploring a comprehensive framework for the construction of authorial identity through interactive metadiscourse. *Journal of Xi'an International Studies University*, (1), 46-52.
- Chen, C., & Zhang, L. J. (2017). An intercultural analysis of the use of hedging by Chinese and Anglophone academic English writers. *Applied Linguistics Review*, 8(1), 1-34.
- Cheng, X. T., & Qiu, J. 2007. The use of modal verbs in Chinese students' English writing: A corpus-based study. *Computer-Assisted Foreign Language Education*, (6), 9-15.
- Crismore, A., Markkanen, R., & Steffensen, M. S. 1993. Metadiscourse in persuasive writing: A study of texts written by American and Finnish university students. *Written communication*, (1), 39-71.
- Deng, L., Fatemeh, B., & Gao, X. (2021). Exploring the interactive and interactional metadiscourse in doctoral dissertation writing: A diachronic study. *Scientometrics*, 126(8), 7223-7250.
- Dontcheva-Navratilova, O. 2021. Engaging with the reader in research articles in English: Variation across disciplines and linguacultural backgrounds. *English for Specific Purposes*, (63), 18-32.
- Du, H. W. (1981). Linguistic characteristics of Chinese scientific and technical style. *Language Teaching and Linguistic Studies*, (2), 87-101, 160.
- Gai, F. H., & Wang, Y. (2022). Correlated metadiscourse and metacognition in writing research articles: A cross-linguistic and cross-cultural study. *Frontiers in Psychology*, 13, 1026554.
- Gong, H., Cao, F., & Liu, L. 2025. Interactive metadiscourse across languages and writer groups: A comparison among L1 Chinese, L2 English and L1 English research articles. *International Journal of Corpus Linguistics*, 30(3), 316-351.
- Gong, H., Liu, L., & Cao, F. 2021. A cross-linguistic study of interactional metadiscourse in english and chinese research articles by the same chinese scholars. *Journal of Language Identity & Education* (1), 1-17.
- Gu, X., & Xu, Z. (2021). Sustainable Development of EFL Learners' Research Writing Competence and Their Identity Construction: Chinese Novice Writer-Researchers' Metadiscourse Use in English Research Articles. *Sustainability*, 13(17), 9523.
- Han, J., & Zhang, D. Q. (2025). A study on formality in academic papers: Constructing an OIC

- framework. *Journal of Xi'an International Studies University*, (3).
- He, Z. Q., & Yan, Y. F. (2021). A comparative study of metadiscourse in introductions of interdisciplinary academic papers. *Foreign Language Education*, (5), 26-30.
- Hu, G., & Cao, F. (2011). Hedging and boosting in abstracts of applied linguistics articles: A comparative study of English- and Chinese-medium journals. *Journal of Pragmatics*, 43(11), 2795-2809.
- Hu, G., & Cao, F. (2015). Disciplinary and paradigmatic influences on interactional metadiscourse in research articles. *English for Specific Purposes*, 39, 12-25.
- Hyland, K. (1998). Persuasion and context: The pragmatics of academic metadiscourse. *Journal of pragmatics*, (4), 437-455.
- Hyland, K. (2001). Bringing in the reader: Addressee features in research articles. *Written communication*, (4), 549-574.
- Hyland, K. (2002). Directives: Argument and engagement in academic writing. *Applied linguistics*, (2), 215-239.
- Hyland, K. (2004). Disciplinary interactions: Metadiscourse in L2 postgraduate writing. *Journal of second language writing*, 13(2), 133-151.
- Hyland, K. (2005a). Stance and engagement: A model of interaction in academic discourse. *Discourse studies*, (2), 173-192.
- Hyland, K. (2005b). Metadiscourse: Exploring interaction in writing. Continuum Intl Pub Group.
- Hyland, K. (2010). Metadiscourse: Mapping interactions in academic writing. *Nordic Journal of English Studies*, 9(S2), 125-143.
- Hyland, K. (2017). Metadiscourse: what is it and where is it going?. *Journal of Pragmatics*, 113, 16-29.
- Hyland, K., & Jiang, F. (2016b). Change of attitude? a diachronic study of stance. *Written Communication*, 33(3).
- Hyland, K., & Jiang, F. K. (2016a). "We must conclude that...": A diachronic study of academic engagement. *Journal of English for Academic Purposes*, (24), 29-42.
- Hyland, K., & Jiang, F. K. (2018). "In this paper we suggest": Changing patterns of disciplinary metadiscourse. *English for specific purposes*, (51), 18-30.
- Hyland, K., & Tse, P. (2004). Metadiscourse in academic writing: A reappraisal. *Applied linguistics*, (2), 156-177.
- Hyland, K., Wang, W., & Jiang, F. K. (2021). Metadiscourse across languages and genres: An overview. *Lingua*.
- Jiang, F. K., & Hyland, K. (2025). Rhetorical distinctions: Comparing metadiscourse in essays by ChatGPT and students. *English for Specific Purposes*, 79, 17-29.
- Jiang, F. K., & Ma, X. (2019). Positioning and proximity of reader engagement: Authorial identity in professional and apprentice academic genres. In *Engagement in professional genres* (pp. 29-46). John Benjamins Publishing Company.

- Jiang, F., & Hyland, K. (2020). Interactive metadiscourse: Argument and rhetoric in changing academic contexts. *Foreign Language Education*, 41(2), 23-28.
- Jiang, T., & Yang, X. (2018). A comparative study of authorial identity construction in English and Chinese legal academic papers: From the perspective of engagement system. *Journal of Xi'an International Studies University*, 26(4), 8-13.
- Ken, H., & Hang, J. Z. (2021). Pithy persuasion: engagement in 3 minute thesis presentations. *Applied Linguistics*, (1), 1.
- Khoshsima, H., Talati-Baghsiahi, A., Zare-Behtash, E., & Safaie-Qalati, M. (2018). Interactional metadiscourse in the writings of novice vs. established members of academic communities. *Journal of English Language Teaching and Learning*, 10(22), 63-86.
- Kim, L. C., & Lim, M. H. (2013). Metadiscourse in english and chinese research article introductions. *Discourse Studies*, 15(2), 129-146.
- Kirisçi, D. I., & Duruk, E. (2022). A Comparative Study of Metadiscourse Markers in the Abstract Sections of Research Articles Written by Turkish and English Researchers. *Shanlax International Journal of Education*, 10(4), 101-114.
- Kopple, W. V. (1985). Some exploratory discourse on metadiscourse. *College Composition & Communication*, (1), 82-93.
- Lafuente-Millán, E. (2014). Reader engagement across cultures, languages and contexts of publication in business research articles. *International Journal of Applied Linguistics*, (2), 201-223.
- Lasagabaster, D., & Bier, A. (2025). An examination of the use of spoken interactional metadiscourse markers in EMI lectures from different disciplines. *English for Specific Purposes*, 79, 137-151.
- Lee, J. J., & Deakin, L. (2016). Interactions in L1 and L2 undergraduate student writing: Interactional metadiscourse in successful and less-successful argumentative essays. *Journal of second language writing*, (33), 21-34.
- Liu, L. (2005). Rhetorical education through writing instruction across cultures: A comparative analysis of select online instructional materials on argumentative writing. *Journal of Second Language Writing*, 14(1), 1-18.
- Lou, B. C. (2022). A corpus-based comparative study of metadiscourse in academic English. *China Social Sciences Press*.
- Lou, B. C., & Wang, Y. L. (2019). Features of engagement markers used in learner English academic writing. *Contemporary Foreign Languages Studies*, (4), 58-69.
- Martin, J. R., & P. R. R. White. (2005). *The language of evaluation: appraisal in English* (Houndmills, Basingstoke, UK: Palgrave Macmillan).
- Mu, C., Zhang, L. J., Ehrich, J., & Hong, H. (2015). The use of metadiscourse for knowledge construction in Chinese and English research articles. *Journal of English for Academic Purposes*, (20), 135-148.
- Mur-Dueñas, P. (2011). An intercultural analysis of metadiscourse features in research articles written

- in English and in Spanish. *Journal of pragmatics*, 43(12), 3068-3079.
- Qin, F., & Chen, J. L. (2013). The creation and maintenance of interpersonal meaning: A study of interaction in graduate students' English scientific papers. *Foreign Language Education*, (4), 56-60.
- Sahragard, R. S. (2017). *English engagement markers: a comparison of humanities and science journal articles*. Online Submission.
- Sun, L. (2020). Metadiscourse use and identity construction features in Chinese master's students' academic English writing. *Journal of Xi'an International Studies University*, 28(4), 28-33.
- Sun, M. M., & Tong, M. Q. (2015). A comparative study of metadiscourse in English abstracts of academic journals. *Academic Exchange*, (3), 214-218.
- Sun, X., & Zhang, D. Q. (2024). A comparative study of rhetorical mechanisms in English and Chinese academic papers: A metadiscourse perspective. *Educational Linguistics Studies*, (0), 202-213.
- Tse, P., & Hyland, K. (2009). *Discipline and gender: constructing rhetorical identity in book reviews*. Palgrave Macmillan UK.
- Wang, C. (2025). Syntactic analysis of English-Chinese modal words based on centrifugal labeling algorithm. *Contemporary Linguistics*, 27(4), 526-540.
- Webber, P. (1994). The Function of questions in different medical English genres. *English for specific purpose*, (13), 257-68.
- Wei, C. L. (2021). The ethical connotation and methodological significance of the traditional Chinese "Zhonghe" thought. *Henan Social Sciences*, 29(7), 92-99.
- White, P. R. R. . 2002. Appraisal: The language of attitudinal evaluation and intersubjective stance.
- Wu, G. Q. (2010). *A comparative analysis of authorial identity construction in English and Chinese research articles* [Doctoral dissertation, Shanghai International Studies University]
- Wu, G. Q. (2013). Author self-reference and identity construction in academic papers: A corpus-based contrastive study between English and Chinese. *Journal of PLA University of Foreign Languages*, 36(3), 6-11, 127.
- Wu, X. (2025). Interactional Metadiscourse in the Classroom: A Cross-Cultural Analysis of Native and Non-Native EAP Teachers. *International Journal of Applied Linguistics*.
- Wu, Y., Bu, Z., & Zhang, J. (2025). A cross-disciplinary study of authorial identity construction through 'reader engagement' in the introduction of research articles. *Journal of English for Academic Purposes*, 75, 101503.
- Xiao, Z. H., & Cao, Y. 2014. A multi-dimensional move analysis of English abstracts of scientific papers by Chinese and international authors. *Foreign Language Teaching and Research*, 46(2), 260-272, 321.
- Xiaole et al. 2021 Gu, X., & Xu, Z. (2021). Sustainable development of EFL learners' research writing competence and their identity construction: Chinese novice writer-researchers' metadiscourse use in English research articles. *Sustainability*, 13(17), 9523.

- Xu, F. (2013). The use and developmental features of engagement markers in second language academic writing: A corpus-based perspective. *Foreign Languages and Their Teaching*, (2), 5-10.
- Xu, H. M., & Gong, S. L. (2006). An empirical study on the correlation between the use of metadiscourse devices and discourse quality. *Modern Foreign Languages*, (1), 54-61, 109.
- Xue, F. S. (1998). On the characteristics of Chinese sentence patterns and grammatical analysis. *Research in Ancient Chinese Language*, (4), 8.
- Yang, Y. (2013). Exploring linguistic and cultural variations in the use of hedges in English and Chinese scientific discourse. *Journal of Pragmatics*, 50(1), 23-36.
- Zarei, G. R., & Mansoori, S. (2007). Metadiscourse in academic prose: A contrastive analysis of English and Persian research articles. *The Asian ESP Journal*, (2), 24-40.
- Zhou, Y. (2012). *A comparative study of engagement markers in second language academic writing* [Master's thesis, Nanjing University].
- Zou, H. J., & Hyland, K. (2019). "think about how fascinating this is": Engagement in academic blogs across disciplines. *Journal of English for Academic Purposes*, 43.