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# If it had been conducted with a larger database...: A comparison of *If*-constructions in Chinese L2 learners' theses and published research articles



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### ABSTRACT

If-constructions, with functional versatility, are of great importance to academic writing. While considerable literature has been published on If-constructions in research articles and naturally occurring discourse, relatively limited attention has been paid to how If-constructions are used in L2 learners' academic writing. To address this gap, a comparative study on the use of If-constructions is reported in this paper with regard to the overall distribution and meaning negotiation in corpora of Chinese L2 learners' theses and published research articles in applied linguistics. We draw upon Warchal's (2010) typology of conditional clauses and Martin and White's (2005) notion on writer-reader meaning negotiation and examine propositional and pragmatic meanings, monoglossic and heteroglossic If-constructions used in the corpora. We also discuss the major reasons for the differences and similarities in the overall distribution and meaning negotiation. From this case study, we conclude that If-constructions are one of the key options from the academic writers' rhetorical toolkit, allowing them to make propositional and pragmatic meanings and to negotiate a dialogic space in academic discourse.

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# 1. Introduction

If-constructions can be referred to as a If p, (then) q constructional pattern, which has been considered both as a factual dependency between the antecedent if-clause (protasis) and the consequent statement (apodosis) (Ferguson, 2001), and as a pragmatic phenomenon of conditionality (Elder & Jaszczolt, 2016). A number of studies on the use of If-constructions in academic writing have shown that they are important tools to negotiate "causal and purposive meaning" so as to prove claims and to reach consensus among different positions (e.g., Carter-Thomas & Rowley-Jolivet, 2008; Ferguson, 2001; Lastres-López, 2020; Louwerse, Crossley & Jeuniaux, 2008; Parkinson, 2011; Warchał, 2010).

However, L2 learner writers at the undergraduate level seem to have little pragmatic knowledge on how to and when to use this construction and a relatively small repertoire of meaning potential to express conditionality in knowledge claims (Parkinson, 2011). This lack of knowledge may be a reflection of the pedagogical materials and classroom practices that the learners are exposed to throughout their studies. The pedagogical EFL grammar guide offering learners fixed paradigms to follow (e.g., past tense in antecedent if-clause + modal verbs 'would' in the consequent statement) does not fit well with the

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naturally occurring conditionals (Ferguson, 2001; Fulcher, 1991). If-constructions are taught with "decontextualized examples and oversimplified rules" (Carter-Thomas & Rowley-Jolivet, 2008, p. 192), which creates a discrepancy from the actual use featured with functional versatility and abundance in meaning negotiation in academic writing. Simply put, the insufficiency of input in grammar books and in classroom instruction is likely to pose potential problems for novice L2 academic writers. However, so far little is known about these problems. Therefore, to understand how L2 learner writers employ this constructional pattern in its full complexity as a combination of both content knowledge construction and interpersonal meaning-making in their academic writing can have important implications for L2 academic writing tutoring and classroom instruction.

The current study compares how *If*-constructions are actually used to make meanings in L2 learners' academic writing in a corpus of Chinese L2 theses (at the Master and Doctoral levels) and in expert writers' academic writing in a corpus of research articles. The main reason for comparing the use of this construction in Chinese L2 learners' theses with published research articles lies in the fact that these research articles represent a general use of *If*-constructions by the target research community.

The rest of the paper is organized as follows. Section 2 revisits previous research on *If*-construction's typologies and meanings conveyed as well as the relevant findings of the studies on the use and functions of the construction. Section 3 summarizes the corpora and the procedures employed in the current study. Section 4 presents the results and analyses of the differences and similarities in the overall distribution and meaning negotiation in the data, and Section 5 discusses the possible reasons for the differences and similarities. Section 6 concludes with the major findings and implications.

# 2. Literature review

### 2.1. Meanings conveyed by If-constructions

Conditionality can account for a sematic relation or characterization involved in deductive argumentation, which is a type of reasoning in scientific discourse with an aim to persuade readers of the truth conditions presented (Horsella & Sindermann, 1992). In traditional descriptive grammars, *If*-constructions follow certain fixed time sequences when describing a cline of hypotheticality, such as '0' (present + present), first (present + future), second (past + would), and third conditional (past perfect + would have) (e.g., Carter-Thomas & Rowley-Jolivet, 2008; Ferguson, 2001). However, these paradigms are criticized as not being descriptively exhaustive of the use of naturally produced *If*-conditionals. For instance, as Carter-Thomas and Rowley-Jolivet (2008, p. 192) put it, "restricting conditional meaning to degrees of hypotheticality, isolating only a very limited number of tense sequences [...] gives an impoverished picture of discourse practice."

In view of the literature on the semantic and pragmatic understanding of conditionals reviewed by Elder and Jaszczolt (2016), an explanation of the main intended meaning expressed by conditionals is presented in the light of Default Semantics along radical contextualist principles. The conditional primary meaning emerges when the conditional meaning expressed by *If*-constructions is to be defined as the primary speech act performed, and the conditional secondary meaning is obvious in the cases where *If*-conditionals are used to express non-conditional meanings, with "conditional thoughts as their secondary meaning" (Elder & Jaszczolt, 2016, p. 46). For example, in "*If you wouldn't mind, could you close the door?*" (Elder & Jaszczolt, 2016, p. 37), its conditional meaning is secondary to the major speech act of a request.

Extensive literature on *If*-constructions' function-based taxonomies, meanings and forms involves a broad range of researchers. According to these previous studies from related literature, *If*-constructions feature functional diversification and semantic productivity in speech communication.

Sweetser (1990) defines *If*-constructions in three domains: the content domain, a prototype to which most of the conditionals refer, regarding the real-world causal relation (as concurred with ideational conditionals in Lastres-López, 2020), the epistemic domain, which maps the inferential dependency between the protasis and the apodosis, and the speech act domain, in which relevance is established between the protasis and the apodosis, indicating an illocutionary force. Likewise, Athanasiadou and Dirven (1997) classify *If*-constructions into course-of-event conditionals, hypothetical conditionals and pragmatic conditionals. These two typologies contribute to the later studies, such as Ferguson's (2001) research into significant variations of *if*-conditionals in different genres. Carter-Thomas and Rowley-Jolivet (2008) echo the classifications of course of event and hypothetical conditionals apart from their redefinition as factual conditionals and refocusing conditionals. Also, they consider the discourse management category of *If*-constructions as "guidance about the author's intentions and the development of the text" (Carter-Thomas & Rowley-Jolivet, 2008, p. 194), which to some extent bears resemblance with textual conditionals in Lastres-López (2020, p. 71) in the cases where *If*-constructions serve as "explicit signals of discourse coherence." That said, a major difficulty with these taxonomies of *If*-constructions is that they are under-specified, and as a result need scrutiny for a decision on the category judgment to be made. Furthermore, the above typologies are loosely related to the discourse context, i.e., the examples of *If*-constructions are decontextualized (Carter-Thomas & Rowley-Jolivet, 2008). Therefore, the testimony from naturally occurring data or corpus data is still needed.

Drawing on Sweetser (1990) and Quirk, Greenbaum, Leech and Svartvik (1985), Warchał (2010) identifies eight categories of *If*-constructions by means of a corpus approach, which form the basis of the categorization of *If*-constructions in the present study. The explanations and examples of each category are given in Table 1.

**Table 1**Meaning-oriented taxonomy of *If*-constructions. Adapted from Warchał (2010, pp. 143–145).

Meanings	Categories	Explanations & Examples
Propositional	Content	The apodosis is based on the protasis (status of facts in the real world). E.g. <u>If</u> speakers are happy, interested, or
meanings	conditional	angry, their voice production is typically high in key and register.
	Rhetorical	Higher hypotheticality with unlikely or even impossible conditions (strong assertions). E.g. If knowledge had been
	conditional	more developed, the participants would have been able to accept variation. (RAs_LL20140302)
	Concessive	The apodosis is true despite the fact that the protasis may be the case (negotiate claims in an incompatible
	conditional	situation). E.g. Lexical choice will clearly be significant, if not essential. (The Chinese L2 corpus)
	Epistemic	The protasis is a sufficient condition; the apodosis is a logic and necessary consequence (emphatics). E.g. If the
	conditional	complements of knowledge predicates are logophoric contexts, then those of thought and speech must be as well.
Pragmatic	Relevance	The protasis provides the relevant condition for the apodosis. E.g. Should it be useful to bypass the speech recogniser,
meanings	conditional	it is possible to call up lists of phrases according to
	Reservation	The protasis presents a reservation concerning the writer's knowledge. E.g. If we are correct in suggesting that; If
	conditional	I am correct,; If there is
	Politeness	The protasis enables the performance of the primary speech act in the apodosis (politeness strategy to appeal to
	conditional	reader's "conventionally granted" permission). E.g. If you will recall; If I may say so,; If you don't mind my
		saying so
	Metalinguistic conditional	The protasis restricts the validity of the apodosis by indicating its potential problems of the forms in which the propositions are formulated. E.g., <i>It is true if it means that; if you know what I mean, never tired of pointing out</i>
	COHUILIOHAI	propositions are formulated. e.g. it is true if it means that; if you know what I mean, never tired of pointing out

As shown in Table 1, we fit the meanings expressed by *If*-constructions into two groups: propositional meanings and pragmatic meanings. Propositional meanings refer to prototypical conditional relations between the protasis and the apodosis, such as causal relation, hypothesized situation and epistemic domain (i.e. Content conditionals, Rhetorical conditionals, Concessive conditionals, Epistemic conditionals and Relevance conditionals). In contrast, pragmatic meanings are expressed in the cases where the protases express pragmatically triggered meanings related to an acknowledgement of the limitation of knowledge, and to a realization of a speech act (i.e., Reservation conditionals, Politeness conditionals, and Metalinguistic conditionals), instead of meanings linked to the propositional content.

With a detailed description, Warchał (2010) focuses on *If*-constructions as a type of consensus-building device and considers how different categories fulfill the interpersonal functions in academic writing. The results show that the highest frequency of *If*-constructions occurs in the category of Content conditionals, accounting for 57% of total occurrences. This indicates a predominant function of *If*-constructions as a factual condition for the propositions expressed in the claims to hold water, establishing "a subject-matter relation of conditions" (Warchał, 2010, p. 146). Interpersonal meanings are found to prevail in the remaining categories to establish "presentational relations in discourse" (Warchał, 2010, p. 149) and perform the functions of meaning negotiation, establishment of writer-reader relationships, confrontations of alternative viewpoints and opening an interactive dialogue with the readers. Among them, Politeness conditionals, in which the protasis is to seek the readers' cooperation to be engaged in the writer's justification of knowledge claims argued in the apodosis, are found to be rare. The predominance of course of event *If*-constructions and a sparse distribution of pragmatic *If*-constructions are reported in Ferguson's (2001) and Carter-Thomas and Rowley-Jolivet's (2008) studies on medical journal articles.

# 2.2. If-constructions in learner corpus studies

In contrast to the rich literature on *If*-constructions in much-studied published genres or naturally occurring language (see Lastres-López, 2020, on face-to-face conversations), relatively little research has been carried out on learner data, and even less on L2 learners' academic writing with Parkinson (2011) and Flowerdew (2015) as exceptions. By drawing on a physics research article corpus and an L2 undergraduate physics laboratory report corpus, Parkinson (2011) compared the causal, conditional and purposive meanings in Discussion sections to see how their contributions to knowledge claims differ in the two corpora. In her research, resources to express conditional meanings are regarded as one of the persuasive means to advance from the undeniable 'weak' claims of knowledge to 'strong' claims of knowledge. Among them, the proportion of *If*-constructions in the L2 learner corpus is 28%, seven times as much as that in research articles (4%). By contrast, research articles mainly adopted adverbial phrases with *at*, *with*, *for* and *under condition* (62%) to serve the same function, such as "...the *E-field enhancements increase with increasing aspect ratio*" (Parkinson, 2011, p. 168). Parkinson (2011) explains that *If*-constructions are one of the most congruent forms of conditional meaning-making, and proves that there is a relatively higher frequency of this more congruent construction in novice L2 academic writing than in research articles.

Another notable exception is Flowerdew's (2015) study of Hong Kong postgraduate thesis writing of the Discussion section. She found that "students were rather uncertain about conditionals" (2015, p. 64), pointing out the necessity to distinguish the subtleties of the functions the conditionals serve.

### 3. Methodology

### 3.1. Research questions

This paper seeks to answer the follow questions:

- (1) Are there any differences between Chinese L2 learners' theses and published research articles (written by authors with a wide range of language backgrounds as L1) in the overall frequency of occurrences of *If*-constructions?
- (2) What are the differences and similarities in the categories to negotiate meanings in Chinese L2 learners' theses in comparison with those in the published research articles?

### 3.2. Corpus and analysis

The data used in the current study are from two self-compiled corpora of Chinese L2 learners' theses written in English (at both MA and PhD levels), and internationally published research articles (RAs). Chinese MA and PhD thesis writers are unpublished novice L2 academic writers at the onset of their professional careers while RA authors are published experienced professionals at the cusp of their professional lives. Although RAs were written by authors with a wide range of language backgrounds as L1, their ability to publish in internationally peer-reviewed journals shows that they have solid proficiency in English. We thought that exploring whether Chinese L2 academic writers tend to overuse *lf*-constructions as indicated in the previous literature (e.g., Parkinson, 2011) could help extend our knowledge of the use of these constructions in the written production of native and non-native writers.

The full Chinese L2 learner corpus comprises 3.3 million words of 100 theses written by Chinese university students in the discipline of applied linguistics at the Master (50 texts with 0.78 million words) and Doctoral levels (50 texts with 2.52 million words). Being the primary written work of the postgraduate and doctoral students and one of the major determinants of success in their pursuit of MA and PhD degrees, Chinese L2 thesis writing is one of the key pedagogical means by which Chinese L2 learner writers are being socialized into the academic conventions and value positions of the disciplinary community. For the RA corpus, 6 popular and active journals in the field of applied linguistics were identified. They are *Applied Linguistics, The Modern Language Journal, TESOL Quarterly, Language Learning, Language Teaching Research* and *Second Language Research*. A total of 227 empirical research articles from the issues of the year 2014–2016 of each journal were selected for inclusion in the RA corpus, totaling approximately 1.76 million words.

Data were retrieved in the corpora automatically by searching for *if* conjunctions. AntConc 3.4.3 (Anthony, 2019) was used to search the corpora for their occurrences. Following the methodology in Warchał (2010) and Lastres-López (2020), we excluded the instances in the concordance data with *if* serving as (1) a conjunction in an indirect question (e.g. *ANOVA was used to find out if there was any difference...*); (2) concession adjuncts (i.e. *even if*); (3) manner adjuncts (i.e. *as if*); and (4) the instances in direct quotations and examples.

The concordance lines were categorized into groups on the basis of Warchał's (2010) fine-grained typology. In this process, we expanded the immediate context of *If*-constructions to 100 words (50 words before *if* and 50 words after *if*) so that a wider discourse context could provide more valid evidence for us to make judgments. The frequency of occurrences was to be reported in the forms of raw frequencies, and the results were normalized to a million words to allow comparison between the corpora. Statistical analyses were performed using chi square tests. The study did not distinguish the (non)initial and middle positions of the if-clause, as was analyzed in Carter-Thomas and Rowley-Jolivet (2008) and in Lastres-López (2020), since it focused specifically on diversity of functions and interpersonal meaning-making of the construction.

# 4. Results

# 4.1. Overall frequency of occurrences of If-constructions

We identified an overuse of *If*-constructions in Chinese L2 learners' theses in terms of the overall frequency of use. There are 1,046 occurrences of *If*-constructions in RAs, producing 594 normalized frequencies per million words, but Chinese L2 theses yield a total of 2,480 occurrences of *If*-constructions, with a normalized frequency of 751 per million words. A chi square test confirmed a statistically significant difference in the overall use of *If*-constructions between Chinese L2 theses and RAs:  $X^2 = 40.50$ , p < 0.001. This result concurs with Parkinson's (2011) finding of an overuse of *If*-constructions in L2 learners' academic writing.

Table 2 shows the overall frequencies of *If*-constructions in the present study with reference to those in some of the previous literature. The present study was carried out in corpora larger than those in the previous studies, so we compared the standardized frequencies per million words. We could see that the frequency of *If*-constructions in L2 student writing is 820 per million words (Parkinson, 2011), similar to the frequency in the present Chinese L2 learners' corpus (751 per million words). The occurrences of *If*-constructions in RAs in the documented results vary, ranging from 44 to 1,140 per million words. In the present study, the frequency of *If*-constructions in RAs (594 per million words) falls within the range.

**Table 2**Overall distributions of *If*-constructions in comparison with some documented results.

	Register category	Corpus token	Raw frequency	Per million words	Register
The present study	RAs	1,761,044	1,046	594	Written
	Chinese L2 theses	3,304,123	2,480	751	Written
1. Ferguson (2001) 2. Biber (2006) 3. Carter-Thomas and Rowley-Jolivet (2008) 4. Warchał (2010) 5. Parkinson (2011)	RAs	37,422	41	1,096	Written
	Campus-related register <sup>a</sup>	1,071,700	≈2,866	≈ 2,674	Written
	RAs	111,907	119	1,063	Written
	RAs	430,000	490	1,140	Written
	RAs	204,000	9	44	Written
	L2 student writing	177,000	146	820	Written
6. Ferguson (2001)	Consultation Campus-related register <sup>a</sup> Conference presentation Face-to-face conversation	30,732	77	2,505	Spoken
7. Biber (2006)		1,665,500	≈9,427	≈ 5,660	Spoken
8. Carter-Thomas and Rowley-Jolivet (2008)		39,454	152	3,852	Spoken
9. Lastres-López (2020)		180,000	475	2,639	Spoken

<sup>&</sup>lt;sup>a</sup> Campus-related written registers include textbooks, course packs, institutional writing, syllabi, etc.; campus-related spoken registers include classroom teaching, classroom management, lab, office hours, study groups and service encounters.

Table 2 also represents a contrast between written and spoken registers in the frequencies of *If*-constructions, indicating the register specificity of *If*-constructions. If we consider the normalized frequencies in spoken registers versus those in written registers, the frequencies in spoken registers (ranging from 2,505 to 5,660 per million words) are approximately 2–4 times as many as those in written registers. The rate of *If*-constructions used in our data is consistent with this trend, with similar statistics comparable with those found in written registers, but not as frequently used as in spoken registers such as consultations, conference presentations and face-to-face conversations, etc. This result corresponds to Ferguson's (2001) findings about the significant variations of *If*-constructions in different registers. In campus-related academic contexts, *If*-constructions are found to be more prominent in spoken university registers than in written registers (Biber, 2006, pp. 77–78). It seems that the *If*-construction is a more spoken means of conditional meaning-making.

In terms of the categories, Table 3 shows that the maximum occurrence in the two corpora is Content conditionals (293 per million words in L2 theses and 279 per million words in RAs), and the minimum occurrences are Metalinguistic and Politeness conditionals (no more than 1 per million words in both corpora). This result supports previous findings of a high frequency of Content conditionals and a low frequency of Politeness conditionals in academic writing (Warchał, 2010). The second most used category is Relevance conditionals (with proportions of 36% and 24% respectively), and the third most used category is Epistemic conditionals (taking up around 15% of the total number of occurrences in both corpora). Concessive, Rhetorical and Reservation conditionals are used in lower percentages (from 2% to 5%). There is little difference in the ranking of categories between the corpora.

**Table 3**Descriptive statistics of categories of *If*-constructions.

Categories	Raw frequency		Per million words		Percentage of total number of <i>If</i> -constructions	
	Chinese L2 theses	RAs	Chinese L2 theses	RAs	Chinese L2 theses	RAs
Content	968	491	293	279	39%	47%
Relevance	889	254	269	144	36%	24%
Epistemic	376	167	114	95	15%	16%
Concessive	117	35	35	20	5%	3%
Rhetorical	75	43	23	24.4	3%	4%
Reservation	51	53	16	30	2%	5%
Politeness	2	2	0.5	1	<1%	<1%
Metalinguistic	2	1	0.5	0.6	<1%	<1%
Total	2,480	1,046	751	594	100%	100%

Table 4 presents the comparison of the meanings expressed by If-constructions in the two corpora.

**Table 4** Meanings expressed by *If*-constructions.

Meanings	Raw frequency		Per million words	
	Chinese L2 theses	RAs	Chinese L2 theses	RAs
Propositional meanings	2,425	990	734	562
Pragmatic meanings	55	56	17	32

The Chinese L2 learner corpus contains more instances of *If*-constructions to express propositional meanings (734 vs. 562 per million words) but fewer instances of pragmatic meanings (17 vs. 32 per million words) than the RA corpus. According to a chi square test, Chinese L2 learner writers and RA writers have significant differences in both the expression of propositional meanings ( $X^2 = 50.30$ , p < 0.001) and pragmatic meanings ( $X^2 = -12.04$  p < 0.001). The categories negotiating propositional and pragmatic meanings in both corpora will be discussed at length in the following subsections, in order to understand the ways in which writer-reader relationships are negotiated.

# 4.2. Categories negotiating propositional meanings

### 4.2.1. Content conditionals

As shown in Table 3, Content conditionals are prominent in both corpora, with a frequency of 293 per million words in the Chinese L2 corpus and a frequency of 279 per million words in the RA corpus. Content conditionals are used in a lower percentage in the Chinese L2 corpus (39%) than in the RA corpus (47%), but the difference in frequencies of occurrence is not statistically significant.

Content conditionals serve the prototypical function of *If*-constructions that is traditionally considered as '0' conditional (present + present) with the if-clause preparing the ground for the consequence in the main clause, as in (1). In addition, the pattern of 'past + past' content conditionals appeared in the data as well, as reported in Carter-Thomas and Rowley-Jolivet (2008) and Parkinson (2011) to be a process of knowledge-making. That is, the protasis could exhibit a 'weak' form of argumentation, and the statement in the apodosis could support the less obvious proof argued by the writer, as illustrated in (2).

- (1) A case is a multivariate outlier if the probability associated with its D2 is 0.001 or less. (RAs\_TESOL20160103)
- (2) ... only one participant held the information necessary to complete the task. If the participant who asked the question was not able to use a specific word in English, he or she inevitably had to use a clarification and ask his or her partner for assistance. (RAs\_TESOL20160402)

In other words, the Content conditionals advance knowledge claims from the known to the new, and from the shallow to the deep (Louwerse et al., 2008, p. 58). In this regard, the higher percentage of this category in RAs provides evidence for a subtle difference of subject-matter meaning making between the corpora. This means that the RAs focus more on the subjectmatter meaning making than Chinese L2 learners' theses do. As academic prose "deals with informational production" (Louwerse et al., 2008, p. 60), factuality is greatly valued. In the current study, the difference in the frequency of Content conditionals is reported to be insignificant, indicating that both Chinese L2 thesis writers and RA writers have a similar level of awareness and conscious effort to promote status as fact in their knowledge construction. In addition, Content conditionals are "single voiced," which set up a contrast between the modalised locution in Lyons's (1977, p. 794) characterization of subjectivity, and represent a "barely asserted proposition" or monoglossia (Martin & White, 2005, p. 99). For example, in (1) there is no modal expression in the protasis, without conveying epistemic, evaluative or attitudinal meanings. In the monoglossic If-construction in (2), what the participants had to do under that specific condition is depicted as "consensual 'knowledge', versions-of-events which are seen to be unproblematic and generally 'known' or 'accepted' in the current communicative context" (White, 2003, p. 263). Without an overt reference to other voices and different positions, the readership is represented as sharing the same common ground and established knowledge, beliefs and viewpoints with the writer. As exemplified in (1) and (2), the monoglossic Content conditionals have been mostly employed in the Methodology section—a part-genre with specification of information in the process of research, such as the widely acknowledged methods, criteria for recruiting participants, procedures of data processing and management, and so on. Likewise, Ferguson (2001, p. 71) found that "in almost all cases the conditionals provide the operational definitions one might expect in the methods section of a research paper." Since Content conditionals detail the conditions in which the research is carried out, the research could be replicated in some future work and it could be compared to other similar studies previously conducted.

# 4.2.2. Relevance conditionals

Relevance conditionals are used more frequently in the Chinese L2 corpus than in the RA corpus, and there is a significant difference in frequencies according to a chi square test ( $X^2 = 79.34$ , p < 0.001). Relevance conditionals are used to establish relevance between the readers and the current situation, as exemplified in (3).

- (3) If in the future one can gather data for nondemographic variables for various language groups in different geographic locations, it might be possible to develop and examine statistical models of these complex relationships of variables in HL maintenance. (RAs\_MLJ20150408)
- In (3), the writer addresses the general disciplinary community (here *one* can refer to any scholarly member in the community), assuming that the future research prospect is relevant for them. In the main clause, *it might be possible* indicates that the writer is uncertain about the proposition and therefore undermines assertiveness in its validity. In Chinese L2 theses, Relevance conditionals are rarely used to establish relevance, but their overuse tends to "constrain the validity of the statement made in the apodosis to one specific approach or point of view" (Warchał, 2010, p. 148), or to a particular scenario as in (4).
- (4) The topic of a writing task will also influence the degree of linguistic creativity, because if one is asked to talk about a topic which is closely related to his/her own culture in a foreign language, it is likely for him/her to create some special expressions to meet the needs. (The Chinese L2 corpus)

In terms of the meaning negotiation between the writer and readers, unlike Content conditionals, Relevance conditionals comprise occurrences that allow room for the textual voice to engage with other voices and alternative viewpoints being referenced in the text. The writers "write the reader into the text" (Martin & White, 2005, p. 95), engaging readers holding alternative points of view into the text and negotiating a dialogic background for the propositions to be advanced.

As Hyland (1994) points out, *If*-constructions are one of the elements of interpersonal meaning-making along with hedges, emphatics, stance markers, passive construction, etc. In a similar vein, Warchał (2010, p. 142) brings to the surface *If*-construction's potentiality to "establish agreement between the writer and the reader of an academic text." Relevance conditionals and the following categories demonstrate the interpersonal meaning of *If*-constructions. These categories are heteroglossic *If*-constructions. If the proposition is set against the background of shared common knowledge, *If*-constructions establish alignment with those having mutually shared beliefs or values. If the propositions put forward by the writers are at various degrees of possibility of being realized (or being true), the writer would anticipate the potential problems readers possibly have and maintain a sense of solidarity with the readers holding a different position. "The solidarity can turn [...] on tolerance for alternative viewpoints, and the communality into which the writer/speaker aligns the reader can be one in which diversity of viewpoint is recognized as natural and legitimate" (Martin & White, 2005, p. 96). As in (3), Relevance conditionals in the RA corpus open up a dialogic space with the inquisitive peer readers who may possibly conduct future research, and respond to the readers' expectation that no single demographic factor would predict the complex relationships among variables.

# 4.2.3. Epistemic conditionals

We now turn to *If*-constructions by which the writer makes inferences. As indicated in Table 3, Chinese L2 thesis writers use Epistemic conditionals more frequently than published writers do in the RA corpus and there is significant difference across the two groups of writers ( $X^2 = 3.86$ , p < 0.05). *Must, certainly, surely, there is no question, no doubt,* among other expressions, are used in the Chinese L2 corpus to yield high-value modalized propositions or to intensify the rhetorical effects, as in (5) and (6).

- (5) Secondly, if you want to improve your reading ability, you should combine your thoughts and your language. (The Chinese L2 corpus)
- (6) From this perspective, if genre is a socio-discursive process, then the teaching practice must develop learners' reflexivity about the relevant social context to use it as a scaffolding device to explore texts in a meaningful way. (The Chinese L2 corpus)

In (5), the writer directly addresses the readers and expresses the obligation that some actions should be taken. *Should* expresses a subjective deontic meaning here. In (6), the writer adopts an authorial stance as authority over the readers by using *must* in the protasis. In contrast, in (7), an example from the RA corpus, the writer envisages a specific research purpose and the importance to investigate both sides of the subject matter in this specific situation. *Must* expresses an epistemic meaning that leads to a logic argument highlighting the necessary changes in the research design, and hence creates a research space.

(7) Though much attention has been given to the story tellers and how their experiences, perceptions, and sociolinguistic competencies (Koven, 2007; Pavlenko, 2006) are made relevant and, in turn, shape the production of their stories, the roles and contributions of story recipients have largely been ignored. If we are to treat stories as interactional accomplishments, we must investigate how both production and understanding are achieved in and through the telling. (RAs\_TESOL20150201)

Lastres-López (2020, p. 74) demonstrates that in Epistemic conditionals the writer's inference comes not only from their knowledge, but also from their assumptions of "the propositional content of the protasis as true." We thus could not deny the fact that these knowledge and assumptions are loaded with subjectivity to some extent. Chinese L2 thesis writers may increase the degree of subjectivity in the propositions argued in the theses, and they might be less aware of the potential face-threatening nature of making high-value modalized propositions.

If viewed from the writer–reader relationship, Epistemic conditionals are the constructions which close the dialogic space with the readers holding different opinions. In Epistemic conditionals, the propositions are but one of a range of possibilities. However, with an authorial intrusion into the propositions (both the deontic modality and the epistemic modality denote subjectivity), the writer presents his/her commitment to the value position or the credibility of the proposition in the apodosis. Such intensification of emphasis may narrow down the possibilities for the potential doubt about the authorial voice to be engaged into the text.

# 4.2.4. Concessive conditionals

The comparison of the use of Concessive conditionals shows that there is a significant difference between the Chinese L2 corpus and the RA corpus ( $X^2 = 9.24$ , p < 0.01) in their occurrences. Gomes (2019, p. 55) states that in Concessive conditionals "the truth of the antecedent is presented as insufficient for preventing the truth of the consequent." In a similar way, Warchał (2010, p. 148) indicates that in Concessive conditionals "a status of events expressed in the apodosis will take place despite the situation expressed in the protasis being the case," as shown in (8)–(10).

- (8) ...teachers' suggestions and instructions are often highly or somewhat misleading, if not erroneous. (The Chinese L2 corpus)
- (9) Both language learners and researchers consider vocabulary as an important component, if not the most important one in language learning. (The Chinese L2 corpus)

(10) In the current study, task difficulty is treated as purely perceptual, and it is principally, <u>if</u> not entirely, about the task itself, however subjective the estimation might be. (RAs\_MLJ20160101)

Even though this category gives emphasis to the proposition in the apodosis, the protasis negotiates a reader-oriented meaning, anticipating that the reader might have alternative points of view. By demonstrating that the apodosis is true in spite of the fact that the protasis is the case, the writer provides conditions in negation, *if not*, to "forestall possible objections" (Carter-Thomas & Rowley-Jolivet, 2008, p. 201). In terms of the writer-reader relationship, alignment is maintained in that they share the common ground supposing the situation of the protasis might be what it was, while solidarity is at stake because the writers negate the possible alternatives.

### 4.2.5. Rhetorical conditionals

Statistical analysis indicates that there is no significant difference in the occurrence of Rhetorical conditionals between the two corpora though the normalized frequency is slightly lower in the Chinese L2 corpus (23 per million words) than in the RA corpus (24.4 per million words). The Rhetorical conditional is a category of higher hypotheticality (Comrie, 1986), in support of the notion of "remoteness... from the actual world" argued by Elder and Jaszczolt (2016, p. 41), since the protasis is believed to be counterfactual. That is to say, the writer employs Rhetorical conditionals to make propositions as events that have already happened and are thus irreversible.

For example, in (11), an example from the Chinese L2 corpus, it is presupposed that the database is small, so the writer speculates that the research would have been of some greater significance if the research had been conducted by using a different data collection method. The protasis is counterfactual to the presupposition and different from the actual research design. In the apodosis, since the suppositions in the protasis can be true (i.e., in future research it is possible to enlarge the database), "the proposition expressed in apodosis is asserted" (Warchał, 2010, p. 146).

(11) If it had been conducted with a larger database particularly collected from more different schools, the research would have been of greater significance. (The Chinese L2 corpus)

With a subtle difference in the frequencies, more Rhetorical conditionals are found in the RA corpus, quite often serving as a response to possible criticisms, such as having not used specific research methods, as in (12).

(12) First, the intention was to probe temporal associations in Chinese, but the Chinese language does not easily allow for a design with explicit paraphrases of two temporal choices. If Chinese-only test sentences and paraphrases had been used, the task would have been unnatural. (RAs\_MLJ20150204)

By taking into consideration the possible criticisms from the readers, the writer engages in negotiation with them by using Rhetorical conditionals. The propositions in the apodosis are based on high hypotheticality with unlikely or even impossible conditions in the protasis. Therefore, Rhetorical conditionals "represent strong assertions" (Warchał, 2010, p. 146), and compress the dialogic space for negotiation with alternative viewpoints because they are inclined to be a potential threat to the writer's claims. By Rhetorical conditionals, alternative viewpoints are implied but do not come into play, so these conditionals are restrictive in reinforcing solidarity with the readers. The authorial voice aligns itself vis-à-vis the readers who hold the same position but dis-aligns those who do not.

# 4.3. Categories negotiating pragmatic meanings

# 4.3.1. Reservation conditionals

Pragmatic meaning is realized by *If*-constructions that express conditional secondary meaning (Elder & Jaszczolt, 2016) in speech act domains. We observed an infrequent occurrence of pragmatic meaning negotiation in the dataset, which is consistent with the studies by Carter-Thomas and Rowley-Jolivet (2008) and Warchał (2010), proving that pragmatic meanings negotiated by *If*-constructions can be defined as specific to spoken registers rather than academic writing.

Among the categories of conditionals realizing pragmatic meanings, Reservation conditionals that express the writer's acknowledgement of their own limited knowledge is a preferred category in the RA corpus. However, it is scarcely used in the Chinese L2 corpus, and there is a statistically significant difference between the two corpora ( $X^2 = -12.03$ , p < 0.001). For example,

(13) If true, this would suggest a severe limitation in learners' ability to track adjacent and nonadjacent statistics concurrently... (RAs\_LL20160101)

In (13), the writer shows his/her caution in making inference on the learners' ability in the apodosis. A severe limitation only exists provided that what has previously been said is *true*. More if-clauses such as *if any, if correct, if this is the case* preserve a cautious self-image of the writer in avoiding overgeneralizations in the apodosis. Thus, a more frequent use of Reservation conditionals in RAs may possibly indicate that published writers are more interactive in pragmatic meaning making than Chinese L2 thesis writers.

With respect to the interpersonal meaning, in Reservation conditionals, the assertion in the apodosis is hedged by means of modulating the writer's detachment from the proposition. Simply put, the choice of Reservation conditionals indicates that

the writer may not be certain about the truth of the statement in the apodosis, and thereby opens up opportunities for the opposition to pose challenges. This option greatly mitigates the assertiveness of the authorial voice, and opens up the hypothetical space in which different viewpoints might have been held.

# 4.3.2. Politeness conditionals and metalinguistic conditionals

As shown in Table 3, both Chinese L2 thesis writers and published writers make a sparse use of Politeness conditionals and Metalinguistic conditionals, but the numbers are too low to suggest a difference.

In Lastres-López's (2020, p. 75) words, Politeness conditionals are softeners to minimize the request's imposition on the readers, saving their negative face. In (14), the *if*-construction could act to mitigate the rhetorical force created by the writer's proposal of literature recall to the readers (since they may not want to do so), creating an impression of a polite writer, and hence to promote readers' willingness to cooperate.

(14) This apparent contradiction can be resolved <u>if</u> we recall that the Paraphrase Task offered ready-made interpretations to choose from, while the harder Acceptability Judgment Task asked speakers to evaluate metonymy. (RAs\_AL20160202)

In Metalinguistic conditionals, the protasis restricts the validity of the apodosis by indicating the potential problems of the forms in which the propositions are formulated (Warchał, 2010). They are used by the writer to provide explanations for the readers' reference, as exemplified in (15), and to indicate that the statement in the apodosis might be conditional in the specific manner the writer sees it in the protasis, as illustrated in (16).

- (15) If we use N1 to represent the patient, N2 to represent the agent and V to represent the verb, the syntactic forms of them can be summarized as follows. (The Chinese L2 corpus)
- (16) Given the demonstrated correlation between language gains and sociocultural factors such as cultural sensitivity and social network [...] the OPI results would seem baffling if we treat identity development narrowly as a variable of language gains. (The Chinese L2 corpus)

In Politeness conditionals and Metalinguistic conditionals, the rhetorical force of propositions in the apodosis is softened by the protasis either by invoking the consideration about the appropriateness of the linguistic form or by providing further explanations of the conditions. Consequently, the readers are involved into the text as being presented an opportunity to challenge and dismiss the appropriateness of how the propositions are advanced (Elder & Jaszczolt, 2016).

### 5. Discussion

We have identified a significant difference between the Chinese L2 corpus and the RA corpus in the overall distribution of *If*-constructions: Chinese L2 thesis writers tend to employ a notably higher frequency of this constructional pattern. The results also show a general overuse of propositional *If*-constructions and an infrequent use of pragmatic *If*-constructions in Chinese L2 learners' theses.

Drawing on the findings from previous studies on *if*-conditionals in written and spoken registers, we infer that the overall divergence can be in part attributable to the specificity of registers. The results in the current study reflect those of Parkinson (2011, p. 174) who also found that in L2 academic writing students tend to overuse the conjunction *if*, a "more spoken" means of conditional meaning-making, than RA writers. In that regard, Chinese L2 learners' theses demonstrate a degree of "spokenness" (Louwerse, McCarthy, McNamara, & Graesser, 2004), which is in line with the findings of the colloquial features in their L2 theses (Wang & Wang, 2017).

Another explanation for the differences between the two corpora is that Chinese L2 learners' theses and RAs are different text types in terms of the length, writing purposes, and target readership. Chinese L2 learners' theses are longer than RAs, and they could be considered as a criterion in the application for a degree and for "admission to the academy" (Paltridge & Starfield, 2020, p. 2). Their target readers are supervisors and teachers in the thesis defense committee. However, RAs are shorter in length, and they are examples of expert writing to promote the professional studies and disciplinary knowledge claims in the academic research community. Therefore, the potential readers are peer academics in applied linguistics. Meanwhile, since RAs are a published text type, their writing is also targeted at journal editors, reviewers and journal readers who are also part of academia.

In our dataset, Chinese L2 theses are much longer than RAs, approximately 3 times more in average word counts. Since longer texts demand more organizational devices to build up and prove academic argumentation, the *If*-construction is not an exception. It is likely that when Chinese L2 learner writers build inferential chains based on deductive logic, they tend to utilize more conditional meaning-making devices. Further, because the *If*-construction is the default or unmarked form for L2 learner writers to express conditional meaning (Parkinson, 2011), the congruency makes Chinese L2 learner writers inclined to repeatedly retrieve if-clauses from their lexico-grammatical resources. In RA writing, however, which is more skilled and proficient academic writing in the research community, RA writers know better than their Chinese L2 learner counterparts when and where to apply this construction and what available resources are at their disposal to express conditionality in a precise and concise way.

Compared with Chinese L2 learners' theses, RAs demonstrate an awareness of register conventions, as published writers are working at the ways in which the writer-reader relationships are appropriately negotiated. This is related to the differences in target readers and writing purposes between the two registers. As mentioned above, in Chinese L2 thesis writing,

the actual readers are mostly superior to the writers in terms of academic research and writing experience. In order to win their recognition as qualified MA or PhD students as far as the scholarly knowledge and research skills are concerned, Chinese L2 learner writers tend to show assertions and authority towards their knowledge claims in their theses. This can partially explain our findings that the categories that contract dialogic space are more frequently used in Chinese L2 learners' theses than RAs, such as Rhetorical conditionals (expressing strong assertions), Epistemic conditionals (with emphatic deontic modality and authorial stance) and Concessive conditionals (negating the alternative views).

Furthermore, the self-identity of Chinese L2 learner writers in thesis writing may intensify a relatively unequal writer-reader relationship between the writers and their readers, which potentially affects the use of *If*-constructions. According to Botelho de Magalhães, Cotterall, & Mideros (2019), writing L2 thesis challenges students in that they are novice L2 academic writers—lacking in experience and uncertain of success. Then in the process of L2 thesis writing, L2 student writers felt as newcomers to the academic discipline, they "lacked the authority" to make their own voice and to "adopt a position"(Botelho de Magalhães et al., 2019, p. 10). Further, the humble student identity has placed constraint on L2 learners' authorial-voice making in academic writing and denied the possibility of other identities, such as budding scholars or successful writers, etc. (Duff, 2010). As a result, it confronts Chinese L2 thesis writers with a crisis of confidence in inviting multiple voices into their texts and engaging their readers into an academic dialogue.

In contrast, we found that the pragmatic conditionals (Reservation conditionals, Politeness conditionals and Metalinguistic conditionals) are more frequently used in the RA corpus than in the Chinese L2 corpus. The pragmatic functionality of *If*-constructions introduces multiple voices into the text, demonstrating the inherent discursive basis for the knowledge construction in applied linguistics (Hyland & Jiang, 2018). Published writers incorporate their own viewpoints mainly through interactions with alternative points of view in the text. In this way, in-text academic interaction with the disciplinary community represented by their peer readers, journal editors and reviewers might be carried out. However, in the Chinese L2 corpus the pragmatic conditionals fail to receive the attention they deserve as a tool to reach consensus with the readers. *If*-constructions are not only used for reasoning, or for formally representing conditionality and different levels of hypotheticality, but also employed by academic writers to position themselves with respect to their readers, the disciplinary field and a specific academic claim or argument proposed.

In the present study, we also found that the two corpora demonstrate no significant difference in frequencies of occurrence of Content conditionals and Rhetorical conditionals. One possible explanation is that Chinese L2 thesis writers have developed an awareness of the positivist nature of the disciplinary research in the field under study. Positivism advocates the priority of objectivity and disguises individual subjectivity. The objectivist epistemology has informed a broad range of social studies along the line of scientific inquiry (Duff, 2012; Hyland, 2013). Through academic training at the Master and Doctoral levels, Chinese L2 learner writers in applied linguistics are able to follow this paradigm and hence their use of Content conditionals is of similar occurrence with that in the RA corpus.

Another explanation for the similarity of frequency distributions of Rhetorical conditionals is the English proficiency in terms of knowledge of the syntactic structure and tense-aspect systems of verb forms needed for *If*-constructions. Rhetorical conditionals require a simultaneous encoding of both the counterfactual function and "an additional marker of pastness in the form of the past perfect" (Shintani & Aubrey, 2016, p. 301) in the protasis. Therefore, a frequent use of Rhetorical conditionals is possible when Chinese L2 thesis writers at advanced proficiency levels have moved beyond the elementary knowledge of syntactical structure and general rules for the subjunctive mood, and mastered more sophisticated semantic-pragmatic knowledge of hypotheticality.

# 6. Concluding remarks

In this paper, we have set out to compare the use of *If*-constructions in Chinese L2 learners' thesis writing with that in RAs. The comparison provides insights into the problems Chinese L2 learner writers may encounter in terms of *If*-constructions in academic discourse of applied linguistics, as well as a full complexity of the constructions' interpersonal functions.

To return to our research questions, we find that overall, Chinese L2 learner writers make more frequent use of *If*-constructions than RA writers, with more *If*-constructions to express propositional meanings and fewer *If*-constructions to convey pragmatic meanings. *If*-constructions are a congruent form for Chinese L2 learner writers to build causal, conditional and hypothetical relations between clauses. However, *If*-constructions are significantly underused by Chinese L2 learner writers when they are used to make meanings in speech act domains. We also find that categories contracting the dialogic space between the writer and the readers holding alternative perspectives, are relatively overused in the Chinese L2 corpus.

Our findings concur with the view that L2 learner writers tend to overuse *If*-constructions in L2 academic writing, and support the argument of the importance of register specificity. Furthermore, this study demonstrates that *If*-constructions function as a tool for meaning making and meaning negotiation, not only providing a platform for reasoning, but also creating a dialogic space for the writers to negotiate objectivity, authorial identity, and disciplinary knowledge. It may be beneficial for Chinese L2 learner writers to use this rhetorical tool appropriately since they rely heavily on it in L2 academic writing.

Undeniably, the developing mastery of *If*-constructions does not come naturally and automatically. As *Byrne* and *Johnson-Laird* (2010) argue, conditionals should be investigated with respect to the tactical options that the writers have at their disposal when they use this constructional pattern. Chinese L2 writers can make progress by explicitly noticing the ways in which *If*-constructions are deployed and factuality and objectivity are valued in the disciplinary discourse community, as noted by Thompson (2001). It is also advisable that the categories and interpersonal functions of *If*-constructions should be

identified and differentiated in the process of teaching instruction. For instance, a wider range of resources to express conditional meaning, such as less congruent forms of conditional meaning making in RAs—adverbial phrases (Parkinson, 2011), may be recommended in English for academic writing classes in the Chinese context. Also, the implied conditionality of pragmatic conditionals might be made explicit to Chinese L2 learner writers so that they may attend to them as a way to make a consensus with readers.

However, our study has three main limitations that need to be acknowledged. The principal limitation was the merging of MA theses and PhD dissertations into one corpus because MA theses and PhD dissertations may well be different registers. That is, they may have systematic divergences in lexico-grammatical features in accord with the situation of use. For instance, they may have differences in contexts, writing purposes, and targeted audiences, among other key differences, which inevitably have an impact on typical linguistic features. It is also the case that in some countries or universities the MA thesis may not be an obligatory requirement and a prerequisite for the degree. In future studies, it will be important to use separated corpora of MA theses and PhD dissertations to account for these divergences. In addition, the generalizability of the findings is limited since we have to say that this is a case study in the Chinese context because only Chinese L2 learner writing was included, which is not a representative sample of L2 thesis writing. A larger sampling of L2 theses based on data from more regions and countries could produce more definitive findings that may account for *If*-constructions in L2 thesis writing in a wider context. Finally, the writers' language background as well as their L1 academic rhetorical transfer may also have inevitable impact on L2 academic writing. In future studies, *If*-constructions in a corpus of RAs by Chinese writers could be analyzed and compared to those constructions in the Chinese L2 thesis corpus.

# Data availability

Data will be made available on request.

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