

Ambiguity in Chinese College Students' L2 Tertiary-Level Writing: A Thematic Analysis

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Abstract

The current study investigated ambiguity errors that characterise the L2 tertiary-level writing of Chinese college students. Data were drawn from 56 authentic English writings from 11 students of different disciplines across 10 different Chinese institutions. A thematic analysis was conducted to examine the ambiguity error patterns at the lexical and syntactic levels. Lexical ambiguities were found to include Chinglish, ambiguous references, and ambiguous abstractions, and syntactic ambiguities were found to consist of misplaced and dangling modifiers. It was also found that lexical ambiguity far exceeded syntactic ambiguity. The results demonstrate Chinese English as a foreign language (EFL) students' limited L2 linguistic competence and struggle with accurate L2 production. This study aims to draw attention to the unpreparedness of Chinese EFL students for tertiary-level L2 writing and to the need for linguistic support in their written L2 output. Given the increasing demand for academic writing, writing with clarity is of great significance for EFL students. Whereas ambiguity resolution in L2 input has received much scholarly attention, limited empirical research has been conducted on ambiguity errors that characterise EFL students' L2 written output. Therefore, the current study aims to fill this gap by examining the ambiguity patterns that characterise the L2 writing of Chinese college students, thus informing future teaching.

Keywords: L2 tertiary-level writing, Chinese college students, lexical ambiguity, syntactic ambiguity

1. Introduction

In second-language acquisition (SLA), ambiguity has not always been criticized. Research has shown how tolerance of ambiguity contributes to L2 learning (e.g., Lee, 1999; Başöz, 2015). Ambiguity is also considered valuable in creative writing because it offers an opportunity for the reader to contemplate. However, ambiguity is risky in L2 tertiary-level writing, where precision and clarity are valued (Zhan, 2015). It affects the quality of written discourse and hinders the smooth presentation of coherent and logical ideas (Tso, 2021). Readers become frustrated with having to constantly grapple with uncertainties and/or confusion resulting from ambiguous language. To be a qualified tertiary-level L2 writer, the writing should be clear, logical, and coherent. Indeed, writing with concision and precision is a prerequisite for effective argumentation (Tso, 2021) and a criterion in the evaluation of L2 writing (Zhan, 2015). Therefore, it is a must-have skill for L2 learners. However, the task of disambiguating at the lexical and syntactic levels is extremely challenging for Chinese English as a foreign language (EFL) learners. Their limited and poor command of the L2 vocabulary repertoire (Hua, 2020), resulting from the deficiency of the L1 learning context (Reichelt, 2013) and a lack of pedagogical support (Cheng, 2016; Li, 2007), restricts their accurate expression and clear communication of ideas in L2 written production. The drastic discursive and cultural differences between L1 and L2 further exacerbate the linguistic pressure of L2 and add to L2 writing difficulty. The ubiquity of ambiguity resulting from the vast number of homophones, homographs, and polysemes in English (Rodd, Gaskell, & Marslen-Wilson, 2002) makes clear writing an arduous task for L2 learners. As Qu (2017) argued, for Chinese EFL learners, the English language is still the most frustrating obstacle to their L2 writing. However, existing empirical studies on ambiguity in the EFL context mainly focused on ambiguity tolerance's influence on L2 learning (e.g., Başöz, 2015; Erturk, Akkas, & Ozturk, 2023) and syntactic ambiguity resolutions (e.g., Dussias, 2003; Marefat & Nushi, 2005). Limited empirical research has been conducted on ambiguity errors in Chinese EFL learners' L2 writing. To develop these learners' competence in disambiguation, it is vital to understand the ambiguity errors that characterise their L2 writing. Therefore, for the current study, the author recruited Chinese college students pursuing different majors from

different Chinese universities and focused on qualitative analysis of their L2 tertiary-level writing to uncover ambiguity error patterns, hoping to inform future instruction.

1.1 Defining Ambiguity

According to Sennet (2023), there are mainly three types of ambiguity: lexical ambiguity, syntactic ambiguity, and pragmatic ambiguity. The current study will not discuss pragmatic ambiguity but will focus on the former two categories.

Multiple meanings or interpretations of lexicons cause lexical ambiguity, also known as semantic ambiguity. The large number of synonyms, homographs, and polysemes in English makes lexical ambiguity a frequent linguistic phenomenon in SLA (Demir, 2020). For example, the sentence “The chicken is ready to eat” has ambiguous meanings given the polysemic nature of the subject “chicken” and the adjective “ready.” “Chicken” could mean domestic fowl or domestic fowl meat, and “ready” could mean the availability of things or the suitable state of an action to take place. Therefore, this sentence could be interpreted as “The domestic fowl will be fed” or the “Chicken meat will be eaten.” Admittedly, context is of help in solving most lexical ambiguities (Foerst, 2017). However, when there are not enough context cues, lexical ambiguity can cause confusion and even misunderstanding. In the current study, lexical ambiguity is not limited to describing the confusion that the rich denotative meaning of English words can cause but is used as a cover term to describe the confusion, vagueness, and incomprehensibility caused by students’ inadequate handling of lexicons, collocations, compound words, and other lexicalized phrases. In this regard, not only is polysemy likely to cause confusion, but abstractions of intangible properties such as “success” and “expensive” and words of generality such as pronouns and determiners are also subject to ambiguity when not properly managed.

Syntactic ambiguity, also known as grammatical ambiguity, results from the structure of sentences rather than of words (Demir, 2020). That is, misplaced modifiers and sequences of multi-unit words or collocations are subject to different grammatical interpretations, resulting in ambiguous meanings and causing confusion. Consider the sentence “The tutor announced on Tuesday there will be an exam.” This sentence is ambiguous because it is open to two interpretations: (1) the tutor made the announcement on Tuesday or (2) the exam will be held on Tuesday. Though often disambiguation can be achieved by reorganising the word order (On Tuesday, the tutor announced there will be an exam.), there are cases where this fails to help. Consider the sentence “The murder killed the student with a book.” This sentence could mean either that the book was used as a weapon or that the student was carrying a book. To clarify the confusion, it is not enough to simply rearrange the word order. Syntactic ambiguity can become tricky for EFL learners because it is not easy to perceive. Although ambiguity is not entirely objectionable in SLA, syntactic ambiguity is deemed grammatically wrong and unacceptable in L2 writing. In the current study, syntactic ambiguity refers to the ambiguous grammatical structures that misplaced and dangling modifiers cause.

1.2 Empirical Studies on Ambiguity in L2 Writing in the EFL Context

Previous empirical studies have investigated language ambiguity in EFL learners’ L2 writing. Demir (2020), for example, conducted a corpus analysis of the lexical and structural ambiguities in student writing, which totalled 52748 words. The results showed only moderate ambiguity errors (14 lexical and four structural ambiguities). Given the sizable dataset, there is a need to further assess the results’ representativeness. The moderate ambiguity errors might have been due to the homogeneity of participants’ discipline backgrounds (the participants were all from the Department of Translation). Furthermore, the four predetermined categories (nouns, verbs, prepositions, and adjectives) for analysing lexical ambiguity may not have been sufficiently inclusive. The limited taxonomy may have prevented the emergence of other ambiguity errors, such as ambiguous pronouns, which are common error types in Asian EFL writing (Crosthwaite, 2016). Therefore, the current study aims to address these limitations by diversifying the participant pool and expanding the category taxonomy to increase the participant sample’s representativeness and enhance the findings’ generalizability. To encourage the disclosure of more lexical ambiguities, the current study does not set predetermined categories but examines students’ lexical usage by analysing not only individual words but also collocations, compound words, and other lexicalized phrases.

Williyan (2022) analysed lexical and syntactic ambiguity in five EFL learners’ narrative texts. In these texts, there were 29 lexical ambiguities and 24 syntactic ambiguities. Because the purpose of the narrative writing was to entertain readers, participants intentionally used ambiguous words to achieve certain rhetorical effects. Although there were lexical and syntactic ambiguities, participants, according to Williyan (2022), made their intended meanings clear by providing enough contextual information in the preceding and following sentences. Therefore, the results may not accurately reflect participants’ L2 writing proficiency. Additionally, the single text type may have prevented students from showcasing the full range of their writing abilities and/or problems. The

limited data size also makes it difficult to generalize the results to a broader population. In light of these limitations, the current study, aiming to gain a deeper understanding of students' linguistic competence, does not impose restrictions on text type but encourages participants to contribute any written work included in their college assignments.

Tso (2021) revealed how ambiguous meaning, vagueness, and incomplete meaning make Hong Kong EFL learners' L2 writing obscure, inconsistent, and illogical. The author argued for the need to incorporate logical linguistics into writing modules. Although this study touches on the element of ambiguity, its focus is on clarity and precision in reasoning. Furthermore, considering the diversity of geographical, educational, and cultural EFL contexts, the L2 learning process and L2 error patterns are by no means universal across these contexts; rather, they have their own unique idiosyncrasies (Manchón, 2009). For this reason, though generally referred to as Chinese EFL learners, Cantonese-speaking Hong Kong students are not representative of Mandarin-speaking mainland Chinese students given the different L2 learning contexts. However, little is known about the language disambiguation ability of mainland Chinese students in written L2 output. Given the influx of Chinese students aiming to further their tertiary education into anglophone countries, where essay writing constitutes an integral part of the educational evaluation system (Alhassan, 2019), writing with clarity and precision is of great importance for academic success. The ability to disambiguate at the lexical and sentence levels signifies linguistic competence and is a prerequisite for quality L2 writing. Therefore, it is imperative to achieve a realistic understanding of Chinese college students' command of lexicons and sentence structures. The current study seeks to reveal ambiguity error patterns that are typical of mainland Chinese EFL learners to understand students' preparedness for L2 tertiary-level writing. The current study aims to answer the following two research questions:

- (1) What are the common features of the lexical ambiguity errors that Chinese university students make in their tertiary-level L2 writing?
- (2) What are the common syntactic ambiguity errors that characterise Chinese university students' tertiary-level L2 writing?

2. Methodology

2.1 Setting and Participants

This study adopted a qualitative case study approach. It was carried out in mainland China, from where 11 Chinese college students (five male and six female) from 10 Chinese institutions were recruited. The criteria for participant selection were based on purposeful sampling, a non-probability sampling method (Miyahara, 2019). Participants were current and past undergraduate students from Chinese universities who had enrolled in a college English writing course during their undergraduate studies. Participants pursuing English majors had passed TEM 8 (Test for English Majors Band 8), a national standardized test for English majors in China; participants pursuing non-English majors had passed CET 6 (College English Test Band 6), a national standardized test for non-English majors in China or had obtained TOEFL (Test of English as a Foreign Language) and IELTS (International English Language Testing System) scores (Table 1). Table 1 lists participants' background information.

Table 1. Participants' background information

Pseudonym	Gender	Age group	University	Major	English level	Graduation status
Andy	Male	19–25	Tier 1	Computer Science & Engineering	TOEFL: 102	Graduated
Iron	Male	19–25	Tier 1	Physics	IELTS: 6.0	Graduated
Amy	Female	19–25	Tier 1	Pedagogy	CET 6: 586	Senior year
Don	Male	19–25	Tier 1	Agricultural & Forestry Economic Management	CET 6: 449	Senior year
Jay	Male	19–25	Tier 1	Mechanical Engineering	TOEFL: 99	Senior year
Mandy	Female	19–25	Tier 2	English	TEM 8: 63	Graduated
Ray	Male	19–25	Tier 2	Marketing	TOEFL: 105	Freshman
Cindy	Female	26–30	Tier 2	Supply Chain	CET 6: 547	Graduated
Lucy	Female	19–25	Tier 1	Electric Engineering	IELTS: 7.0	Graduated
Nancy	Female	19–25	Tier 2	Fashion Design	TOEFL: 92	Graduated
Sunny	Female	19–25	Tier 2	Finance	TOEFL: 105	Graduated

2.2 Data Collection

Data collection commenced only after the author received approval from the Human Research Ethics Committee (Approval number: 2021/622) of the University of Sydney. Because of COVID-19 restrictions, data collection was conducted online. Advertisements for participant recruitment were published through social networks (Facebook and WeChat). After potential participants reached out, participant information statements, participant consent forms, and participant background questionnaires were emailed to them. After their written consent was obtained, participants emailed their written data (i.e., their authentic L2 writings).

2.3 Data Preparation

Authentic English writings were organized and converted into 11 separate PDF files, the content of which was copied and pasted into Microsoft Word for manual coding. Written data consisted of 56 student writings (53 of an academic nature), totaling 24,532 words (references excluded; Table 2).

Table 2. The genre of written data

Pseudonym	Genre	Number of writings
Andy	Persuasive writing	5
	Persuasive writing	9
Iron	Email	1
	Narrative	3
	Persuasive writing	1
Amy	Chinese-English translation	1
	Book review	2
	Movie review	2
	Persuasive writing	5
Don	Email	1
	Narrative	1
Jay	Essay	2
Mandy	Persuasive writing	1
Ray	Persuasive writing	7
Cindy	Persuasive writing	3
	Persuasive writing	3
Lucy	Research report	1
Nancy	Persuasive writing	7
Sunny	Reflective journal	1

2.4 Data Analysis

The coding and categorization of the written data were based on Braun and Clarke's (2006) six-step framework of thematic analysis—Step 1: Familiarize oneself with the data. After the data were properly organized and prepared, the author read through the 56 student writings to gain a preliminary understanding of participants' L2 linguistic competence and L2 writing proficiency. Step 2: Generate initial codes. This is the most time-consuming phase of the whole analysis process. Written data were visited line by line, and ambiguous items were identified and labelled with various codes (Table 3). Step 3: Search for themes. Multiple revisits had to be made to the coded content to search for themes. The initial codes were subject to revisions or adjustments during the proofreading process. The re-evaluated codes were then organized into different categories/themes (Table 4). Step 4: Review themes. At this stage, the author reassessed and edited the themes by re-examining the meaning units in Table 4. Step 5: Define the themes. To address the research questions, themes were grouped and termed into the subsets of lexical/syntactic ambiguity (Figure 1). Step 6: Compilation. This stage required the author to delve into the coded content again to excerpt examples of raw quotes from student writings. The author interpreted and elaborated on the raw quotes to answer the research questions.

Table 3. Coding of written data

Participants' writing samples	Codes
<p>Iron: Tier 1 university</p> <p>Girls are Better at Language Learning Many people believe that girls perform better at language learning, but I disagree. Maybe it's normal to see that most students who major in language learning are girls. But if girls perform better at language learning, why are most linguists not women? People always get <u>inherent ideas</u> from <u>phenomena</u> and think about the cause <u>rarely</u>. Like a large percentage of women are housewives in reality, <u>leading to</u> the view that women should stay at home and do chores all day.</p>	<p>Lexical ambiguity: Abstract word Chinglish: w-w translation Misplaced modifier</p>
<p>So why is <u>this</u> happening? The best answer is <u>expectancy</u>, that means people often expect a girl or a boy to do something and not to do. If <u>the</u> father was a physicist, he would expect his son to be. With <u>this encouragement</u>, the boy is often more likely to be a physicist. <u>This</u> can also be used to explain that girls are expected to learn languages easier than science. People usually surprised by female scientists also can prove <u>this point</u> as well.</p> <p>In my eyes, everyone is equal, they all have the <u>gift</u> to do everything. Only effort and confidence will decide if you can succeed. When you find out this truth, you can become <u>a minority</u> and succeed.</p>	<p>Ambiguous pronoun Abstract word Article issue Ambiguous pronoun</p>
<p>Don: Tier 1 university</p> <p>From my point of view, <u>network courses</u> are undeniably passive <u>in some factors</u>, and the <u>peak</u> of the dilemma is the inefficient in studying. Nonetheless, only if we bury ourselves into online learning, will we ultimately find the magnificent <u>beauty of it</u>. Online learning could not only broaden our horizons, but also urge us to be self-disciplined and diligent. Generally speaking, online learning is supremely superb</p> <p>approach to students who are <u>at home</u>. Furthermore, I wish that online learning will exert a profound influence to education in the not distant future.</p>	<p>Pronoun issue</p>
<p>Andy: Tier 1 university</p> <p>Admittedly, <u>a minority of individuals</u> may underestimate the <u>working strength</u> of teachers, thinking <u>it</u> is an easy job of reading what the books say. They totally neglect the painstaking efforts paid by teachers. As far as I know, many teachers volunteered to give free classes <u>during vacations</u>. Many sacrificed their <u>time with family sitting</u> in the office for Q&A. Many suffered from occupational diseases like sore throat for quite long time. Considering the efforts teachers paid, some economic make-up for teachers is never too much.</p>	<p>Noun phrase Lexical issue: misuse Unintelligibility Article issue</p>
<p>Amy: Tie 1 university</p> <p>E8 Test4 Writing</p> <p>There are various health problems emerging coming along with the rapid development of society, one of which is the increase of average weight and the decline of <u>health level</u>. <u>It</u> disturbs many people because obesity not only affects their personal images, but also triggers series of diseases. To solve <u>this problem</u>, we need to know the reasons of <u>it</u>.</p> <p>Firstly, the <u>unreasonable</u> diet structure is a very significant reason. Due to the general fast-paced life, many people probably spend only three to five minutes eating, which will cause indigestion and then elicit obesity. Meanwhile, high oil, high sugar and high calorie food are favored by many people, however, despite <u>their</u> good taste, <u>their</u> potential obesity risk is really high.</p>	<p>Phrase</p> <p>Lexical issue: Chinglish</p> <p>Syntax issue: incorrect syntactical order</p> <p>Genre (C-E translation)</p>
<p>There are various health problems emerging coming along with the rapid development of society, one of which is the increase of average weight and the decline of <u>health level</u>. <u>It</u> disturbs many people because obesity not only affects their personal images, but also triggers series of diseases. To solve <u>this problem</u>, we need to know the reasons of <u>it</u>.</p>	<p>Collocation issue Syntactic ambiguity Lexical ambiguity Chinglish Ambiguous pronoun</p>
<p>Firstly, the <u>unreasonable</u> diet structure is a very significant reason. Due to the general fast-paced life, many people probably spend only three to five minutes eating, which will cause indigestion and then elicit obesity. Meanwhile, high oil, high sugar and high calorie food are favored by many people, however, despite <u>their</u> good taste, <u>their</u> potential obesity risk is really high.</p>	<p>Lexical ambiguity Padding Ambiguous pronoun</p>

Table 4. Coding and categorisation of written data

Meaning unit	Condensed meaning unit	Code	Sub-categories	Categori es	Main category
You can become a minority and succeed.	Become minority	a	Ambiguity	Abstract word	Lexical issue Ambiguous abstraction
Luckily, I find it interesting recently to cooking. China has a wide range of food culture consist of many types and flavours. In the past enjoying meals is my favorite, but now I can make it by myself.	But now I can make it by myself.		Ambiguity	Pronoun	Lexical issue Ambiguous pronoun
Problems requiring armed force or judicial power could not leave the help of the government.	Could not leave the help of the government		Ambiguity	Chinglish	Lexical issue Ambiguity caused by cross-cultural linguistic mismatch
If the father was a physicist, he would expect his son to be. With this encouragement, the boy is often more likely to be a physicist.	With this encouragement		Ambiguity	Pronoun	Lexical issue Ambiguous pronoun
But this trip makes him feel mixed.	Feel mixed		Ambiguity	Chinglish	Lexical issue Ambiguity caused by cross-cultural linguistic mismatch
To some extent, I admit that father is not as good as mother in terms of listening and communication, but it doesn't mean that they don't care about kids, whereas they thirst for the truth: are they really happy?	Are they really happy?		Ambiguity	Pronoun	Lexical issue Ambiguous pronoun

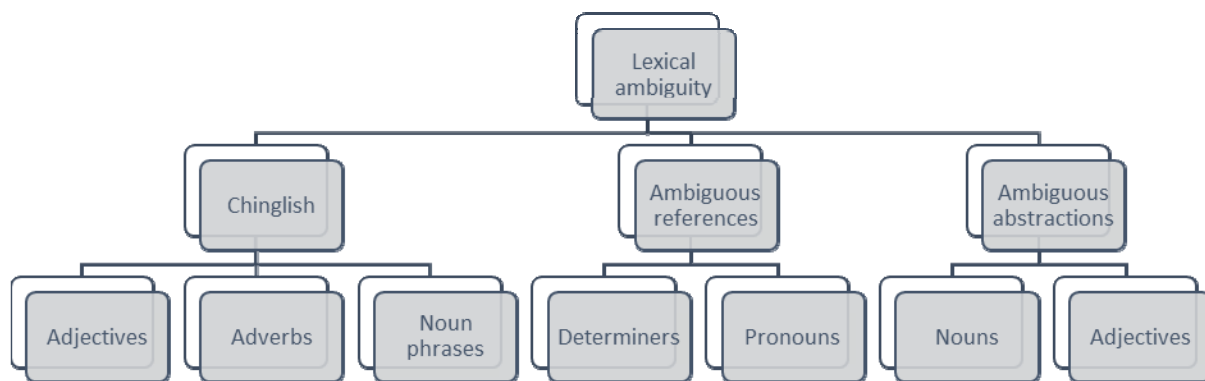


Figure 1. Defining themes

2.5 Reliability and Validity

All data were manually analyzed line by line to minimize errors and mistakes and re-examined at different stages of analysis. Authoritative references were consulted to reduce subjective judgment. Peer debriefing, “a widely accepted and encouraged method to improve the credibility of qualitative research” (Barber & Walczak, 2009, p. 4) was also applied to the data analysis. The author sought the opinions of two of her colleagues with about a decade of experience in teaching English writing. After informing them about the details of this project, the author discussed with these colleagues, via Zoom, the coded content of 10 randomly selected participants’ essays. Coded content not agreed upon was uncoded and removed. Additionally, the raw quotes of the written data (paragraphs, sentences, and meaning units) were presented.

3. Findings

Findings of research question 1: What are the common features of the lexical ambiguity errors that Chinese university students make in their tertiary-level L2 writing?

Common lexical ambiguity errors that characterise participants’ L2 writing are Chinglish (105 items), ambiguous references (162 items), and ambiguous abstractions (78 items; Figure 2). Similar items within a sentence are not counted twice. To illustrate, in the sentence “I have never forgotten their focused look, persisting for dreams, it deeply touched me,” “their” and “it” are both ambiguous references but are only categorised as one item.

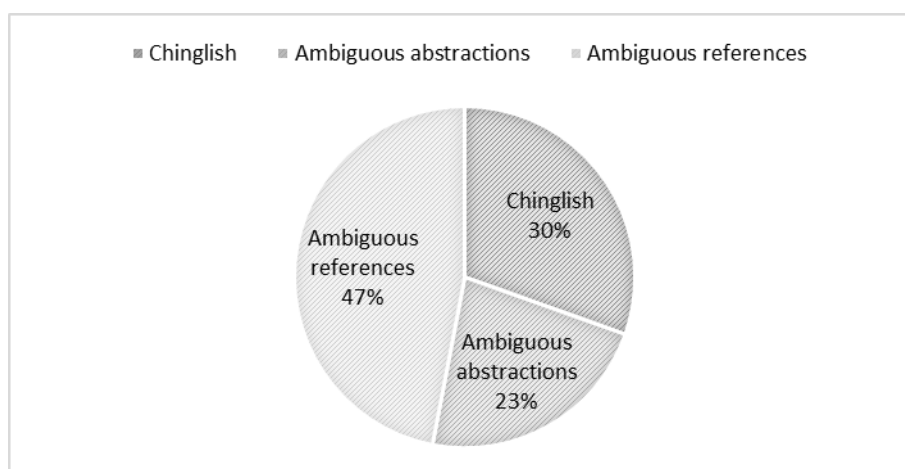


Figure 2. Number of lexical ambiguities

3.1 Chinglish

Chinglish, also described as “English with Chinese characteristics,” is a “misshapen hybrid language that is neither English nor Chinese” (Pinkham, 2000, p. 1). Its occurrence could be due to insufficient input, overlegalization of L2 linguistic rules, and/or L1 thinking patterns. Because of linguistic mismatches between Chinese and English, Chinglish strikes native English speakers as weird, ambiguous, and nonsensical. Therefore, it hinders cross-cultural communication. That said, Chinglish signals Chinese EFL learners’ interlanguage development. Its hybrid features are not static but subject to improvement in the L2 learning process.

3.2 Examples of Raw Quotes from Participants

(1) “I still remember that down period.”

By “that down period.” the author means “a period when he felt depressed.” The underlined expression exemplifies how literal translation can lead to incomprehensibility. Examining the expression’s Chinese literal equivalent “那段 (nà duàn) (that) 低谷 (dī gǔ) (down) 时期 (shí qī) shows that “down” and “低谷(dī gǔ)” work differently as per the unique linguistic rules of English and Chinese. Therefore, a rigid word-to-word translation results in incomprehensibility.

(2) “Nowadays many young people live irregularly, stay up late and become weak, because they do not manage their time.”

The correct version of “live irregularly” would be “keep irregular hours.”

(3) “At the beginning of the movie, he immerses himself in the joy of preparing for a big dinner. The ordinary but realistic scene let me recall my family’s flavor.”

The correct version of the underlined part should be “reminds me of my parents’ cooking.”

(4) “As an old saying goes: ‘one thousand readers, one thousand Hamlets.’”

The underlined quote above does not originate in English literature but is a catchphrase in China. The participant’s misconception of the source of this phrase may be responsible for the participant’s literal translation of the phrase. “Hamlet” is a famous character in *Hamlet*, a famous play by William Shakespeare. The original Chinese catchphrase is “一千个 (yī qiān gè) (one thousand) 读者 (dú zhě) (readers), 一千个 (yī qiān gè) (one thousand) 哈姆雷特 (hā mǔ léi tè) (Hamlets),” which means “a character is subject to multiple interpretations.”

3.3 Ambiguous References

One of the drawbacks of referential ambiguity is “the danger of being misunderstood” (Cock & Kluge, 2016, p. 351). Despite various means to curtail potential ambiguity, such as using grammaticalized word order, morphology, contextual cues, and logical connection (Hernández, 2021), referential ambiguity is still a widespread phenomenon (Siewierska, 2004). Personal pronouns, for example, are fuzzy and versatile (Hernández, 2021) and thus are liable to cause ambiguity, especially when there are not enough linguistic cues to rely on.

3.4 Examples of Raw Quotes from Participants

(1) “On the other hand, diversity TV channels have brought merits in terms of access to knowledge and entertainment. With regard to the former, people can educate them by choosing the field they interested in.”

There is no clear antecedent for the underlined pronouns “them” and “they,” which causes confusion among readers. It is up to the readers to infer from the context what these pronouns mean. Audiences of different backgrounds and age groups might arrive at different conclusions.

(2) “Similarly, the thereupon reduced demand for fossil fuel would reduce the scale of local mine industry, in the process of which a lot of harmful gases are released into the atmosphere.”

The underlined pronoun “which” has multiple antecedents. Grammatically, “which” could either refer to “the scale of local mine industry” or the main clause “the thereupon reduced demand for fossil fuel would reduce the scale of local mine industry”. Semantically and logically, none of the antecedents helps to make sense of the subordinate clause. The author does not make it clear that by “in the process of which,” he means “in the mining process.”

(3) “Firstly, accepting criticism contributes to helping you be trusted by colleagues and get the respect you deserve. Becoming successful in teams inevitably needs both of them. It indicates that your suggestions about the project or your incisive ideas about the problems waited to be solved play an indispensable role in the final decision.”

The underlined “it” makes a weak subject because there is no clear antecedent, leaving the reader puzzled.

3.5 Abstraction

Intangible in nature, abstractions violate Grice’s cooperative principle because of their indirectness, implicitness, and imprecision (Khalil, 2017). The use of ambiguous abstractions requires careful consideration because they are likely to cause confusion. This is especially the case in academic writing, where clarity is one of the top priorities.

3.6 Examples of Raw Quotes from Participants

(1) “On the other hand, he cannot get used to the ‘modern’ life but choosing to maintain original principle like the forefathers to keep a distance from desires.”

This sentence is about a Chinese man adapting to post-Cultural Revolution China. For Chinese readers who are familiar with the Cultural Revolution, it may not be difficult to infer what “original principle” means, but for others, the phrase is too vague because principles vary across cultures (O’Sullivan & Pecorino, 2002). Deeming principles as universal would lead to misunderstanding and even cause conflict.

(2) “For example, many college students think they are not as good as high school students because they are used to a loose life and lose many skills.”

Given how the Western and Chinese education systems differ from each other, using vague words (“loose life” and “many skills”) to describe Chinese college students is likely to cause misunderstanding or

incomprehensibility. Given that “loose life” and “skills” are neither self-evident nor universal, the readers would only feel perplexed.

(3) “For instance, the lamplighter, whose ridiculous behavior impresses me most, represents the poor busy office worker nowadays (I think).”

The “poor busy office worker” represents a prevalent phenomenon in China: a “996” work culture (working from 9 a.m. to 9 p.m., 6 days a week, without overtime pay) that characterizes domestic private enterprises. The expression “poor busy” could resonate with Chinese audiences, but not necessarily with audiences from other cultures, because the “996” work culture is not a universal phenomenon.

Findings of research question 2: What are the common syntactic ambiguity errors that characterise the tertiary-level writing of Chinese university students?

Misplaced modifiers (37 items) and dangling modifiers (8 items; Figure 3) cause syntactic ambiguity errors in Chinese university students’ L2 writings. Ambiguities resulting from fragmented sentences, incomplete meanings, multiple predicates, and mispunctuation are not included in the category of syntactic ambiguity and therefore are not counted.

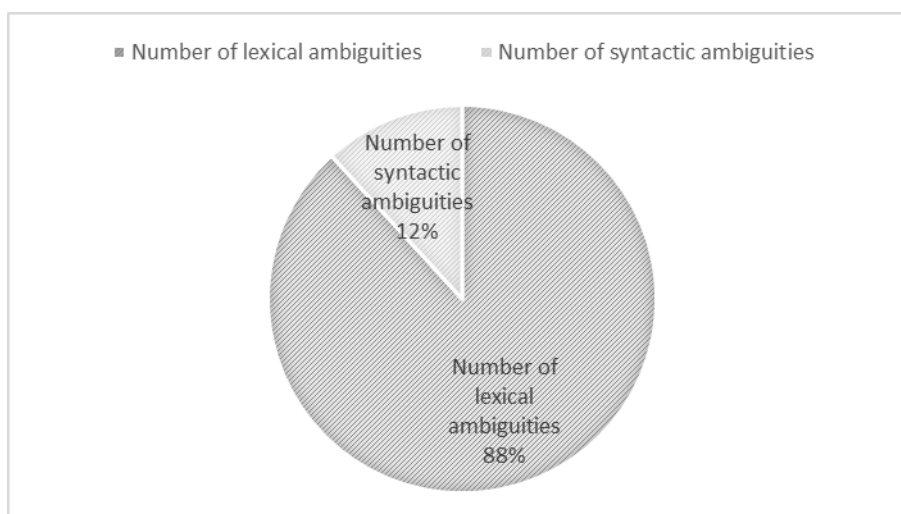


Figure 3. Number of syntactic ambiguities

3.7 Misplaced Modifiers

A misplaced modifier refers to a word, phrase, or clause that is improperly arranged or separated from the word(s) it modifies. To remove ambiguity or confusion, the word order must be rearranged. Clauses with relative pronouns such as “which,” “who,” “whom,” and “that” are categorised under lexical ambiguity (ambiguous references).

3.8 Examples of Raw Quotes from Participants

(1) “Many sacrificed their time with family sitting in the office for Q&A.”

The underlined part is ambiguous because it could be interpreted as “family members sit in the office for Q&A,” or “many (teachers) sacrificed family time and sat in the office for Q&A.” EFL learners should exercise caution when dealing with collocations in L2 writing, given how a change in word order might result in totally different meanings.

(2) “The speed of species extinction has increased nearly 1000 times because of human destruction in last few decades.”

In this sentence, it is unclear whether human destruction has occurred in the last few decades or whether the speed of species extinction has increased in the last few decades. To avoid ambiguity, the above sentence could be rephrased as “The speed of species extinction has increased nearly 1000 times in the last few decades due to human destruction.”

(3) “Of course no one can deny the negative effects resulting from on-line communication like a lack of emotion.”

To clarify its meaning, the sentence could be revised as “Of course, no one can deny that online communication results in negative effects, such as a lack of emotion.”

3.9 Dangling Modifiers

A dangling modifier modifies a word that cannot be found in the sentence and that fails to establish a grammatical relation with the subject of the sentence. A dangling modifier requires more than just rearranging the word order to clarify the sentence’s meaning.

3.10 Examples of Raw Quotes from Participants

(1) “After offering them jobs, they will feel satisfied with the government and won’t do anything to hurt our harmonious society.”

According to grammar rules, the underlined part modifies the subject “they.” However, this sentence does not make any sense because “they” cannot be those who are offering jobs. To eliminate confusion, this sentence could be revised as “After being offered jobs, they will feel satisfied with the government and will not do anything to harm our harmonious society.”

(2) “After doing it, the old woman’s relatives thanked him a lot and became friends.”

According to the context, “doing it” refers to “a young man helping an old woman to go to the hospital.” Therefore, the young man (he) should be what the underlined part intends to modify.

To clarify its meaning, this sentence could be rewritten as “After the young man sent the old woman to the hospital, the old woman’s relatives thanked him and became friends with him.”

4. Discussion

In line with Demir (2020), the current study reveals that the percentage of lexical ambiguities (88%) far exceeds that of syntactic ambiguities (12%). The ambiguous nature of English words explains this result. The abundance of denotative meanings of English words and the vast number of homophones, homographs, and polysemes make the English language more liable to be ambiguous (Lipka, 2010). The 345 lexical ambiguities found in the current study demonstrate the extent to which Chinese EFL learners face lexical ambiguities. However, the number of lexical ambiguities and syntactic ambiguities (46 items) revealed in the current far exceeds that reported in Demir (2020) (14 lexical ambiguities and four syntactic ambiguities). Two factors could explain this discrepancy. The first is the diversified participant pool. Unlike in the Demir study (2020), where all participants were from the Department of Translation, the participants in the current study came from 11 academic disciplines, ranging from Computer Science and Engineering and Physics to Marketing and Fashion Design. Students specialising in translation may exhibit higher L2 linguistic competence than their counterparts from other majors. The second factor is the more inclusive taxonomy adopted in the current study. In contrast to the Demir study (2020), which used four predetermined categories to analyse lexical ambiguities, the current study examines students’ use of lexicons and lexical bundles by employing the thematic approach, which enables a more flexible categorization of lexical ambiguities and the revelation of more ambiguity errors. The current study also diverges from Williyen (2022), who adopted a moderate attitude toward the ambiguous items in student writing. Given that the narrative texts Williyen (2022) collected were for entertainment purposes, the use of ambiguous language could be tolerated and even accepted to some extent. However, in the current study, the texts are mainly of an academic nature, placing great importance on clarity and precision. Ambiguous language violates a key principle of tertiary-level writing and therefore is not permissible.

Of the lexical ambiguities revealed in the current study, ambiguous references account for the highest percentage (47%), Chinglish for the second highest (30%) and ambiguous abstractions for the third highest (23%). The referential ambiguity errors show a pattern according to which L2 referents can only be interpreted by resorting to semantic contextual cues rather than syntactic rules. This pattern reflects the influence of the distinct linguistic typology of L1 (Chinese), which is concerned more with semantic congruity than with the syntactic congruity observed in English (Wang et al., 2023). Crosthwaite (2016) also pointed out how cross-cultural influence causes Asian EFL learners to struggle with managing L2 references. The large percentage of ambiguous referential errors found in Chinese EFL learners’ L2 writing show the formidable challenges Asian EFL learners face in L2 referential movements. Furthermore, the fact that ambiguous pronouns account for 135 out of 162 ambiguous references signals Chinese EFL learners’ poor L2 writing quality, because L2 pronoun errors are the most common trigger for miscommunication (Ryan, 2012). The ability to manage unambiguous references, a strong indicator of linguistic competence (Wu, 2022), is essential for effective L2 writing. Clear referential movement minimises audiences’ processing effort, whereas ambiguous or incorrect references result in the breakdown of discourse coherence and hinder communication (Crosthwaite, 2018). To counteract cross-linguistic influence on Chinese

EFL learners' L2 referential skills, pedagogical support is called for. Crosthwaite (2016), for example, pointed out the deficiency of EFL materials and proposed in-class activities such as retelling of pictures and silent films to elicit an extended narrative discourse from students. He also suggested incorporating collaborative writing to provide students with opportunities for actual L2 discourse production and gap-filling tasks to help students better understand L2 referential movements. Although not necessarily entirely suitable for Chinese EFL learners, these suggestions at least offer insights into the ways of helping L2 learners overcome certain obstacles in acquiring L2 referential skills.

With respect to lexical ambiguities induced by Chinglish and abstractions, two factors can be considered responsible: (1) the influence of L1 and (2) a lack of cross-cultural awareness. The literature suggests that L1 has a significant influence on L2 lexical acquisition and application (Harding, 2011). L2 lexical acquisition seems to be facilitated when L1 and L2 are related (Ringbom, 1978). Chinese and English have different ancestries, which may help explain participants' poor handling of L2 lexicons and collocations. Chinglish, for example, exemplifies how L2 lexicon production is subject to semantic ambiguity due to the L1-L2 lexicalization mismatch. In a similar vein, Paribakht (2005) concluded the possible detrimental effect of the L1-L2 lexicalization mismatch on L2 vocabulary development. Given the essential role of lexicons in L2 writing, addressing the lexical mismatch between L1 and L2 is imperative. Heidari-Shahreza (2014), for example, asked material developers to pay attention to nonlexicalized words (L1 words that do not have L2 equivalents). He also suggested the use of enhanced input and extensive reading to help EFL learners with semantic features of L2 words. The enhanced input practice is useful because it can make salient the deficiency of L2 lexical application and raise students' awareness of the L1-L2 lexicalization mismatch.

A lack of cross-cultural awareness might also play a part in ambiguous lexical production. To illustrate, abstractions involving Chinese-culture-specific expressions may convey concepts that are entirely new to native speakers of English (Baker, 2000). Successful delivery of such expressions requires not only a flexible application of translation strategies (Liu, 2019) but also learners' cross-cultural awareness (Lin & Qin, 2015). For example, one of the expressions participants mentioned is "the harmonious society," which the former Chinese president Hu Jintao used to call for a society where people from all walks of life strive for a better China. However, the participants provided no additional information to further elucidate such Chinese-culture-loaded expressions, creating the possibility of misinterpretation in cross-cultural communication (Hu, 1999). This could be due to participants' ignorance of the ideological differences between China and the West.

L1 syntactic transfer could be the reason behind syntactic ambiguity. As a paratactic language, Chinese syntax emphasizes meaning compared to the S-V structure that characterises a hypotactic language such as English (Lian, 1993). In Chinese, function words, such as subordinating conjunctions and prepositions, are not required to clarify logical and semantic relationships between clauses (Yu, 1993). Rather, such relations are often implied from the context (Yu, 1993). Dangling modifiers are the epitome of paratactic syntax.

A case in point is the following raw quote:

"After offering them jobs, they will feel satisfied with the government and won't do anything to hurt our harmonious society."

According to English syntactic rules, the subject omitted in the subordinate clause should be consistent with that of the main clause. The participant's phrasing makes the sentence awkward and confusing because the logic between the two clauses is nonsensical. However, according to Chinese syntax, the quoted sentence reads naturally because it is clear from the context that "they" are the ones being offered jobs.

That said, given China's exam-oriented English teaching context (Cheng, 2016), it is worth exploring how teaching-related factors might influence students' L2 syntax learning. Grammar teaching in China, for example, focuses on the form and inflection of words and emphasizes drills and exercises (Bao & Sun, 2010). This uncontextualized L2 grammar teaching approach neglects the need for active and meaningful L2 output (Bao & Sun, 2010), leading to a major discrepancy between grammar in class and grammar in real-world writing. The complexity of the English syntax in L2 tertiary-level writing further exacerbates Chinese students' struggles with L2 linguistic accuracy. Therefore, it is important for teachers and policymakers in China to take note of the increasing academic needs of Chinese EFL students and incorporate into the writing class contextualized learning activities, such as real-world writing practice and writing workshops, to provide students with additional learning resources. Syntactic ambiguities caused by subject inconsistency and misplaced modifiers may be expected to be mitigated if sufficient targeted instructions are offered.

Finally, the current study aims to draw attention to Chinese college students' inadequate English mastery in L2 tertiary-level writing. Although all participants have achieved B2 English-level (upper intermediate) proficiency,

their command of lexicons and complex syntactic structures still falls significantly short of that required by post-secondary writing. This raises concerns about the potential challenges students may face if they intend to further their postgraduate studies in anglophone countries. Although the WPA (Writing Program of Administration) Outcomes Statement for First-Year Composition (2014), for example, has responded to the rapid development of digitalization by including multimodal literacy as a must-have skill in post-secondary writing, Chinese college students still face fundamental obstacles at the linguistic level in writing in English (Qu, 2017). Therefore, it is imperative that teachers at home and abroad note the mismatch between the cognitive ability and linguistic competence of Chinese college students. Furthermore, informed by the TOEFL iBT test and score data summary (2021), which reports a mean score of 87 for Chinese (22 in writing) and Korean students (21 in writing) and 74 for Japanese students (18 in writing), the current study cautiously deduces that the overall level of writing proficiency of Japanese and Korean EFL students may not meet the criteria of tertiary-level writing in L2. Smith and Swan (2001) presented a detailed description of how the different typologies of the Chinese, Korean, and Japanese languages interfere with L2 writing. Therefore, a similar qualitative exploration in other EFL regions is needed to further assess students' disambiguation ability in L2 writing.

5. Limitations

The current study is not without limitations. First, despite the use of peer debriefing and caution against errors in the analysis process, manual coding is of subjective nature and may be subject to unintended biases. For example, the other two teachers and the author held different opinions on the categorization of certain lexical items. Additionally, face-to-face discussions with the two teachers were not possible because of COVID-19 restrictions, which may have influenced the strength of the data interpretations. It is recommended that native English speakers who possess expertise in academic writing participate in qualitative data analysis to enhance the interpretation of the results in future studies.

6. Conclusion

The current study aims to highlight the lexical and syntactic ambiguities that characterize Chinese EFL students' L2 writing, with the expectation of advancing teaching practice. Specifically, it is hoped that contextualized input and output can be integrated into the current pedagogical approach to better prepare Chinese EFL students for future academic opportunities. The disclosed lexical and syntactic ambiguities demonstrate Chinese college students' limited linguistic competence, reveal their lack of readiness for L2 tertiary-level writing, and, more important, offer insights into future pedagogical approaches. The author also discusses possible factors that contribute to the error patterns of ambiguity. Given the complexity of L2 acquisition, other factors, such as cognitive, psychological, and pedagogical factors, may also play a part. Therefore, it is imperative that language teachers note possible influences to better serve their teaching practice.

References

- Alhassan, A. (2019). Investigating business EFL postgraduate student writing in a UK university: a qualitative study. *Cogent Education*, 6(1), 1699741-. <https://doi.org/10.1080/2331186X.2019.1699741>
- Baker, M. (2000). *In other words: A coursebook on translation*. Oxford: Oxford University Press.
- Bao, J., & Sun, J. (2010). English grammatical problems of Chinese undergraduate students. *English Language Teaching*, 3(2), 48-53. <https://doi.org/10.5539/elt.v3n2p48>
- Barber, J. P., & Walczak, K.K. (2009). *Conscience and critic: peer debriefing strategies in grounded theory research*. Paper presented at the Annual Meeting of the American Educational Research Association San Diego, California.
- Başöz, T. (2015). Exploring the relationship between tolerance of ambiguity of EFL learners and their vocabulary knowledge. *Journal of Language and Linguistic Studies*, 11(2), 53-66.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qual Res Psychol*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Cheng, A. (2016). EAP at the tertiary level in China: challenges and possibilities. In *Routledge Handbook of English for Academic Purposes* (pp. 121-132). Routledge. <https://doi.org/10.4324/9781315657455-17>
- Cock, B., & Kluge, B. (2016). On the referential ambiguity of personal pronouns and its pragmatic consequences. *Pragmatics: Quarterly Publication of the International*.
- Crosthwaite, P. (2016). Managing referential movement in Asian L2 writing: Implications for pedagogy. *Writing & Pedagogy*, 8(3), 539-560. <https://doi.org/10.1558/wap.27695>

- Crosthwaite, P., Yeung, Y., Bai, X., Lu, L., & Bae, Y. (2018). Defining discourse-new reference in L1 and L2: The case of L2 Mandarin. *Studies in Second Language Acquisition*, 40(3), 625-649. <https://doi.org/10.1017/S0272263117000353>
- Demir, C. (2020). Lexical and structural ambiguities in student writing. *African Educational Research Journal*, 8(3), 100-108.
- Dussias, P. E. (2003). Syntactic ambiguity resolution in L2 learners: Some effects of bilinguality on L1 and L2 processing strategies. *Studies in Second Language Acquisition*, 25(4), 529-557. <https://doi.org/10.1017/S0272263103000238>
- Educational Testing Service. (2021). *TOEFL iBT Test and score data score summary 2021*. <https://www.ets.org/pdfs/toefl/toefl-ibt-test-score-data-summary-2021.pdf>
- Foerst, A. (2017). Ambiguity. *Cross Currents (New Rochelle, N.Y.)*, 67(4), 653-665. <https://doi.org/10.1111/cros.12287>
- Harding, L. (2011). Accent, listening assessment and the potential for a shared-L1 advantage: A DIF perspective. *Language Testing*, 29, 163-180. <https://doi.org/10.1177/0265532211421161>
- Heidari-Shahreza, M.A. (2014). The effect of L1-L2 lexicalization mismatch on incidental acquisition of receptive vocabulary knowledge. *International Letters of Social and Humanistic Sciences*, 39, 67-76. <https://doi.org/10.18052/www.scipress.com/ILSHS.39.67>
- Hernández, N. (2021). Personal pronouns: variation and ambiguity. *Zeitschrift Für Anglistik Und Amerikanistik*, 69(3), 237-265. <https://doi.org/10.1515/zaa-2021-2023>
- Hu, W. (1999). *Aspects of Intercultural Communication*. Beijing: Foreign Language Teaching and Research Press.
- Hua, H. (2020). A study of English vocabulary learning in China--from the perspective of Conceptual Metaphor Theory. *Journal of Language Teaching and Research*, 11(3), 427-434. <https://doi.org/10.17507/jltr.1103.11>
- Khalil, H.H. (2017). A pragmatic analysis of vague language in the news articles on the Iraqi security crisis. *Theory and Practice in Language Studies*, 7(5), 327-. <https://doi.org/10.17507/tpls.0705.01>
- Lee, E. K. (1999). The effects of tolerance of ambiguity on EFL task-based writing approach. *Studies in Higher Education*, 23(2), 157-172. <https://doi.org/10.1080/03075079812331380364>
- Li, Y. (2007). Apprentice scholarly writing in a *community of practice*: An “intraview” of an NNES graduate student writing a research article. *TESOL Quarterly*, 41(1), 55-79. <https://doi.org/10.1002/j.1545-7249.2007.tb00040.x>
- Lian, Sh. (1993). *A contrastive study of English and Chinese*. Beijing: Higher Education Press.
- Lin, Y., & Qin, Y. (2015). An investigation into the culture-loaded words learning by English majors in a vocational college in China. *English Language Teaching*, 8, 63-78. <https://doi.org/10.5539/elt.v8n8p63>
- Lipka, L. (2010). *An outline of English lexicology: lexical structure, word semantics, and word-formation* (Vol. 3). Walter de Gruyter.
- Liu, F. (2019). Translation strategies of culture-loaded words in publicity materials under the background of “the Belt and Road”. *Creative Education*, 10, 839-847. <https://doi.org/10.4236/ce.2019.105062>
- Manchon, R. (2009). *Writing in foreign language contexts: Learning, teaching, and research* (1st ed., Vol. 43). Multilingual Matters. <https://doi.org/10.21832/9781847691859>
- Miyahara, M. (2019). Sampling: problematizing the issue. In J. McKinley, & H. Rose (Ed.), *The Routledge handbook of research methods in applied linguistics* (1st ed.) (pp. 52-62). Routledge. <https://doi.org/10.4324/9780367824471-5>
- Marefat, H., & Nushi, M. (2005). Syntactic ambiguity resolution: A case of L2 learners. *Journal of Cognitive Science*, 6(1), 55-71.
- O’Sullivan, S., & Pecorino, P. A. (2002). *Ethics an online textbook*. Open Resource Text. https://www.qcc.cuny.edu/socialsciences/ppecorino/ethics_text/default.htm
- Paribakht, T. S. (2005). The influence of first language lexicalization on second language lexical inferencing: A study of Farsi-speaking learners of English as a foreign language. *Language Learning*, 55, 701-748. <https://doi.org/10.1111/j.0023-8333.2005.00321.x>
- Pinkham, J. (2000). *The translator's guide to Chinglish*. Foreign Language Teaching and Research Press.

- Qu, W. (2017). For L2 writers, it is always the problem of the language. *Journal of Second Language Writing*, 38, 92-93. <https://doi.org/10.1016/j.jslw.2017.10.007>
- Reichelt, M. (2013). ESL and EFL writing instruction: Challenges and opportunities. *Perspectives on Foreign Language Learning*, 9-21. <https://doi.org/10.18778/7969-032-9.02>
- Ringbom, H. (1978). The influence of the mother tongue on the translation of lexical items. *Interlanguage Studies Bulletin-Utrecht*, 3(1), 80-101.
- Rodd, J. M., Gaskell, M. G., & Marslen-Wilson, W. D. (2002). Making sense of semantic ambiguity: Semantic competition in lexical access. *Journal of Memory and Language*, 46, 245-266. <https://doi.org/10.1006/jmla.2001.2810>
- Ryan, J. (2012). *Acts of reference and the miscommunication of referents by first and second language speakers of English*. Ph.D. Thesis. University of Waikato, Waikato.
- Sennet, A. (2023). Ambiguity. In E. N. Zalta & U. Nodelman (Eds.), *The Stanford Encyclopedia of Philosophy* (Summer 2023 Edition), Metaphysics Research Lab, Stanford University. <https://plato.stanford.edu/archives/sum2023/entries/ambiguity/>
- Siewierska, A. (2004). *Person*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511812729>
- Smith, B., & Swan, M. (2001). *Learner English: a teacher's guide to interference and other problems* (2nd ed.). Cambridge University Press.
- Tikiz-Erturk, G., Denki-Akkas, F., & Ozturk, K. (2023). Investigating foreign language ambiguity tolerance and class anxiety of preparatory level students at tertiary level. *Language Education & Technology*, 3(1).
- Tso, A. W. B. (2021). Revealing Obscurity: A Linguistic-conceptual Analysis of English Academic Writing by Chinese Learners. *Journal of Communication and Education*, 5(1), 3-11.
- Wang, T., Geng, M., Wang, Y., Zhao, M., Zhou, T., & Yang, Y. (2023). Chinese EFL learners different from English natives in cataphora resolution: Evidence from eye-tracking studies. *Frontiers in Psychology*, 14, 1126673-1126673. <https://doi.org/10.3389/fpsyg.2023.1126673>
- Williyan, A. (2022). Language ambiguity in EFL learners' narrative texts: a semantic discourse analysis. *Linguistics, Literature and English Teaching Journal*, 12(2), 352-369. <https://doi.org/10.18592/let.v12i2.7439>
- WPA outcomes statement for first-year composition. (2014). WPA. *Writing Program Administration*, 38(1), 144-.
- Wu, H.Y. (2022). Young Chinese EFL Learners' Referential Strategies in Written Chinese and English Narratives. *Language Teaching Research Quarterly*, 30, 1-17. <https://doi.org/10.32038/ltrq.2022.30.01>
- Yu, N. (1993). Chinese as a paratactic language. *Journal of Second Language Acquisition and Teaching*, 1, 1-15.
- Zhan, H. (2015). Frequent errors in Chinese EFL learners' topic-based writings. *English Language Teaching*, 8(5), 72-81. <https://doi.org/10.5539/elt.v8n5p72>

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