

Analysis of Apologies in English Textbook Using Python: Contextualization and Interpretation

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Abstract

This study employs Python crawlers and data analysis to conduct text mining and visualization on the apologies in English textbook. Through methods such as word distribution, frequencies, and interpretations, the results indicate that the distribution is uneven. The linguistic forms of apologetic expressions are basically “sorry, excuse me, oh, and oops” with pure “an expression of an apology”. The apologetic contexts are inclined to be homogeneous and simple within the settings of selling-buying and inviting. The contextualization, distribution and interpretation are interrelated. Furthermore, the contexts are not authentic enough to facilitate the more complicated expressions of apologies. This study has implications for research on pragmatic knowledge in primary school textbook analysis, adaptation, and development.

Keywords: Python apologies, IFIDs, EFL textbooks, contextualization.

1. Introduction

Python language comes with a large standard library that covers areas such as string processing, internet protocols, software engineering, and operating system interfaces. In recent years, Python has become more and more popular for data mining due to the rise in the number of data analysis libraries. The python language been in cooperated into the gross studies as text mining, and sentimental analysis^[1-5]. Rare study has been incorporated python into textbook analysis. For English as a foreign language (EFL), textbooks are a significant source of knowledge and a major factor in shaping teaching and learning. They are the main resource of routinized pragmatic speech acts besides tutors in ESL context. Some of the studies mainly focus on the presentation and distributions of pragmatic knowledge^[6-9]. This article introduces Python as an adequate programming language for education and research on textbook analysis. This is accomplished by the analysis of distribution, cooccurrence and frequency. The results of these studies cater for teaching pragmatic competence and be implicitly represented in the textbook. T Apologies are the common utterances in daily communication.

2. Apology and Its Felicity Conditions

2.1 Definition

Apology is one of the ubiquitous social actions. Apologetic expressions are common in daily interaction. Apology is an important strategy in maintaining and restoring social harmony, due to its indication of accepting moral responsibility for doing offensive behavior. Apology has been extensively discussed in speech act theory^[10-12] psycholinguistics, and sociolinguistics sociologically. The three approaches are not exactly clear-cut; however, they complement with each other for different focuses. In the linguistic aspect, it mainly focuses on the linguistic form of apology expression. In the social approach, it particularly deals with the cross-cultural differences in various language communities. In the pragmatic aspect, apologies are studied as one of the speech acts, such as its felicity conditions, its realization strategies, and the categorization of its different functions. Jucker^[13] traced the development of the speech act of apologies. They argued that the development of apologies originated from the formula speech to God, and then gradually changed into the conventionalized speech act. Until now it has

become a fully grammaticalized and minimalized speech act. Due to the diversification of its original meaning, apologies are used for a much broader range of situations than previous days. Accordingly, the definitions of apologies have also changed. In speech act theory, “Apologies” belongs to Searle’s group of “expressive”. Aijmer’s^[14] research of the teenagers’ apologies showed that this speech act was often used not as real apologies but “non-sincerely” in context of mock politeness or mock impoliteness. Then a series of corpus-based studies shows the weakening and attenuation of apologies.

2.2 Illocutionary force indicating device of apologies

In the process of investigating the speech act apologies, it is crucial to identify each specific speech act known as apologies. Olshtain and Cohen^[15] proposed the notion of speech act set and introduced the concept of Illocutionary Force Indicating Device (IFID). To further investigate the apologies, the concept IFID is introduced. It is a collection of semantic formulas for apologies exist universally. Blum-Kulka et al.^[16] claimed that the explicit realization of an apology is via an explicit IFID. The IFID could be adopted as a method to identify apologies in this study.

However, evidence by different studies indicates that the identification of IFID remains changing. The IFID of speech act apology is the “verb” or synonym of a verb in the present indicative active with a first-person singular subject. The most widely recognized used speech clichés of act of apologies realization are: *(I am) sorry, Forgive me, I apologize / (My/Our) Apologies, Pardon (me) / I beg your pardon, Excuse me*. All these semantic formulae could be used as a clue to trace the speech act of apology.

For each speech act, the specific context is supposed to be provided where the speech act is executed. The concept of felicity condition is crucial to construct individual context. Speech act theory recognizes the felicity conditions for each category of speech act. Since the function of apologies has changed, the development of the felicity conditions for apologies has undergone some changes. Owen^[10], Smaglie et al.^[17] have all conceptualized the felicity condition of apologies. It appears to be less complicated chronologically from five rules to three rules. It is defined mainly from its function and semantic features. Owen^[10] identified five rules including three preparatory rules, sincerity rule and essential rule to constitute the felicity condition, and the felicity condition is supposed to predict the sentences that could function as indirect performance of apologies. Thomas^[18] simplified it into three procedures in terms of propositional act, preparatory condition and sincerity condition. Smaglie et al.^[17] identified three phases of apologies. They singled out three kinds of speech act of apologies in terms of sincerity criterion: sincere, phatic and official. Among the three conceptualizations, the condition of sincerity has remained to indicate the major implicature of “apology”: to show regret, and sorry for what the speaker has done to the hearer.

3. Research on Apologies in Textbooks

For the English as Foreign Language (EFL) learners, textbooks become the primary sources in imparting pragmatic knowledge in school studies. Many studies have examined the speech act in textbooks. The contexts L2 is exposed to are crucial for them to construct their pragmatic knowledge in non-native speaking countries. Many studies challenged the authenticity of material provided by the textbooks. The teaching material of speech act is often criticized as inauthentic^[19,20]. The authentic text is a stretch of real language, produced by a real speaker or writer for real audience and designed to convey a real message of some sort.

Carlos^[21] investigated the pragmatics of *thanking* in Spanish textbooks, and argued that the contents of thanks do not widely reflected the varied representation of *thanking* in situation.

Holger’s study^[22] examined the speech act apologies in German textbooks, investigating the input of teaching apologies in textbooks. Then the results show that the input of ‘apology’ has been presented to learners of different levels, however the inconsistency lies between the input part of the apologies and the output part (specifically the exercises) which the learners are supposed to fulfill. More specifically, the contexts design of the input of the apologies are less complicated, and simple while the exercises require highly contextualized expressions based on comparatively more complicated contexts.

Therefore, to conduct a systematic investigation of apologies in the textbooks is valuable and feasible. The materials provided by the series textbooks for English as a foreign language (EFL) in China are examined

particularly on how they construct the context of speech act ‘apologies’ in the textbook. A discussion of the ‘apologies’ contexts seeks to answer the following questions:

1. What are the distribution and presentation of ‘apologies’ in PEP Chinese textbooks for EFL learner?
2. What are the linguistic features and contextualization for expressing apologies in the textbooks?
3. What are the relationships of ‘apologies’ among distribution, construction and contextualization in the textbooks?

4. Research Methodology

4.1 The textbooks

The textbooks analyzed in this study are all currently available on the market for elementary schools in China. The series of PEP Primary English Textbooks are compiled based on the basic national principles of curriculum. The Education Department established the *National English Curriculum of Compulsory Education* and issued it in July, 2011. Students in Grade three and four should acquire the ability of level one; students in grade five and six should acquire the ability of level two. It suggests that the general objective during fundamental education period is aiming to cultivate students’ overall ability of using English. The ability is specifically categorized in four aspects: language knowledge, language skill, learning strategy affect and cultural awareness. And in the design of the textbooks, the *Curriculum* specifies that learners should learn how to conduct some individual speech acts such as *apology, request and thank*. Since these series are compiled and published by the People’s Education Press, an authoritative press in China, many elementary schools are likely to use this textbook. The newly version of the PEP textbooks came out in 2012, two books per academic school year starting from age 9-12. The textbooks are designed to incorporate the language skills especially reading, listening and speaking to the familiar settings of the student’s daily life experiences such as school life, at the park, animals, birthday party and so on.

In the *National English Curriculum of Compulsory Education Curriculum*, the speech act of apologies has been defined in terms of the functional knowledge, language skill, and cultural aspect. It is more inclined to be the pragmatic competence in cultural section, since the appropriateness has been mentioned which corresponds to the traditional evaluation criteria of pragmatic studies. For the specific skills, students are supposed to use the daily expressions. However, the textbooks are compiled in terms of discrete language knowledge instead of pragmatic knowledge-based. Therefore, even the speech act of apologies presents in the textbooks, there’s no requirement for the context design and setting for the learner. Besides, four principles for textbook compilation are formulated in terms of thoughtfulness, scientific principle, interest, and flexibility. They emphasized that the selection and design of the context in the textbook should be close to the authentic context, be lively and vivid, interactive to arouse the interests of the students in learning English. And the compiler should incorporate the language skills into the context design. The material authentic, idiomatic, typical and the important point should be reoccurred. To sum up, the principles concerning the context design in the textbooks requires the authenticity, interaction, typicality and accuracy.

4.2 Data collection

The textbooks start from Grade 3, two semesters for each academic year. The book for fall semester is labeled as Volume 1, the spring semester as Volume 2. So, the textbook for Grade 3 (Fall semester) is coded as “G3 Vol. 1” as an example. Each textbook consists of six units. To analyze the speech act of apologies, the starting-point for the analysis is to identify the apology expressions operationalized as the linguistics forms of *sorry, pardon, excuse me, forgive me*. Besides, *Oh, afraid of, oops*, are also introduced by IFID. We investigated the whole textbook and introduced “*Oh*” as a newly added linguistic forms of apologies due to its pragmatic functions.

5. Results and Discussion

5.1 Distribution and presentation of speech act of apologies

We conducted text analysis on Python software to further explore the characteristic of the text. First, we implemented word cloud method on the text for visualization. We included the 50 most frequent words and the font size indicates the frequency of word occurrence.



Figure 1 The word cloud of words around apologetic words

In figure 1, the most frequently used words around the apologetic words show the tendency of context employed in the textbooks. It is shown that school and home are the major context of apologies.

Then, the “apology” items and their variants that are to be examined, and the results is shown in the Table 1.

Table 1 Overall representation of apologies in PEP English textbooks for elementary school. (With percentage in the parenthesis)

Apology IFIDS	G3	G3	G4	G4	G5	G5	G6	G6	Total
	Vol.1	Vol.2	Vol.1	Vol.2	Vol.1	Vol.2	Vol.1	Vol.2	
<i>sorry</i>	0	2	2	3	4	3	3	6	22(64.8)
<i>pardon</i>	0	0	0	0	0	0	0		0
<i>excuse me</i>	0	0	2	1	0	0	3		6(17.6%)
<i>forgive me</i>	0	0	0	0	0	0	0		0
<i>oh...</i>									
<i>afraid of</i>	0	1	0	0	2	1	0	1	6(17.6 %)
<i>oops</i>									
Total	0	3(8.8%)	4(11.8%)	4(11.7%)	6(17.7%)	4(11.8%)	6(17.7%)	7(20.5 %)	34 (100%)

The number of speech act of apologies are increasing. The distribution of this speech act is uneven. In G6 and G5, totally 23 (67.7%) speech acts of apologies appear, covering the majority part of the presentation. No input shows in G3 Vol.1. The lack of apologies in G3 Vol.1 and comparatively fewer presentations in G3 Vol.2, G4 Vol.1, and G4 Vol.2 indicate that the input of the apologies is not enough. For the linguistic form of apologies. The single response word “sorry” constitute the 62.8% of the IFIDS. The word “excuse me” takes 17.2%, and the combined expressions as “oh/ afraid”, or “oops” constitute the rest of the formula. The much higher frequency of “sorry” and “excuse me” confirms that apology expressions are indeed conventionalized and are routinely expressed by idiomatic expressions. Other IFIDs as “pardon, forgive me” are not presented in the textbooks. Since each unit consists 12 sections, namely “Leading Part, Let’s talk, Let’s Learn, Let’s sing, Let’s play, Let’s check, Let’s wrap it up, Let’s try, Read and write, Start to read, Look and say ,Story time with Recycle and Appendix attached at the end of each volume “. Each unit selectively have some of the sections. The distribution of the apologies in different section is shown in Table 2.

Table 2 The distribution of the apologies in different section (with frequency of number in the parenthesis)

Apology IFIDS	Leading part	Let’s talk	Let’s wrap it	story	read and	Recycle	Look and say	Appendix
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			up	time	write			
G3 Vol.2		sorry (1)		sorry (1)				
		oh (1)						
G4 Vol.1	excuses me (1)	excuse me (1)		sorry (1)				
	sorry (1)							
G4 Vol.2		excuse me (1)		sorry (1)				
	sorry (1)	sorry (1)						
G5 Vol.1	sorry (1)	sorry (1)		oh (1)		oh (1)		
				sorry (2)				
G5 Vol.2	sorry (1)			sorry (1)	sorry (1)			
				oh (1)				
G6 Vol.1	excuse me (1)	excuse me (1)		excuse me (1)				
	sorry (2)		sorry (1)	sorry (1)	sorry (1)		sorry (1)	sorry (1)
G6 Vol.2		sorry (1)		oops (1)				
				sorry (1)				
Total(number)	8	8	1	12	2	1	1	1

Most of the Apology IFIDs appear at the “*story time*” sections. This section serves as a function of reading for fun and to increase the interests of the textbook. A conversation happening between fixed figures with a funny ending constitute the main context of “*story time*”. The other expression mainly in the *Leading part* and *Let’s talk* section. And the rest of them scattered in “*Let’s wrap it up, Read and write, Recycle, Look and say, and Appendix*”. No apologies could be found in other sections as “*Let’s Learn, Let’s sing, Let’s play, Let’s check, Let’s try, Start to read*”. One reason is the input of apologies mainly concentrates on the communicative competence instead of language skill training. Another reason accounting for this distribution is the notion of context, since speech act is highly context-dependent. Enough context should be designed to elaborate the use of specific speech act. The section without apologies lies in that they are language skill based which is less context-dependent.

5.2 The linguistic features and contextualization of apologies

5.2.1 The analysis and interpretation of “sorry”

We have reviewed the felicity condition of “apologies” since the *Curriculum* emphasized the speech act of apologies in functional, skill and cultural aspects. The functions of the apologies are changing while the felicity conditions have changed accordingly. This paper would adopt Smaglieri et al.^[17]’s three phases model as the theoretical framework to evaluate the contextualization of ‘apologies’ in the textbooks. The most frequent form of apologies is expressed with a single form of ‘(to be) +sorry’ as an ending of a conversation. 21 expressions identified as ‘apologies’ are delivered with the expressions of ‘sorry’. Since Murphy^[23] argues that *(I’m) sorry* is not an explicit form for apologizing but rather a generalized conversational implicature which by default issues an apology, and can perform these sympathetic uses. Five formulaic expressions consisting of “*(I’m) sorry*” are removed from apology due since they function differently from apologies. Only 17 of them are identified as functions of apologies. All the 17 contexts of apologies satisfy the felicity conditions for the three phases: 1) the offence committed by the speaker to the hearer; 2) realization of the speaker’s responsibility for what has been and psychological discomfort; 3) speaker’s longing to restore the violated harmony of communication. This is illustrated in Example 1 in G4 Vol.1

Example 1

Zoom: Goodnight, Mom.

Mom: Wait, Zoom. Put away your books

Zoom: All right. English book, Chinese book, math book...

Mom: Zoom, is everything in your schoolbag?

Zoom: Yes, Mum

Mom: Goodnight Sweet dreams!

(tomorrow morning, for the breakfast)

Mom: Some more?

Zoom: No, thanks. I'm full.

(on the way to school)

Zoom: On, my schoolbag is so heavy.

(In the classroom)

Teacher: Take out your books, please.

(There jumped a cat from Zoom's schoolbag. And sacred)

Zoom: Oh! Sorry

In Example 1, the character "Teacher" requests the students to take out the textbook in the classroom before class. However, an unexpected cat rather than books jumps out of Zoom's schoolbag. According to the context, Zoom's Mom has already reminded him to prepare for the textbooks in the following day, and confirmed Zoom's done everything well. In the morning, Zoom felt that his bag was abnormal since it was too heavy. The cat has jumped into the bag. However, he did not check it again. At last, he felt sorry about his own guilty. The context to elicit the speech act apologies is established on a complete story. All the contexts provided are paving the way for the readers to comprehend the force of apology. This example appears in the "story time" part at the end of each unit.

This example also well demonstrates the three phrases of the condensed felicity condition. In example 1, Zoom's cat's coming from the schoolbag is an offence of Zoom to the hearer teacher. Then Zoom's teacher shows that he is severely astonished and sacred. Zoom realizes that it is his responsibility that he does not prepare well for the class which has aroused the teacher's discomfort. Then he wants to restore the violated harmony by expressing apology saying "sorry" to the teacher. And we examine the rest of the expression consisting of "sorry" to check whether they could meet the standards of the felicity conditions or have provided enough contexts to elicit the speech act of apologies.

We have numbered the 17 expressions consisting of 'sorry' functioning as 'apologies' in the order for different grade (first semester and second semester), and have identified the constructions of their contexts based on the mentioned Smagllii et al.'s research^[17] as shown in Table 3.

Table 3 shows that the contextualization of apologies in this textbook has the following characteristics: they happen within the school context since the students are familiar with it; there are explicit apologies with the construction "*(I am) sorry*". The apologies are constructed all through dialogues except one example of "comment letter". The dialogue mainly creates a simple context which leads to the simple use of 'apologies': a request for buying something, an invitation, and school activities. The speech act of apologies serves as an ending of each dialogue saying directly "Sorry".

To answer the second questions, the contextualization of the context is homogeneous and simple. The most important settings are buy- and-sell contexts, specifically the hearers are rejected for buying them by the reasons as lacking of money, not for selling. Another important setting is that the hearers invite the speaker to attend some activities. Then the hearers refused to attend by providing the reasons as having exams, having no time, personal physical inadequate. These two contexts serve as the typical contexts in this textbook design.

It's worth mentioning one special example in G5 Vol.1. When the speaker does not hear exactly what the hearer says. The speaker wants the hearer to repeat. The speaker uses "sorry" rather than "pardon" which is more appropriate in this context.

Table 3 The context constructions of "*(I'm) sorry*."

Textbook series	Context	Felicity condition		
		The speakers commit offenses.	The speakers' actions cause the hearer's psychological discomfort.	The speakers' expressions to restore the relationship
G3 Vol.2	The elephant and the monkey are picking the banana, strawberries.	The elephant has eaten the banana	The monkey likes the banana too.	Sorry! I like bananas.
G4 Vol.1	They are doing the cleaning,	One is holding a basin of water	She said: "excuse me!"	Oh, sorry
	Zoom's cat scared the teacher	Zoom's cat comes out.	The teacher is scared	Oh! Sorry
G4 Vol. 2	The hears are buying the things.	The things are not for selling	The hearer wants to buy them.	Sorry, they are not for sale.
	Sarah wants by the skirt	Mom refuses to buy the skirt.	Her mother doesn't have enough money.	Sorry, Sarah. It's too expensive.
G5 Vol.1	Zoom wants to buy the football.	Zip refused.	Zip didn't have enough money.	I'm sorry, Zoom. We don't have enough money.
	The kid wants play with Mr. Li.	Mr. Li finds refused.	Mr. Li could not play now.	Sorry. I have an English class at 3 o'clock.
	A Can wants the bird to take it 'home'(dustbin)	The bird refused	The bird cannot help the Can to the dustbin	Sorry. I'm busy
	Zoom is invited to play football	Zoom refuses his request.	Facial expression of the Rabbit.	Sorry. I can't. I want to practice the song.
G5 Vol.2	Zoom's desk is dirty.	The dirty desk annoyed the rabbit.	Zoom did not clean the table	Sorry
	Zoom making noise in the cinema.	His noise was disturbing Zip	Zip reminds Zoom's behavior.	Sorry.
G6 Vol.1	Dad and the kid are crossing the roads.	The kid is almost running the red light.	Her father reminds her.	Sorry
	Zoom wants cake for the high tea	The cake is not for selling.	Zoom is disappointed.	Sorry. I don't have any cake.
	Boys are playing.	One is shouting at the other.	The other one didn't hear.	Sorry. I didn't hear you.
G6 Vol.2	The giraffe wants to play football with other animals.	Zip and Zoom refuse giraffe.	The giraffe is disappointed	Sorry. Your neck is too long. The others can't reach you. Football needs teamwork.
	A complain letter to the hotel.	The hotel is supposed to be praised by the customers.	The customer does not give good comments.	I'm sorry, but we didn't enjoy our story very much.
	The family is going to buy a pet, and they all like the rabbit.	The speaker realizes that the rabbit is not for sale.	The hearer cannot buy the rabbit.	Sorry. You can't buy him. He's my friend!

The essence of speech act of apologies lies in the speakers' taking responsibility for the offence committed to the hearer, and then he expresses regret to the hearers. The one exception in the apology speech act in the textbook is the letters to the hotel. The relationship is reversed and the hearer is "committing the offense to the speakers". In this context, the hearer (the hotel) is expecting to get positive response. The speaker chooses to use the expression ironically that the hotel should be criticized. The context of the comment letter fits for the felicity condition of apologies; however, it is the hotel's responsibility to show their regret to the hearer (the custom).

5.2.2 Beyond "sorry"

The rest of the apologetic expressions are “*excuse me, oh, and oops*”, among which “*excuse me*” constitutes the most part. Its use mainly functions as a “forgiveness-seeing” construct which complies with the function of apologies. Holger^[22] argued that ‘*excuse me*’ could be often uttered to get somebody’s attention to ask a question, and this apologetic formula cannot always be replaced with “*sorry*”, as the two phrases have slightly different functions. *Excuse me* is used to remedy a past or immediately forthcoming breach of etiquette or other light infraction of a social rule^[24]. The quasi-apologetic expressions with slightly different pragmatic functions do not suffice for learners to be able to use them in pragmatically proficient and contextually sensitive ways. The other 5 examples shown in this textbook confirmed the results. In most contexts, the formulaic expression “*excuse me*” is put in the initial part as to arouse somebody’s attention in terms of asking the way, consulting something, or asking for help. It is inappropriate to conceptualize them as typical function of apologies. Among the 6 “*excuse me*” expressions, only Example (2) in G4 Vol.1 is identified as a real apology.

Example 2

(The students are doing cleaning in the classroom. The woman was holding a basin of water to clean the table, while a man is standing in her way mopping the floor.)

Woman: Excuse me.

Man: Oh, sorry.

‘*Excuse me*’ in Example 2 serves as a forgiveness since the speaker thought she is interrupting the hearer’s mopping the floor. The hearer replies with the combination of “oh, sorry” to show that he is aware that he is blocking the way.

In the textbooks, some words as *Oh* and *Oops* still function as apologies. “*Oh* and *Oops*” here function often the same as in the settings of “*sorry*” of feeling regret when they could not provide the food that a hearer wanted. The speaker does not do his/her best to satisfy the hearer, or the speaker does something wrong by accident. They could be all replaced by the expression as “*sorry*”. Therefore, all the 6 expressions could be identified as apologies.

5.2.3 Distribution, construction and contextualization

When incorporating all the elements into consideration, the distribution, the construction and the contextualization are interrelated with each other.

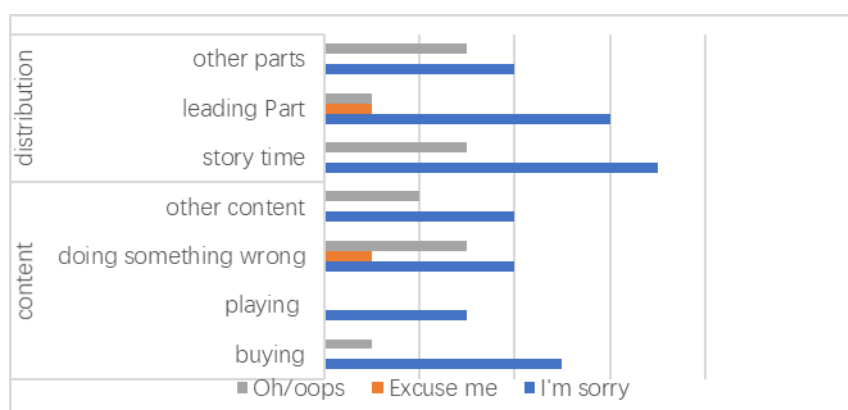


Figure 2 Context, distribution and expressions of apologies in the textbooks

Figure 2 shows that the typical contexts in the textbooks are the “buying and playing activities” in the “story time and leading section” in which the expression of “*I’m sorry*” stands out. This is probably due to the inauthentic contexts. The forms of apologies are realized in conversations except for one letter. The result confirms Aijmer’s^[14] study that in the Lodon-Lund Corpus 83.7% of 215 apologetic expressions are various forms of ‘*sorry*’. ‘*Pardon*’ occurs in situations where a person has not heard what is said. However, the same examples in G6 Vol.1 uses ‘*sorry*’ instead of ‘*pardon*’. In this textbook, the compiler only adopts the direct strategy by offering direct apology/IFID.

Jörg^[25] reviewed the pragmatic evidence, context in experimental pragmatics, and argued that pragmatic evidence is often constructed by a story, since they are an effective method to condense context. The investigation in these textbooks confirmed this study, since most contexts appear in ‘Story time’ and ‘Leading part’ serving as a complementary material reading for fun or as an opening part introducing a new unit.

Among the 17 examples, 11 are expressed with an explanation or account of the situation as “*You can’t buy him. He’s my friend! Sorry. Your neck is too long. The others can’t reach you. Football needs teamwork. Sorry. I can’t. I want to practice the song....*” Five are merely an expression of an apology like *Sorry*, or *Oh! Sorry*. Only one example shows an acknowledgement of responsibility. “*Sorry. I didn’t hear you.*” “*Sorry*” appears to be stand-alone syntactic structure, and is the high representation of apology formula in the textbooks. Other expressions as “*afraid of, pardon...*” are not included. An expression of an apologies can be intensified by adding suitable intensifiers (such as ‘*I’m really sorry,*’, ‘*I’m really very sorry.*’) The intensification is language and situational-specific. However, no intensifier like ‘*very, extremely....*’ have been investigated in the series of the textbook. The input formula of the apologies concentrates on the form of ‘*Sorry*’, while other formulae constitute a small part of expression. However, as the major resource of input in the textbooks, the input for various formula of pragmatic is far from enough.

The simple contextualization accounts for its comparatively static construction and distribution. The contexts are quasi authentic conversations that happen between the imaginary figure of ‘Zoom’ and others. The distribution of the apologies indicates that the context and construction are not of great importance as discrete language skills. Only one apology appears in the ‘Let’s talk’ section. Since most formulae appear in the ‘Story time’ which function as an “reading-for-fun”. No explicit part particularly based on speech act is designed for the learner to practice. ‘Leading part’ serves as an introductory section for the characters, settings of the contexts in this unit. No specific language points are taught. The context in this part is confined to a short conversation. It could not be expanded due to the distribution.

When ‘*I’m sorry*’ appears in the story time section, the conversation would be comparatively longer. The ‘*story time*’ serves as a supplementary part for entertainment and for fun. It did not aim at imparting pragmatic knowledge; however, the speech act of apologies appears the most. This inconsistency suggests that pragmatic knowledge is a byproduct of input with the emphasis on leaning other language skills.

The *Curriculum* has specified that the contexts in the textbook should be authentic, vivid and interactive. However, the results indicate that the relationship of participants is mainly friends, classmates, or family members. Little information is mentioned of contextual factors like age, gender, social power and cultural factors, which is not beneficial for learners’ pragmatic competence development and far from the authentic natural language use. The conversation is comparatively short and simple which is not interactive enough. Vellenga^[26] argues that textbook developers could include authentic examples of speech acts and sufficient metapragmatic information to facilitate pragmatic competence acquisition. In order to improve the authenticity of the context, Ryan & Granville^[27] suggests introducing film in modeling the pragmatics of interaction. They conclude that film scene could be analyzed in class and compared with transcriptions of spontaneous speech or with scripted talk that is more authentic. However, for students of lower level or beginners, it is suggested that the familiar contexts of classic cartoon films with daily activities at school, at home, in the park or in some other familiar contexts would be more suitable to be selected as authentic materials in the textbooks.

The most prominent expression ‘*I’m sorry*’ could not be necessarily implied as the sign of speech act of apologies in textbooks, since 5 expressions have been identified as other functions. The same situation is applicable to other expressions as well. All the phenomena have confirmed the result of Jucker^[13]: the apologies are attenuated and less conventionalized. When using the textbooks as a resource of teaching material, it is necessary to clarify to the learners the way to identify the function of apologies through the construction of context, the analysis of its felicity conditions of apologies, or to interpret the apology-like expressions within the context. The typical context for apologies is better to be presented for the beginner as in Grade 3 and 4 while the other function of the same expression is welcome to be introduced for learners of higher level as in Grade 5 and 6. Textbooks are supposed to offer a variety of input sources by means of dialogs, visuals, tasks and exercises to help learners construct a knowledge base for uttering apologies and practicing these in meaningful contexts.

6. Conclusions

The data used are the apologetic expression in EFL textbooks reviews with explicit and implicit classifications via an analytical text mining method. This research provides an opportunity to evaluate whether python-assistant analysis can be effectively deployed to the text and pragmatic analysis of textbook. Python can display the target retrieval item in the form of certain key words. The proposed key words displaying of the target retrieval item can proffer the collocation, semantic meaning, connotation, and different contexts of the target retrieval item. The researchers could gain the semantic features of the target retrieval item. The results of the data show that based on evaluation, most of these actions would take place in the context of school and at home. The major distribution of apologies is “sorry” and its variations.

Most expressions identified by the IFID are functioning as apologies, while some expressions have other functions. Therefore, the teaching and learning of apologies are not merely a process of learning linguistic formulae. It is more reliable to analyze the contexts and its functions of apologies, recognize and get acquainted with the use of different functions by the expressions of “apologies”. Teachers have to realize and address this properly when dealing with apologies in the foreign language classroom.

The outcome of the analysis gives reasons to believe that Chinese EFL textbooks could increase its complexity in both context construction and expressions. What the texts have provided as speech act of apologies are clearly need to be expanded, or at least need to be edited by native speakers.

Finally, the expression of the speech act is explicitly presented in the textbook, however, no explicitly teaching material for speech act is particularly compiled. So, one more section designed for the practices and exercises of pragmatic knowledge are suggested to added.

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