Topic-comment constructions in L1-Chinese learners' English

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Abstract

Given the typological differences between Chinese and English, the question arises whether and how topic-prominent (TP) features affect the English development of L1-Chinese learners. The present study explores this question by examining the non-target-like structures surfacing in learners' interlanguage. 200 essays were randomly selected from the Spoken and Written English Corpus of Chinese Learners, taking two factors into consideration: English proficiency level and production form (written and oral). One major manifestation of interlanguage structures (i.e. topic-comment constructions, categorized into six types) was tagged, and the processes by which the structures are formed were analyzed to explore the relative difficulty of unlearning them. The study revealed that as learners' English proficiency improves, the incidence of with TP structures features decreases (intermediate learners: 3.77%; advanced: 2.30%), approximating their incidence in the subject-prominent language English, fewer structures with TP features are found in the learners' oral (4.76%) than their written (1.31%) production, and the frequencies of six types of topic-comment construction differ markedly. In light of our findings, we propose a hierarchy for the difficulty of unlearning TP features.

1 Introduction

Chinese is well known as a topic-prominent (TP) language, whereas English is subject-prominent (SP) (Li and Thompson, 1976, 1981). For instance, sentences like (1a) are natural in Chinese, but the English counterpart in (1b) is ungrammatical.

(1) a. 这些学生,他最聪明。 zhèxiē xuéshēng, tā zuì cōngmíng these__student__he__most__clever

He is the cleverest of these students.
b. These students, he is the cleverest.

In (1a), *zhèxiē xuéshēng* 'these students' is the topic and the following part is the comment. It is a kind of Chinese topic-comment constructions (TCC for short), where the presence of the comma after the topic is optional.

Chao (1965: 69) stated that all Chinese clauses can be regarded as TCCs, and he proposed that nearly 50% Chinese sentences are TCCs. Therefore, topics play a more important role than subjects in Chinese, and subjects may even be dropped, leading to null subjects. By contrast, subjects are of great significance in English. English does not allow null subject except in imperative sentences. There are also dummy subjects that do not have semantic content but serve the syntactic function of subjects only (e.g. expletive there and it). As a TP language, Chinese is known as a discourse-oriented language, while English is a sentence-oriented language. According to Rutherford (1983), one noticeable difference between Chinese and English lies in word order. Chinese has a pragmatic word order, which is relatively flexible, to meet discourse demands, whereas English as a SP language has a grammatical word order which is fairly rigid. Chu (1998) claimed that topic is a concept based on the discourse, and it can only be defined at a discourse level. Given the typological difference between Chinese and English, a question to address, theoretically and empirically, is how Chinese students acquire English. More specifically, whether and how Chinese learners of English transfer the Chinese TP features to their English and whether they are able to unlearn these features.

Most previous studies concerning TP features in Chinese learners' English mainly focused on various types of TCCs and the structures related with TP features surfacing in interlanguage. According to previous studies, Chinese learners transferred TP features into English, and they produced TCCs in target language. However, there are still some problems. Most previous studies focused on the acquisition rather than on unlearning. Montrul and Yoon (2009: 308) claimed that unlearning is more difficult than acquisition because unlearning one specific parameter requires the learners to notice the absence of the parameter and infer that the parameter is marginally acceptable. Besides, previous studies have usually adopted qualitative research methods, which is relatively confined in terms of description and explanation. Few studies have explored the oral production, which is a kind of instantaneous task where more attention is paid to semantics and pragmatics. Therefore, the current study aims to explore the transfer and unlearning of TP features by Chinese learners of English by analyzing TCCs in their oral and written English.

2 Topic-prominent Features

According to Xu (2000), a topic-comment construction is composed of three parts in the following order: a topic, a topic marker, and a comment. The topic can be NP, VP, PP, etc. The topic marker serves as a pause between the topic and comment regardless of whether it is overt or not. Typical overt topic markers in Chinese are a comma or a particle (e.g., *a*, *ba*, *ya*, *ne*, etc.). The comment is a particular kind of clause related to the topic. This structure is unmarked in Chinese but marked in a SP language like English.

Linguists working in second language acquisition (SLA) have generally identified two types of TCC: movement-derived constructions (MDCs), where the topic is derived by movement, and basegenerated constructions (BGCs), where it is derived by base-generation. According to Pan and Hu (2008) and Hu and Pan (2009), MDCs and BGCs are both natural in Chinese, whereas only MDCs and some types of BGCs are acceptable in English.

There are two types of MDCs. In the first, which we call Type I, the topic is moved from the object position of the comment, leaving a trace (*t*) behind, as shown in (2). In the second, which we call Type II, an NP or a PP that denotes time or place is moved to the topic position. In (3), the topic $zh\bar{o}um\dot{o}$ 'weekend' denoting time and the topic $z\dot{a}i$

túshūguăn 'in the library' denoting place, are an NP and a PP respectively. According to Yuan (1996), when a sentence states an event, a constituent indicating time or place is usually needed in the sentence-initial position, representing the background information of that event. Hence, an NP or a PP denoting time and place are generally moved to topic position to serve as a marked topic, which provides a spatial-temporal reference point for the event depicted in the comment.

(2) 张三 $_{\mathbf{i}}$ 我不认识 $t_{\mathbf{i}}$ 。

zhāngsān_wŏ_bù_rènshì_t zhangsan_I_not_know_t I don't know Zhangsan.

(3) a. 周末;我们*t*;不上班。

zhōumò_wŏmen_t_bù_shàngbān weekend_we_t_NEG_work We don't work on the weekends.

b. 在图书馆;我们不应该t;睡觉。

zài__túshūguǎn__wŏmen__bù__yìnggāi__t shuìjiào in__library__we__NEG__should__t__sleep We shouldn't sleep in the library.

In a BGC, the base-generated topic is not syntactically related to a gap in the comment. However, a certain relation holds between these two parts. Depending on the particular type of relation, BCGs are further categorized into six types as follows.

(4) a. 小丽; 她; 不喜欢我。

xiǎolì tā bù xǐhuān wǒ xiaoli she NEG like I Xiaoli doesn't like me.

b. 那位老师; 学生都非常喜欢他; 。

nà_wèi_lǎoshī_xuéshēng_dōu_fēicháng _xǐhuān_tā that-CL_teacher_students_all_very_like _him

Students all like that teacher very much.

(5) 那个男孩眼睛又大又亮。

nà_gè__nánhái__yǎnjīng__yòudàyòuliàng that-CL__boy__eye__big-and-bright *That boy's eyes are big and bright.*

(6) a. 水果苹果最常见。

shuǐguǒ__píngguǒ__zuì__chángjiàn
Fruit__apple__most__common
As for fruits, apple is the most common.
b. 运动我喜欢游泳。
yùndòng__wǒ__xǐhuān__yóuyŏng

yùndòng wŏ xǐhuān yóuyŏng sport I like swimming As for sports, I like swimming.

(7) 房价纽约很高。

fang__jià__niŭyuē__hěn__gāo house__price__New-York__very__high As for house price, New York has very expensive housing.

In the first type of BCG—a left-dislocated construction, which we call Type III—the topic is base-generated in topic position and is coindexed with a resumptive pronoun in the subject position of the comment clause, as shown in (4a) or in the object position, as shown in (4b). The relation can be part-whole or inclusiveness. In Type IV, the relation is possessor-possessed, as in (5), where the topic nánhái 'boy' is the possessor of yǎnjīng 'eye'. Types V is a domain-subset construction; that is, the topic shuǐguǒ 'fruit' in (6a) is the hypernym of píngguŏ 'apple', and the topic yùndòng 'sports' in (6b) is the hypernym of yóuyŏng 'swimming'. The difference between (6a) and (6b) is the position of the NP in the comment clause. If the topic is directly associated not with any element inside the comment but with the comment as a whole, as in (7), the construction is categorized as an aboutness construction (Type VI).

In English, topic constructions are used less frequently compared to Chinese. The use of English topic sentences is almost entirely restricted to spoken discourse, like the examples in (8), corresponding to MDC Types I (8a) and II (8b) and BGC Types III (8c and 8d) in Chinese.

(8) a. **John_i**, I do not like t_i .

- b. In the park_i, he ran into Mary t_i .
- c. John_i, he_i is cool.
- d. John_i, I do not like him_i/the man_i.

Although there are MDCs and BGCs in English, these constructions are relatively marked in this SP language, which are regarded as an abnormal word order, whereas MDCs and BGCs both are common ("unmarked" forms) in Chinese.

3 Literature Review

Topic-prominence and subject-prominence, two important parameters in linguistics, have been extensively studied in SLA. The typological differences between Chinese and English definitely have influence on the L1-Chinese leaners' English acquisition, resulting in the transfer of TP features. Previous studies have found these learners would use TCCs in their interlanguage.

Written or/and oral translation tasks were employed to investigate the use of TCCs in L1-Chinese learners' English. The incidences of TCCs decreased as their L2 proficiency improved, and the use of TCCs by advanced students was rare. The English beginners had a tendency to use NPs as topics, and the use of PPs as topics increased as their English proficiency improved (Cai, 1998a; Yang, 2008; Chen, 2011). Considering these Chinese TP features in translation task have strong inductivity, some studies examined TCCs in English writing and found that the frequency of use of TCCs by students in the advanced group is markedly lower than students at the preliminary level (Cai, 1998a, 1998b; Xiao, 2002). In addition, by employing a grammatical judgment test, Zhang and Su (2002) found that the success rates for L1-Chinese English learners to identify different structures with TP features in target language vary greatly. Chang, Xu and Zheng (2017) examined the acceptability of different types of TCCs in English and found that the reject rates developed in a U-curve as students' proficiency improved. The rate of acceptability judgments among advanced students approached that of native English speakers, not violating the topic-to-subject hypothesis as the L1-Chinese English learners gradually learned the SP features and unlearned the TP features (Yang, 2008).

As shown above, the transfer of TP features results in the use of TCCs in L1-Chinese English learners' interlanguage. The current study aims to investigate the unlearning of TP features following the classification of topic structures in Section 2, as the previous studies' analysis of these learners' interlanguage is inadequate. In addition, previous studies mainly analyzed written corpora of Chinese learners; so far no study has explored these features in spontaneous oral production. Our study aims to

fill this gap, comparing spontaneous oral and written productions in terms of unlearning TP features. It addresses the following questions:

- i. Can L1-Chinese learners of English unlearn Chinese TP features?
- ii. Do L1-Chinese learners of English show differences in the unlearning of different types of TP features?
- iii. Do L1-Chinese learners of English produce more structures with Chinese TP features in oral English production than in written English production?

4 Methodology

To answer the above questions, the spoken and written English production data of L1-Chinese learners were collected. The data came from the Spoken and Written English Corpus of Chinese Learners (SWECCL), which includes the Spoken English Corpus of Chinese Learners (SECCL) and the Written English Corpus of Chinese Learners (WECCL) and contains more than 2 million words.

4.1 Spoken and Written English Corpus of Chinese Learners

According to Wen et al. (2005, 2009), the recorded tapes in SECCL were randomly packaged in groups of 30 tapes, and the oral productions were ranked from 1 to 30. In addition, these spoken production data were transliterated into written form. We randomly selected 10 groups and examined 10 spoken essays from each group, the top five, representing the advanced level, and the bottom five, representing the intermediate level. In total, we examined 100 spoken essays, 50 from top-ranking students and 50 from low-ranking students. The written essays in WECCL were collected in the same way (see Table 1).

Table 1. Distribution of amounts of essays

	Intermediate	Advance
Oral production	50	50
Written production	50	50

4.2 Reliability and Validity

As for the construction of SECCL, 30 recorded tapes were randomly packed as one group, and then the oral productions would be ranked from 1 to 30 within group by double marking. We used the same method to rank the texts in written corpus, which guaranteed the reliability of ranking. The top five represented the advanced level, and the bottom five represented the intermediate level. It's found that there is definitely a dividing line between the two proficiency levels.

Wen et al. (2005, 2009) point out that the oral and written production data were both collected from the national English major undergraduate students, and these two form data were graded by the same scoring mechanism. In this study, oral essays and written essays were divided into groups based on the proficiency level. Moreover, we chose the oral data from the Task B in SECCL, which was a monologue rather than a conversation task considering the production in conversation task will be influenced by the utterance of partners and the elicitation provided by partners will certainly interfere with the results. All these could ensure the comparability between oral production and written production.

4.3 Data Analysis

The data processing involved tagging, counting, and sorting out data. Raw data were calculated and tabulated for analysis.

The collected data were identified and tagged so that the incidences of various types of interlanguage structures could be counted. The sentences, especially in spoken essays with repeated elements (9a) or revised elements (9b), would not be tagged as TCC. In addition, quotations, incomplete clauses, and incomprehensible clauses were excluded as well.

- (9) a. I...I miss them...dearly. (SECCL B00-29-05)
 - b. Although my... life... my study life was very limited, I decided to have a party with my...roommates. (SECCL B00-11-04)

Given there is no comparability of the frequency of use due to the various amounts of clauses in different types of production form and different proficiency levels, the clauses in oral and written essays were counted for calculating the incidences of types of TCCs in the two groups. Any (part of a) sentence or utterance composed of a subject and a predicate was counted as one clause. The result is shown in Table 2. Descriptive statistics such as incidences were used to describe the proportion and tendency, and the data were analyzed via SPSS instrument. ANOVA was carried out to analyze the possible correlations between the use of TP features and various factors such as types, English proficiency levels and production forms.

Table 2. Distribution of clause number

	Intermediate	Advance
Oral production	24.14	36.94
Written production	30.24	41.52

5. Results

The purpose of this study is to find out the use of different interlanguage structures with TP features by L1-Chinese English learners.

5.1 Movement-derived and BGCs

This section aims to investigate whether the major category of TCC (MDC and BGC), English proficiency, and production forms affect the incidences of MDCs and BGCs.

Table 3. Descriptive statistics of two major TCC

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		MDC	BGC
Oral	Intermediate	4.74%	1.18%
_	Advanced	2.88%	0.71%
Written	Intermediate	1.51%	0.11%
	Advanced	0.85%	0.15%

As shown in Table 3, the asymmetry of the two major types of TCC is obvious. We also can learn from Table 3 that the participants of lower levels tend to use more MDCs (intermediate: 3.12%; advanced: 1.87%) and BGCs (intermediate: 0.64%; advanced: 0.43%), and that the occurrences in oral production (3.81%) are generally more frequent than in written English compositions (1.18%).

The repeated measures ANOVA was carried out with one within-subjects factor of 2 levels and two between-subject factors to examine whether the types, the proficiency levels, and production forms significantly affect the frequency of use. The results show that there are significant effects of the factors on the frequency of use of TCC, for types (F = 42.318, p < 0.001), proficiency levels (F = 6.013, p = 0.015), and production forms (F = 32.931, p < 0.001). Interaction effects between types and production forms (F = 9.136, p = 0.003) are found as well, which suggests that the frequency of use is decided by this pair of factors.

In addition, a multivariate ANOVA was carried out to examine whether the proficiency levels and production forms markedly affected the incidences of MDCs or BGCs, or both. The results show that both the proficiency levels (F = 4.387, p = 0.038) and the production forms (F = 20.760, p < 0.001) have significant influence on the frequency of use of MDCs, while only production forms decidedly affect the use of BGCs (F = 18.890, p < 0.001) (level: p = 0.271). We found that L1-Chinese learners at intermediate level tend to use more MDCs, while no difference in the use of BGCs is found between the two level groups, and that the incidences of MDCs and BGCs are substantially higher in oral production than in written production.

5.2 Types of Topic-comment Constructions

This section investigates the influence of English proficiency and production form on the frequency of use of the six types of TCC. The percentages of six types of TCC are presented in Table 4. Subsequently, the sentences with TP features produced by the participants in this study will be analyzed in detail.

As is shown in Table 4, among the six types of TCC, the frequency of use of Type II is the highest among all the groups, while Type IV don't occur. The intermediate-level learners tended to use more TCCs both in oral and in written production, and the frequency of use of TCCs in both proficiency groups was generally higher in oral production than in written production.

The repeated measures ANOVA was carried out to examine the influence of type, English proficiency, and production form on the use of eight types. It's found that the incidence is significantly affected by the type (F = 22.223, P < 0.001).

Form	Level	Type I	Type II	Type III	Type IV	Type V	Type V
Oral	Intermediate	0.18%	4.58%	0.94%	0	0.07%	0.17%
	Advance	0.06%	2.82%	0.71%	0	0	0
Written	Intermediate	0.08%	1.43%	0.11%	0	0	0
	Advance	0	0.85%	0.12%	0	0	0.04%

Table 4. Descriptive statistics of six types of TCC

Post Hoc Tests further showed that Types II and III differed significantly from all other types (p = < 0.001). There was also a significant difference between Type I and Type IV (p = 0.047).

English proficiency (F = 5.981, p = 0.015) and production form (F = 32.756, p < 0.001) also have significant influence on the frequency of use of TCCs. Interaction effects on the frequency of use were only found between the type and the production forms (F = 8.325, p < 0.001). Therefore, the multivariate ANOVA was carried out to examine whether the proficiency level and the production forms decidedly affect the incidences of each types of TCC. The results showed that (1) the proficiency level had a significant influence on the use of Type II (F = 4.146, p = 0.043), suggesting that the English production of lower-level L1-Chinese learners is strongly influenced by this TP feature, and (2) the production form markedly affects the use of the two types, namely Type II (F = 20.108, p < 0.001) and Type III (F = 17.378, p <0.001).

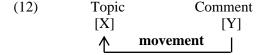
The sentences of each type produced by the learners are given in (10).

- (10) a. ...and many of them_i I...I cannot met I have not met t_i in recent years. (SECCL B00-29-05)
 - b. In classes we can't use mobile telephone. (WECCL 11ND)
 - c. Tom Smith_i he_i didn't want us to hang a assignment. (SECCL B01-08-20)
 - d. Other_i we all remember that_i too. (SECCL B01-01-05) (Other refers to the lesson given by the speaker's teacher.)
 - e. The present I remember that time no any toys...eh...no any players. They just some... eh...some books and... some...eh... pens ... sended by my folks (SECCL B00-65-09)

(10a) is a MDG whose topic *many of them*, the argument of the predicate *met*, moves from object position, leaving a trace. Here, L1-Chinese learners move NPs to the topic position, resulting in a word order which is different from the canonical SVO word order in the SP target language, which can be schematized in (11).

(11)	Topic	Co	mment
	[X]		[Y]
	1	movement	

(10b) is an example of spatial-temporal constructions, with a PP serving as the topic. As the background information, *in classes* moves to topic position to provide a spatial reference framework for the comment, leaving behind a trace; see (12). The repeated-measures ANOVA also showed that learners used spatial-temporal TCCs significantly more frequently than other types of TCC.



(10c, d) are left-dislocation constructions. In (10c), *Tom Smith* is base-generated in topic position and is coindexed with the resumptive pronoun *he* in subject position. In (10d), *other* is base-generated in topic position and is coindexed with the anaphoric demonstrative pronoun *that* in object position. These topics are base-generated by L1-Chinese English learners with the topics syntactically related to some elements of the comment.

In (10e), the topic *The present* is not syntactically related to any element in the comment. From the semantic perspective, however, *The present* might be considered to be related to *some books* and *some pens*. These topics are base-generated by L1-Chinese English learners and they are not related syntactically to any constituents in the comment, as schematized in (14).

6. Discussion

This section summarizes and discusses the findings of the current study and answers the three research questions.

6.1 Unlearning TP features

We found that the intermediate-level L1-Chinese learners of English used more structures with TP features and that there were great differences in the incidence of TCCs between the intermediate and advanced groups. These findings support the topic-to-subject hypothesis (Yang, 2008) that L1-Chinese learners transfer Chinese TP features, and that as their English proficiency improves, they gradually become sensitive to the subject-prominence characteristics of the target language.

Influenced by TP features in the source language, the beginners relied heavily on topic-comment order. They tended to present the topic first, and then to elaborate on it with little concern for morphology or syntax. In the early stage of learning, when the standard rules of the target language have not yet been acquired, the productive mechanism of the brain will produce incomplete rules to compensate for language incompetence. Just as Schwartz and Sprouse (1994) and Hawkins and Chan (1997) have proposed, the grammar consisting of L1 syntax with L2 lexical items constitutes the early stage of L2 learning. Therefore, at this stage L1-Chinese learners of English will map morphophonological forms from English onto the feature specifications of Chinese: Chinese topiccomment syntax with English lexical items. Continued exposure to the target language will help them acquire the standard rules, and then, with stronger awareness of the typological difference

between English and Chinese, their proficiency will improve. Advanced learners will preempt the ill-formed TCC structures by the correct ones learned from the English input. This process is called preemption (Rutherford, 1989).

However, TP features can be found in the advanced learners' English production as well. This finding indicates that the interlanguage grammar might be impaired, contra the no impairment hypothesis (Schwartz and Sprouse, 1994; Haznedar and Schwartz, 1997; Lardiere, 1998a, 1998b, 2000; H. Chang, 2005a, 2005b, 2006; among many others). The finding cannot be explained by the global impairment hypothesis either (Meisel, 1997, 2000). This is because with improving English L1-Chinese proficiency, learners gradually approached subject-prominence. The finding that TP features still occur in the advanced group's English together with the performance of L1-Chinese English learners supports the failed functional features hypothesis (Hawkins and Chan 1997; Hawkins, 1998) from the perspective of unlearning. According to Hawkins and Chan, learners will not only progressively approach the target language, but also establish grammatical presentation which diverges from that of native speakers, as well as from their source language.

In general, even though their proficiency level increases, our study found that the L1-Chinese English learners are not likely to use structures without TP features and try to reset this parameter. Furthermore, our findings suggest that the TP features will prevail over a long period and that the learners might be unable to fully unlearn the TP features.

6.2 Unlearning Different Topic-prominent Features

Our study showed that Type V–VIII BGCs were rarely found in L1-Chinese learners' interlanguage and that they were used markedly less frequently than MDCs (0.54% vs. 2.50%). The principle of "transfer to somewhere" (Andersen, 1983) can be applied to explain this phenomenon. If the target language proves that occurrence of the transferred structure is reasonable, learners will transfer it from the source language to the target language. Since Type I, II and III exist in Chinese and (spoken) English, when L1-Chinese learners produce English, they will unconsciously transfer them,

whereas BGC Type IV-VI will be unlearned immediately. In addition, we found that one type of MDC, Type II (the spatial-temporal construction), was used decidedly more frequently than MDCs of Type I and the BGCs.

6.3 Spoken and Written English Production

Our study found that TCCs were markedly more frequent in the L1-Chinese learners' oral than written English production. First, unlike writing, speech is an instantaneous production form where more attention is paid to semantics than to morphology and syntax. Therefore, even though some utterances violate grammatical rules, they are understandable at the discourse level. Since meaning has been successfully conveyed, speakers are not likely to revise the syntax or morphology of the utterances even though they are not considered as well-formed in the target language. Even if the learners intend to perfect their English utterances, they might fail because the property of instantaneousness makes revision much more difficult in speaking, unlike in writing where producers can refer to the visible production to perfect their expressions.

Compared with writing, pragmatics seems to take precedence over morphology and syntax in speech, which is communication-oriented. Shifting the theme to sentence-initial position in Chinese is one pragmatic strategy for improving the effectiveness of the audience's processing of main information. This is because the first component of an expression takes longer to read than subsequent words (Chang 1980; Aaronson and Ferres, 1983), which suggests that the first word will be encoded more thoroughly. According to Givón (1986), first-occurring information summons attention. Considering this function of topics, it makes sense that L1-Chinese learners would use more structures with topiccomment order in the communication-oriented mode, which coincides with the findings that in speech, English speakers usually put the important constituent first, and listeners are supposed to comprehend the utterance based on the shared focused knowledge (Birch and Garnsey, 1995; Green, 1989).

Moreover, the L1-Chinese learners' greater use of structures with TP features in spoken than in written English can be explained by the difficulty of language processing and the fact that they would face less communicative pressure in the writing task. As Prévost and White (2000) suggest, L2 learners might be expected to perform more accurately on an untimed task than in spontaneous production. Our findings support this extralinguistic factor proposed by Prévost and White.

6.4 Summary

Our study found that L1-Chinese learners at a lower English proficiency level used more structures with TP features and that as their English proficiency improved, they were less likely to use these structures, but TP features can still be found in advanced learners' production. These findings suggest that there is a long period of variability regarding TP features before the learners can fully unlearn TP features and that the interlanguage grammar of L1-Chinese L2-English might be impaired. Besides, we found that the incidence of different types of TCC were significantly different. In light of our findings, we summarize the difficulty of unlearning the Chinese TP features using the following hierarchy: spatial-temporal construction > left-dislocation > topicalization of object > possessor-possessed, domain-subset, aboutness. We also found that the incidence of TP features was markedly higher in oral than in written production.

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