

The Use of Inflection Morphology of Tense and Agreement in English Among Chinese Second Language Learners in College

Wenhui Li*

Applied Linguistics, University of Melbourne, Australia

*Corresponding author: wenhui3@student.unimelb.edu.au

Abstract. This study examines how Chinese learners of English use four English verb inflectional morphological changes, namely the third person singular *-s*, the past tense *-ed*, the copula *be* and the auxiliary *be*. Unlike English, subject-predicate agreement and tense marking tense markers are not present in Chinese. Therefore, this difference between the two languages can cause difficulties in second language learning. To explore English language learners' use of verb inflection changes, this study investigated the spontaneous production data of four Chinese college students in online classes. The results show that the four Chinese undergraduates had the highest error rate in the inflection change of the third-person singular verb, slightly higher than the inflection change of the past tense of the verb. That indicates the correct rate of verb inflection change of past tense is slightly higher than that of agreement. Moreover, the copula *be* and the auxiliary *be* is rarely used by learners. This has implications for English teaching activities, and Chinese university English teachers can adapt their teaching to these situations by focusing more on students' use of inflexion changes in production tasks.

Keywords: Inflection morphology; language transfer; second language learning.

1. Introduction

Language transfer is an inevitable influence on second language (L2) learning. Language transfer refers to the transfer of structural patterns from the native language to a foreign language [1]. It can be divided into three types, which are positive, negative, and neutral transfer, and it is reflected in pronunciation, syntax and semantics [1]. For Chinese learners of English, negative transfer in the form of inflection change often results in inappropriate language use. Second language learners' use of inflection morphology was inconsistent in terms of correctness, and tense and agreement markers are not always consistently used correctly in L2 production data [2-3]. There have been many observations on the use and distribution of English verb inflection forms in the speech of second language learners. The following conclusions have been drawn from a large number of empirical studies of second language acquisition [4]: 1) The *be* form (*I'm hungry*) occurs more frequently than the affix form (*She walks or walked*). 2) The correct use of the inflection form by second language learners is inconsistent, with the occasional omission of the inflection form (*Yesterday she walks home/Yesterday she walked home*). 3) When the inflection form is used, the S - V agreement is rarely mismatched (*I walks*) and the use of the past tense variant in a non-past context is rarely the case (*Now I played*).

Based on the current research, it's known that second language learners have an unconscious awareness of functions and features in verb tenses and agreement [3]. However, learners sometimes may encounter problems in realizing surface morphology. The reason for this problem has caused many researchers to debate whether the incorrect use of tense and agreement morphology by L2 learners means that the tense and agreement functional categories are somehow impaired in L2 grammar [2], or whether there are indeed other reasons for these morphological omissions.

A large number of studies have investigated L2 learners use of verb inflections and have attempted to elucidate the reasons for their misuse or omission [2-3]. Ionin and Wexler's [2] study of Russian children in their first language with English as a second language explores the reasons for omitting verb inflection in L2 acquisition and argues for the existence of functional categories in L2 grammar. The analysis of spontaneous production data shows that children's L2 learners omit but hardly ever produce incorrect tense and agreement inflections. In addition, L2 learners produce suppletive

inflection significantly more often than affix inflection. However, there are many researchers who argue that the use of inflection morphology by L2 learners is not due to the lack of functional categories of tense and agreement in L2 grammar, but rather claim that this phenomenon of language use is due to the difficulty that L2 learners have in implementing inflection morphology in L2 [3]. Prévost and White [3] examined two hypotheses for the use of inflection in adult L2 acquisition, the Missing Surface Inflection Hypothesis (MSIH) and the Impaired Representation Hypothesis (IRH). Through examining spontaneous production data of two adult learners of French and two adult learners of German, it was found that adult L2 learners' grammar is not impaired in this domain, which supports the MSIH.

There is also a large body of research explaining the language use of second language learners in terms of language transfer. Jarvis and Odlin [5] investigated the morphological use of Finnish and Swedish-speaking teenage learners of English. The results show that both Finnish and Swedish morphology limit the types of spatial reference learners can choose from in L2 English. Differences in structure and semantics between the two L1 systems resulted in different spatial reference patterns in L2. Studies have also examined language transfer of morphological awareness in bilingual Chinese-English children [6]. After Chinese elementary school students were given a series of tests on vocabulary, word reading, and reading comprehension in Chinese and English, the results indicated that participants had morphological awareness transfer between English and Chinese language use.

The previous studies of the impairment of interlanguage grammar of second language learners are always limited to the data of affixal inflection of the thematic verbs [4]. In addition, studies of inflection morphology have focused more on children's second language acquisition [2]. As for Chinese learners' relevant grammatical production data, it is always collected through writing forms [7-8], and there is a lack of oral production data.

To address the research gap, this study examines production data on the L2 acquisition of English by adults with Chinese as their first language (L1) and illustrates how adult L2 learners deal with inflection forms in spontaneous production tasks and explores the different frequencies of tense and agreement use errors. The possible explanations will also be provided from the aspects of language transfer [8] and morphological feature expression [3], and. To be specific, the research questions in the study are as follows: 1) Do Chinese learners make more mistakes in agreement in oral production than in verb tenses? 2) If these two inflection morphologies are used with high percentages of errors, what are the possible reasons?

2. Methodology

2.1 Participants

This study investigated the spontaneous production data of four Chinese adult learners (3 female and 1 male) of English in online classrooms. The basic information of the participants is shown in Table. 1. The average age of these formally instructed Chinese adult learners was 21 years old, and all had been exposed to English since elementary school and had been learning English in China for over ten years without an immersion environment. Moreover, all four self-reported an intermediate level of English in the interviews, and all passed the College English Test Band 4 (CET-4), which is somewhat representative of the English level of Chinese university students. However, since the participants' English level is self-reported, it may differ from the actual level.

Table 1. Basic information of participants

Participants	Age	Gender	Age of exposure to English	CET-4 (425+)	Self-reported English level
1	21	female	elementary school	pass	intermediate
2	20	male	elementary school	pass	intermediate
3	21	female	elementary school	pass	intermediate
4	22	female	elementary school	pass	intermediate

2.2 Materials

The production data used in the study came from a composition of four weeks of classroom speeches that they conducted in a full English-taught research project with three and a half hours per week, and these speeches were delivered and recorded by zoom. Each lecture requires students to be active, as evidenced by sharing their own language learning experiences and evaluating and stating their own opinions on the theories that have just been taught. Class participation is included in the final score for the project, which facilitates learners to answer questions enthusiastically. The classroom speeches, which are not prepared in advance, can provide insight into the natural performance of the participants' English-speaking proficiency.

2.3 Procedure

After collecting the data anonymously, the speeches were compiled into a transcript. This study will focus on the use of four English morphemes, which are the third person singular *-s* (*She watches TV.*), the past tense *-ed* (*She watched TV.*), the copula *be* (*She is my friend.*) and the auxiliary *be* (*She is going to watch TV.*). This study will count the number of errors in the use of verb tense and agreement that occur in the transcript and calculate the number of errors as percentages of the total number of tense and agreement uses. Apart from errors in tense and agreement, other grammatical errors will be ignored, such as the wrong use of prepositions, wrong syntax order, etc.

3. Results

Table. 2 below shows the use of the four types of verb inflection changes, using the third person singular *-s*, the general past tense *-ed*, the copula verb *be* and the auxiliary verb *be*. Figure 1 shows the percentage of inappropriate uses of the verb inflection.

Table 2. Participants' use of verb inflection changes

	third-person singular-s	past tense -ed	be auxiliary	be copula
number of instances of inappropriate use/ total uses	25/51	7/15	0/1	1/7
percentage of inappropriate use over all instances of use	49.0	46.7	0	14.3

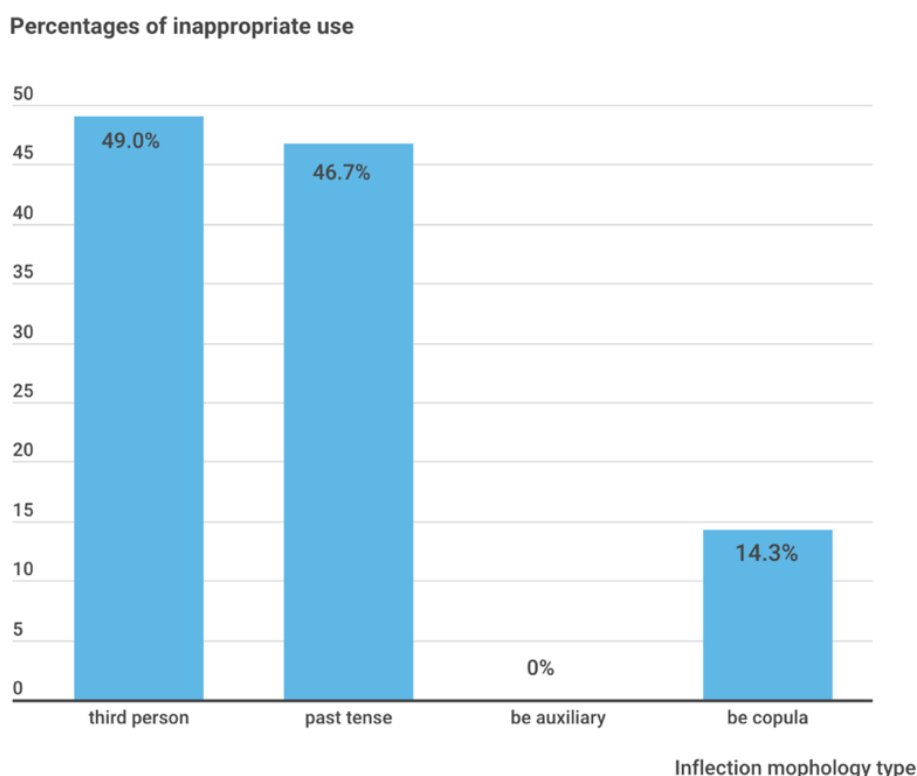


Figure 1. The percentages of inappropriate uses

As can be seen from the table, the four participants' most used verb inflectional change was the single third-person form, with a total of 51 uses. The second most frequent was 15 inflectional changes of the past tense of the verb. The next most frequent was the verb *be* as a copula appearing seven times in the production data. The auxiliary verb *be* is barely used, with only 1.

Of all these verb inflectional changes used, the most improperly used by participants were the verb changes after the single third-person, 25 in total, accounting for 51% of all single third-person verb inflectional changes. As for the past tense changes of verbs, there were seven improper uses in total, accounting for approximately 46.7%. Relatively few participants used the inflectional change of the verb *be*, especially the auxiliary verb, which was used correctly only once. The auxiliary verb *be* was used incorrectly once (14.3%).

Inappropriate use of all types of verb inflection changes for the four participants is demonstrated in Table. 3 and Figure 2. All three participants 1 2 and 4 had more incorrect uses of single third-person verb inflection changes than the other three inflection morphological change types, with all incorrect uses being higher than 7. Only participant 3 had slightly more incorrect uses of inflection changes in verb tense than the other three inflection change types. Also, participant 3 had the highest number of incorrect verb tense uses, with four, slightly more than the other three participants.

Participant 4 had no errors in verb changes in terms of past tense. It is worth noting that only participant 2 of the four participants incorrectly used the verb *be* as a copula.

Table 3. Overall inappropriate inflection changes of all participants

Participants	Past tense	Third person singular	Copula be	Auxiliary be
1	2	8	0	0
2	1	7	1	0
3	4	3	0	0
4	0	7	0	0

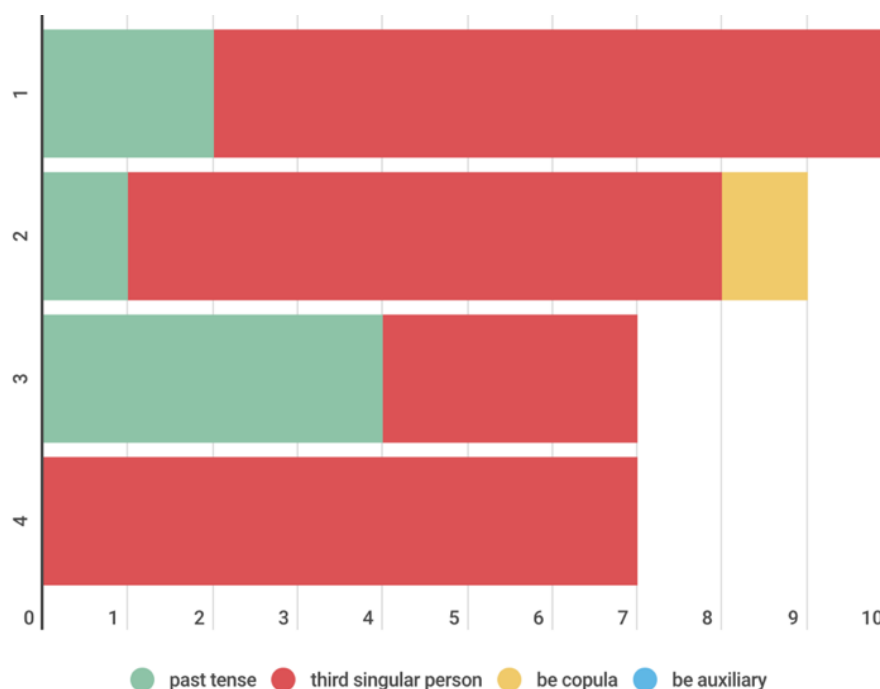


Figure 2. Overall inappropriate inflection changes of all participants

4. Discussion

This study found that the four learners had the highest rate of error in the inflection changes of the verb in the third singular person, slightly higher than the inflection changes of the verb in the past tense. Over half of the participants were found to have a higher error rate for the verb for the third singular person than for the other three verb inflection changes. In addition, few used the copula *be* and the auxiliary *be*.

According to Prévost and White [3], second language learners have an unconscious awareness of verb tense and agreement functions and features. However, second language learners have difficulties in achieving surface variation. As a result, they sometimes incorrectly use or omit the third person singular *-s* and the past tense *-ed*. Especially for Chinese learners of English, Subject-verb agreement and tense markers do not exist in Chinese. English learners with Chinese as their first language have L1 interference in the acquisition of the English third-person singular *-s* and the past tense *-ed* and show selectivity in morphological changes [10].

Mixed-use of two languages will occur when learners are unable to acquire positive L1 transfer when acquiring L2 grammar [9, 11]. Thus, the high omission of the English third-person singular *-s* and the general past tense *-ed* may be related to negative transfer from the mother tongue. As Ringbom [12] stated, learners may make use of similarities between the previously acquired language and the target language while learning. The more similar the mother tongue is to the target language, the greater the likelihood of mother tongue-assisted language learning. Since the inflection changes in English do not exist in Chinese, Chinese learners will experience the phenomenon of underproduction

in negative transfer in the English output [13]. Since learners are not familiar enough with the target language, they choose structures that are not commonly used by native speakers instead. The participants in this study had all studied English for over ten years, so it was not that they did not understand the grammatical rules of inflection changes, but rather that they might be unfamiliar with the use of inflection changes in their daily lives due to their poor use of English. Therefore, they did not develop the subconsciousness to pay attention to the inflection changes of verbs. It is worth noting that the production data in the present study allowed for an examination of participants' implicit knowledge of the use of inflection changes, and it is likely that participants would have performed better on the grammatical judgement task that examined explicit knowledge. However, this does not prove that they fully mastered the use of this grammatical knowledge.

The reason for the slightly higher error rate for the inflection changes of third-person singular verbs in this study than for the inflection changes of the verb past tense may be that the content of the participants' classroom statements revolved around their past language learning experiences. The topic gives them a hint that the past tense of the verb would be needed for all subsequent statements. While the high frequency of incorrect use of the third-person singular may be due to a preference for the use of the verb after the person in favor of the bare verb. 'The first person + bare V' is too ingrained in the learners' minds, so when the person changes, the learners do not find a grammatical equivalent in the first language and lack input on the use of rules for changing the predicate verb in the third person singular of the target language. Therefore, the learners show a high error rate in the classroom speech.

There are also several other reasons why second language learners may have a high incorrect use of the inflection changes in verbs. As Prévost and White [3]. noted, even if a form with the relevant features has been acquired, it may not be retrieved from the lexicon for the time being, which might be due to processing reasons or communication pressure. The data used in this study are production data from participants in the classroom and it can be expected that they might perform better on the grammatical judgment task [3].

5. Conclusion

The aim of this study is to investigate the use of inflection changes in verbs by Chinese learners of English. The current study found that four learners had the highest error rate in the inflection change of third-person singular person verbs, slightly higher than the inflection change of the past tense of the verb. This study also focuses on first language transfer to explain the possible reasons for the difficulty of achieving the inflection change form of the verb successfully for second language learners. Subject-verb agreement and tense markers are not present in Chinese. The acquisition of English third-person singular *-s* and past tense *-ed* by native Chinese learners of English have L1 negative transfer and shows selectivity in morphological change. Participants may also have been pressured to omit verb inflectional changes due to communication pressure. Despite the findings, this study examined a relatively small number of people, with only four Chinese university students use of English inflection changes. This study was also influenced by the limited classroom speech of the participants, thus the use of the auxiliary verb *be* was not observed and the use of the copula verb *be* was only rarely observed. It is suggested that future research could examine more use of English inflection changes in a larger number of people, across age groups and cultures.

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