A Typological Investigation into L2 Chinese “Prepositional Phrase-verb” Word Order Acquisition

DING Xue-huan
Jinan University, Guangzhou, China

The study, using an interlanguage corpus, investigates how international students in China acquire “prepositional phrase-verb” word order. It found that students whose mother tongue features VO and OV word order mostly produce pre-placement structure of “prepositional phrase+verb”, which is similar to Chinese word order and hence reflects an overt influence of the target language. However, when producing post-placement structure of “verb+prepositional phrase”, VO type L1 speaking students slightly outnumber those OV type L1 speaking students, which indicates limited influence of L1 transfer. In addition, other factors such as the relator principle and the temporal iconicity principle also exert certain influence on the word order acquisition of “prepositional phrase-verb” structure.

Keywords: “prepositional phrase-verb” word order, typology, L1 transfer, target language factor, universal principle

1. Introduction

Through investigating 625 languages, Dryer (1992; 1999) and Greenberg (1966) concluded some dominant word order typologies related to the word order of “verb+object” (VO). They found that languages featuring VO tend to place their preposition before noun (Prep+N) and to put prepositional phrase (PP) after verb (V+PP); while languages featuring “object+verb” (OV) word order tend to place preposition after noun (N+Post) and prepositional phrase before verb (PP+V) (cited from LIU, 2003, pp. 45, 56). What these dominant word order structures have in common is that modifiers (N & PP) share the same place as objects. In other words, languages with VO word order place their modifiers after verb while OV type languages put modifiers before verb.

Chinese is considered to be a language with VO word order structure1. However, its PP is mostly put ahead of its verb, which agrees with OV type language features2. Then, is it easier to acquire Chinese “PP+V” word order for learners with a OV type mother tongue than those with a VO type mother tongue?

Acknowledgements: This article is one of the achievements of the National Social Science Fund's major project “Cognitive Process and High Efficiency Model Study of Learning Chinese as a Second Language “ (12 & ZD224).

DING Xue-huan, Ph.D., Professor, study on Chinese second language acquisition, Jinan University.

1 Jin & Yu (2012) believe that Chinese is a typical mixed language of both VO and OV word orders because Chinese has, respectively, three types of word order in the VO as well as in the OV family. There are four types of word order that share features of both VO and OV type language, namely pre- and post-modifier, adposition phrase, manner adverbial and comparative structure. However, the researcher believes that pre- and post-modifier belongs to VO type while adposition phrase and manner adverbial are in the OV family.

2 Liu (2002) argues that Chinese has more in common with OV type languages in a number of aspects. For example, that PP adverbial is mainly in the pre-position is only seen in Chinese among other types of VO languages around the world.
For the moment, only two research papers directly address this issue. Zhou (2014) analyzed an interlanguage corpus and found that the number of wrong order “V+PP” errors made by learners from VO or OV type L1 speaking countries do not differ greatly, which indicates little influence of L1. However, he believes that learners of VO type mother tongue outperform learners of OV type mother tongue in terms of acquisition. Lu (2014) analyzed the number of errors of four meaning types of PP structures in an interlanguage corpus and concluded that OV type Japanese and Korean students did a better performance in learning Chinese PP word order than students whose L1 belongs to the VO family. She also discovered that the influence of L1 mainly exists in the initial stage of Chinese learning. Results from these two papers are not consistent and it is hypothesized that the inconsistency is due to the small size of their corpus as well as their limited use of corpus data. The present study argues that a comprehensive investigation should be made on both the number and percentage of the PP errors and on factors other than L1 features.

In view of the above problems, the present study makes use of the 4+million+word Chinese interlanguage corpus of Jinan University and focuses on the usage of Chinese “PP+V” structures produced by learners whose L1 is either VO type Indonesian or OV type Japanese and Korean. The study extracts structures in which PP directly modifies verb so as to exclude common examples in most languages of PP at the very beginning of sentences. In addition, only two types of prepositions are considered, namely “跟” (gen) and “用” (yong) which are in the pre-verb position as well as “在” (zai) and “给” (gei) that can be in either the pre- or post-verb position. Analysis is based on the percentage of use and the number of errors of different word order structures and on factors apart from the level of influence of learners’ L1 word order type.

2. Quantitative Distribution of ‘PP+V’ and ‘V+PP’ Interlanguage

After searching the Written Interlanguage Corpus of the College of Chinese Language and Culture, Jinan University, altogether 6326 entries are derived which contain structures of two types of PP directly modifying V and which were produced by Indonesian, Japanese and Korean L1 speakers.

2.1. Statistical Results of Double Placement Type PP Word Order Structures (PP with “在” and “给”)

2.1.1. Word order structures of “在+N” and V

<table>
<thead>
<tr>
<th></th>
<th>Total frequency</th>
<th>Frequency of errors</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indonesian L1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>609 (74%)</td>
<td>216</td>
<td>825</td>
</tr>
<tr>
<td>Intermediate</td>
<td>135 (70%)</td>
<td>57</td>
<td>192</td>
</tr>
<tr>
<td>Advanced</td>
<td>527 (71%)</td>
<td>131</td>
<td>458</td>
</tr>
<tr>
<td>Advanced</td>
<td>147 (84%)</td>
<td>28</td>
<td>175</td>
</tr>
<tr>
<td><strong>Japanese and Korean L1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>657 (80%)</td>
<td>163</td>
<td>820</td>
</tr>
<tr>
<td>Intermediate</td>
<td>178 (77%)</td>
<td>53</td>
<td>241</td>
</tr>
<tr>
<td>Intermediate</td>
<td>585 (80%)</td>
<td></td>
<td>480</td>
</tr>
<tr>
<td>Advanced</td>
<td>94 (86%)</td>
<td>15</td>
<td>109</td>
</tr>
</tbody>
</table>

3 Due to the huge size of the corpus data, only the first 2,000 entries of each type of prepositions produced by different L1 speakers were extracted for analysis. And among them, exclusion was done to invalid sentences such as those with a homophone or those whose prepositions serve as a verb.
The statistics in Table 1 reveal to us some conclusions:

1. **PP+V structure dominates in number among speakers of three different L1.**
   
The structure of “在+N+V” produced by Indonesian learners of Chinese takes up 74% while only 26% indicates their PP’s post placement. The situation is even more bias for students from Japan and Korea in which 80% of their interlanguage features the word order of “PP+V”.

2. **As for the dominant word order of “V+PP” structure in VO type language, there is no outstanding manifestation among VO type Indonesian L1 speakers.**
   
The number of “V+在+N” entries by Indonesian L1 speakers is 216, taking up only 26%. The percentage is relatively higher among learners of primary and intermediate levels (30% and 29% respectively). 65% of the “V+PP” structures are phrases of binary syllables, close combination and fixed collocations such as “住在” (zhuzai), “设在” (shezai) and “坐在” (zuozai). Learners tend to use them as a word, especially students at the primary level whose “住在+N” takes up as high as 99%. The noun N in the phrases indicates the destination of action. See Example (1) and (2),

   **Example (1)** 我们住在宿舍。（Indonesian L1, intermediate)
   
   Women zhuzai sushe.
   
   We live in the dorm.

   **Example (2)** 只要能和他坐在一起我就很开心。（Indonesian L1, intermediate)
   
   Zhiyao neng heta zuozai yiqi wojiu henkaixin.
   
   I am happy as long as I can sit alongside him.

   These sentences with “V+在+N” word order are examples of correct usage of the target Chinese language. Errors of “V+在+N” word order due to L1 transfer are only 9% in percentage.

3. **The percentage of use of the “V+PP” (V+在+N) structure is higher by the VO type L1 speakers than by OV type L1 speakers.**
   
The percentage of the “V+在+N” word order structures produced by VO type Indonesian L1 speakers is 26%, while the percentage is lower (only 20%) for OV type Japanese and Korean L1 speakers. No L1 transfer is found for the Japanese and Korean L1 speakers since these two languages abide by the word order of ‘PP+V’. On the contrary, Indonesian follows the word order of “V+PP”, which leads the Indonesian L1 speakers to produce more word order structures of “V+在+N” due to the influence of L1 transfer. The above data testifies the influence of mother tongue transfer: errors of ‘V+PP’ word order structures produced by Indonesian L1 speakers take up 9%, higher than Japanese and Korean L1 speakers’ 3% proportion.

4. **The rate of errors of the “V+PP” (V+在+N) structures is higher among VO type L1 speakers than among OV type L1 speakers.**
   
The rate of errors of “V+在+N” structures by learners from Indonesia is 35% and their errors manifest word order confusion. Among these Indonesian L1 speakers, learners at the primary and intermediate levels made more errors (39% and 36% respectively) than learners at the advanced level (18%). Some examples can illustrate how Indonesian learners of Chinese confuse word order.
Example (3) *我爸爸工作在飞机场。… (Indonesian L1, primary)
  *Wo baba gongzuo zai feijichang, …
  *My father in the airport works, …
Example (4) *吃饭在广州又便宜又好吃。(Indonesian L1, intermediate)
  *Chifan zai Guangzhou youpianyi youhaochi.
  *In Guangzhou eating is inexpensive and delicious.
 Errors (3) and (4) are due to the negative transfer of Indonesian word order features.

Word order confusion errors of the “V+在+N” structure (taking up 15%) also exist in the interlanguage of Japanese and Korean learners of Chinese. The error rates among the three level groups exhibit little difference, among which error rate of the primary level is slightly higher (19%) while errors rates in both the intermediate and advanced levels drop. More specifically, word order confusion errors mainly happen to Korean students while only one such error is found for Japanese students (their other two inaccurate entries exhibit other kinds of error). See Example (5) (6) and (7):

Example (5) *没想到这样子开车在韩国。(Korean L1, primary)
  *Meixiangdao zheyangzi kaiche zaihanguo.
  *I never thought of in Korea driving in such a way.
Example (6) *他既经常说骂人话又经常兴奋在学生面前。(Korean L1, intermediate)
  *Ta ji jingchang shuo maren hua you jingchang xingfen zai xuesheng mianqian.
  *He often abuses others on the one hand, and in front of his students appears to be excited on the other.
Example (7) *春天的阳光暖煦煦地照着在大地上，而且许多树开着樱花。(Japanese, intermediate)
  *Chuntian de yangguang nuanxuxudi zhao zhe zaidadishang, erqie xuduoshu kaizhe yinghua.
  *The vernal sunlight on the ground is shining warmly, and lots of trees are blossoming with sakura.

Same with the case of Indonesian learners of Chinese, the “V+在+N” structures by Japanese students are commonly used as chunks (sometimes called compound verbs) composed by “V+在” and nouns referring to places. Examples include “住在” (zhuzai), “放在” (fangzai) and “留在” (liuzai) followed by a place. Such chunking usage is in accordance with the Chinese grammar. See Example (8) and (9):

Example (8) 放在家里，没有? (Japanese L1, intermediate)
  *Fangzai jiali, meiyou?
  *It was put at home, wasn’t it?
Example (9) 最难是把调查内容用字写在纸上。(Japanese L1, advanced)
  *Zuinan shiba diaocha neirong yongzi xiezai zhishang.
  *The most difficult part is to write on the paper contents for investigation.

2.1.2. Word order structures of “给+N” and V
Table 2

Frequency and Percentage of “给+N+V” and “V+给+N” Structures

<table>
<thead>
<tr>
<th></th>
<th>“给”+N+V</th>
<th>V+“给”+N</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total frequency</td>
<td>Frequency of errors</td>
<td></td>
</tr>
<tr>
<td>Indonesian L1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>933 (61%)</td>
<td>594</td>
<td>1527</td>
</tr>
<tr>
<td>Primary</td>
<td>76 (71%)</td>
<td>43 (3.7%)</td>
<td>107</td>
</tr>
<tr>
<td>Intermediate</td>
<td>551 (65%)</td>
<td>302</td>
<td>853</td>
</tr>
<tr>
<td>Advanced</td>
<td>306 (54%)</td>
<td>261</td>
<td>567</td>
</tr>
<tr>
<td>Japanese and Korean L1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>223 (72%)</td>
<td>5 (1.6%)</td>
<td>311</td>
</tr>
<tr>
<td>Primary</td>
<td>35 (66%)</td>
<td>18</td>
<td>53</td>
</tr>
<tr>
<td>Intermediate</td>
<td>176 (74%)</td>
<td>63</td>
<td>239</td>
</tr>
<tr>
<td>Advanced</td>
<td>12 (63%)</td>
<td>7</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 2 reveals some similarities of the quantitative distribution pattern of “给+N” and “在+N” word order structures. Two main differences are discovered though:

1. For Indonesian learners of Chinese, the percentage of use of PP post-placement structures ‘V+给+N’ (39%) is higher than that of “V+在+N” (26%). However, the percentage of errors for “V+给+N” (3.3%) is lower than that for “V+在+N” (9%).

2. Similarly, for Japanese and Korean learners of Chinese, the percentage of use of PP post-placement structures “V+给+N” (28%) is higher than that of “V+在+N” (20%). However, the percentage of errors for “V+给+N” (1.6%) is lower than that for “V+在+N” (3%).

Indonesian learners exhibit not only errors of word order, but also confusion among “给” (gei), “让” (rang) and “向” (xiang), especially among learners at intermediate and advanced levels. See Example (10) (11) and (12),

Example (10) *问候给妈妈。

* wenhou geimama.

*To mother send regards.

Example (11) *靠朋友翻译给我。

*kao pengyou fanyi geiwo.

*Depend on for me my friend’s translation.

Example (12) *他们已经准备生日会给我。

*tamen yijing zhunbei shengrihui geiwo.

*They have for me prepared a birthday party.

2.2. Statistical results of pre-placement type PP word order structures (PP with “跟” and “用”)

2.2.1. Word order structures of “用+N” and V
Table 3

Frequency and Percentage of “用+N+V” and “V+用+N” Structures

<table>
<thead>
<tr>
<th></th>
<th>用+N+V</th>
<th>V+用+N (erroneous in order)</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesian L1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>721 (97%)</td>
<td>21 (3%)</td>
<td>742</td>
</tr>
<tr>
<td>Primary</td>
<td>29</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td>Intermediate</td>
<td>488 (96.4%)</td>
<td>18 (3.6%)</td>
<td>506</td>
</tr>
<tr>
<td>Advanced</td>
<td>204 (98.6%)</td>
<td>3 (1.4%)</td>
<td>207</td>
</tr>
<tr>
<td>Japanese and Korean L1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>96 (99%)</td>
<td>1 (1%)</td>
<td>97</td>
</tr>
<tr>
<td>Primary</td>
<td>19</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>Intermediate</td>
<td>72 (98.6%)</td>
<td>1 (1.4%)</td>
<td>73</td>
</tr>
<tr>
<td>Advanced</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

According to Table 3, word order structures of “用+N” and V and double placement structures of “在/给+N” share the following similarities:

(1) Pre-placement “PP+V” word order holds absolute predominance of use among two groups of different L1 speakers (97%; 99%).

(2) As for the natural “V+PP” word order in VO type languages, no advantage (3%) is found for VO type Indonesian students. No significant difference is detected compared with OV type Japanese and Korean students (1%).

In addition to these two similarities, three differences can also be concluded:

(1) A major drop of frequency of use is found for “用+N” modifying V, especially compared with the situation in structure of “在/给+N”. The gap between these two kinds of structures is even more evident among Japanese and Korean L1 speakers.

(2) The percentage of post-placement PP structure “V+用+N” (1+3%) is visibly lower than that of post-placement PP structure “V+在/给+N” (20+39%) as well as that of erroneous “V+在/给+N” structures.

(3) All the PP post-placement “V+用+N” structures exhibit error of word order⁴. Only one example of erroneous “V+用+N” usage is found in Japanese and Korean students’ interlanguage:

Example (13) *所以我们说话用英文。 (Korean L1, intermediate)

  *suoyi women shuohua yong yingwen.

  *So we in English talk.

2.2.2. Word order structure of “跟+N” and V

Table 4

Frequency and Percentage of “跟+N+V” and “V+跟+N” Structures

<table>
<thead>
<tr>
<th></th>
<th>跟+N+V</th>
<th>V+跟+N (erroneous in order)</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesian L1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>1334 (97%)</td>
<td>40 (3%)</td>
<td>1374</td>
</tr>
<tr>
<td>Primary</td>
<td>282 (96.2%)</td>
<td>11 (3.8%)</td>
<td>293</td>
</tr>
<tr>
<td>Intermediate</td>
<td>901 (97.1%)</td>
<td>27 (2.9%)</td>
<td>928</td>
</tr>
<tr>
<td>Advanced</td>
<td>151 (98.7%)</td>
<td>2 (1.3%)</td>
<td>153</td>
</tr>
<tr>
<td>Japanese and Korean L1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>623 (99%)</td>
<td>7 (1%)</td>
<td>630</td>
</tr>
<tr>
<td>Primary</td>
<td>156 (98.7%)</td>
<td>2 (1.3%)</td>
<td>158</td>
</tr>
<tr>
<td>Intermediate</td>
<td>425 (99.1%)</td>
<td>4 (0.9%)</td>
<td>429</td>
</tr>
<tr>
<td>Advanced</td>
<td>42 (99%)</td>
<td>1 (%)</td>
<td>43</td>
</tr>
</tbody>
</table>

⁴ The structure of “[ ] +N” will not be put after V in Chinese except for special pragmatic meanings.
Table 4 reveals that the quantitative distributions of both “跟+N+V” and “V+跟+N” structures are highly similar to the “用/在/给” structures. Therefore, it is unnecessary to go into details again.

3. Analysis and Discussion (Factors of Influence)

Both qualitative and quantitative analyses disclose that in the acquisition of PP word order structures, L1 exerts little influence while a number of other factors including target language features play some roles.

3.1. Pre-placement PP Word Order Structure Takes up Absolute Advantage, Reflecting Evidential Influence of Target Language Input Frequency.

Both two groups of overseas learners of Chinese exhibit high frequency of use (over 74%) of pre-placement “PP+V” structures, in accordance with the predominant word order of the target language. Compared with usage of “V+PP” structures, Chinese features higher frequency and wider range of “PP+V” word order. Therefore, in learning Chinese as a second language, overseas learners are more familiar with “PP+V” word order and thus their output presents higher frequency of its use. A number of research including those focusing on sequential acquisition of English morphemes have concluded that input frequency is a reliable factor in examining learners’ output (Freeman, 1991).

3.2. VO Type L1 Speakers Display Slightly More Usage of Post-placement PP Structures, Showing Limited Influence of L1 Word Order Transfer.

No major preference for use of “VO; V+PP” or “OV; PP+V” is detected in the interlanguage corpus in that VO type Indonesian learners only output 26% of use of the “V+PP” structure, close to the 20% of use of the same word order structure by OV type Japanese and Korean L1 speakers. It is thus concluded that VO type L1 speakers are under the influence of their mother tongue natural word order transfer to some extent, but the influence is limited.

Judging from the statistics, the number and percentage of erroneous “V+PP” structures of “在” (zai), “给” (gei) “跟” (gen) show a relatively big gap between Indonesian students and Japanese/Korean students at primary and intermediate levels. In other words, L1 word order transfer mainly happens at primary and intermediate levels.

Why, in the acquisition of L2 Chinese PP word order, does L1 transfer exert little difference while target language features play a more important role? The answer to this question lies in the cognitive difficulty of the language task. Although the natural “PP+V” word order of Chinese is contrary to the dominant “V+PP” word order of Indonesian, their distinctive features are obvious and their cognitive saliency is high. Learners can thus fast detect Chinese PP word order features in the input and after a certain amount of output exercise, they can more easily command Chinese pre-placement PP word order features. Japanese and Korean share the same “PP+V” word order feature with Chinese, but their PP follows the rule of “N+P” which is contrary to the “P+N” word order of Chinese. However, the interlanguage corpus contains barely any entry of erroneous “N+P” structure due to L1 transfer. This constitutes a piece of evidence that overseas learners can easily command Chinese “PP+V” and “P+N” word order, which are simple in structure, easy to notice and relatively fixed in composition. However, it should also be noted that when learners cultivate a new language usage habit, a small number of incorrect “V+PP” word order usage is unavoidable.
3.3. OV Type L1 Speakers Manifest a Small Number of Post-placement PP Structures Missing/Infrequent in Either Their L1 or the Target Language, Showing Restraints from the Relator Principle.

Dik put forward the relator principle to explain that the relator should be placed between the two limbs that it connects. He argued that the relator principle had a strong predictive power. For pre-placement PP type languages, PP is usually put after VP so that sentences follow the pattern of “VP+Preposition (relator)+NP” (V+PP) in which the pre-placement word (Preposition) is between VP and NP\(^6\). And for post-placement PP type languages, sentences follow the word order of “NP+ Postposition +VP” (PP+V) (LIU, 2003, pp. 69, 315).

Chinese is a language of VO and pre-placement type and only word order of “VP+PP+NP” accords with the relator principle which stipulates that the relator (Preposition) be placed between the two components “VP” and “NP” (it is also principle of iconicity).

“V+PP” word order barely exists in Japanese, Korean or Chinese. However, Japanese and Korean learners of Chinese still produce a small number of sentences following “V+PP” word order (VP+PP+NP) such as “爸爸工作在广州” (My father in Guangzhou works). It is suspected they are under the influence of the relator principle. On the other hand, L1 speakers of Indonesian (VO and V+PP type language), without doubt, produce more “V+PP” structures under the influence of both the relator principle and L1 transfer.

3.4. Other Factors

(1) The semantics of prepositions

PP structures in which prepositions have different semantics and syntax (such as double+placement “在/给+N” and pre-placement “用/跟+N”) show different percentages of use in interlanguage “V+PP” word order.

L2 Chinese learners produce an obviously smaller number of ‘V+PP’ structures using pre-placement PP (“用/跟+N”) than using double+placement PP (“在/给+N”).

Qu (2012) points out that in Chinese, the level of pre-placement is higher for prepositions indicating instrumental functions (“用”) than for those indicating places (“在”). Thus, PP indicating places may follow two kinds of word order: “PPL+V” and “V+PPL”, while PP indicating instruments, objects and dependence can only follow the word order of “PP+V”\(^6\).

In learners’ interlanguage, PP indicating instruments and accompaniment (“用/跟+N”) are overwhelmingly placed before V. On the contrary, prepositions indicating places, objects of offer/service (“在/给+N”) are less likely to be placed before V. It reveals influence of target language word order on L2 Chinese learners’ use of PP structures.

(2) Principle of temporal iconicity\(^7\)

That whether “在+N” and “给+N” are placed before or after V is governed by the principle of temporal iconicity to some extent.

Structure of “在” PP: Some of the “V+在+L (location)” structures in learners’ interlanguage are meaning units indicating “action+location”. In other words, they are structures expressing someone reaching a certain

---

5 Liu (2003, p. 71) cited from Dryer (1992) a statistical finding that VO type languages, except modern Chinese, commonly feature PP put after the core word to be modified.

6 Piao (2006): only a small number of prepositions such as “四”, “四”, “四”, “四”, “四”, “四”, “四” could appear after V.

7 For semantics and location of PP, refer to Fan (1982).
location after taking some kind of action, or someone making something reach a certain destination. The word order is synchronized with the sequential order of something happening. For example, among sentences following the “V+在+N” pattern produced by intermediate or advanced level Japanese and Korean students, a number of “住在/呆在/留在/放在/坐在/写在+L” structures indicate the destination of actions with usage of “在+L”:

Example (14) 然后放适量的配料在米饭上。(Japanese L1, intermediate)
Ranhou fang shiliangde peiliao zaimifanshang.
Then, put an appropriate amount of ingredient on the rice.

Example (15) 最难是把调查内容用字写在纸上。(Japanese L1, advanced)
Zuinan shi ba diaocha neirong yongzi xie zaizhishang.
The most difficult part is writing contents for investigation on paper.

“在+N+VP” word order, which belongs to “PP+V” structure, indicates something happening in a certain place. The fact that place (“在+N”) precedes action (VP) is analogue to the sequential order of events. For example,

Example (16) 下午一点在家吃午饭。(Korean L1, primary)
Xiawu yidian zaijia chiwufan.
Lunch is at 1 p.m. at home.

Structure of “给” PP: Some of the “V+给+N” structures in learner interlanguage indicate passing something to some recipient through some action. Their word order is analogue to the sequential order of events. In other cases, “给+N” in some of the “给+N+V” structures indicates the object of service action. In this way, the structure of “给+N+V” suggests the temporal order of the real world—that object exists first, then comes the action. Example sentences include:

Example (17) 我帮你买给你。(Korean L1, intermediate) (give sth. to sb; V+PP)
Wo bangni maigeini.
I will help you buy this for yourself.

Example (18) 如果您想给自己拍，不必打开手机，请按手机左边的“’”就行了。(Indonesian L1, advanced) (provide service for sb; PP+V)
Ruguo nin xiang geiziji she, bubi dakai shouji, qing an shouji zuobian de ‘’ jiuxing.
If you want to take a photo of yourself, you don’t need to turn on your phone. Just press the ‘’ on the left side will do.

The word “给” in example (18) could be replaced by “为” (wei). In this way, object/recipient “给自己” precedes action “拍摄”, thus analogue to the order of how things happen in the real world. Although in Indonesian, the structure of “give to sb.” is put behind V, such as “上给我们汉语课” or “上汉语课给我们”, no L1 word order transfer is discovered.

(3) Learners’ information processing when producing sentences

Not only Indonesian L1 speakers but also Japanese and Korean learners of Chinese produce “V+PP” word order structure (action+location/object/instrument), which is missing or rare in their L1 or Chinese. This phenomenon is related to how learners process information in sentence production. Due to the language habit of first expressing what is most urgent or in focus, Chinese L2 learners, especially those at the primary level, would
first make use of the simple “SV (O)” structure to deliver the main “event” (“who does what” such as “我学习汉语”), then complement it with relevant “location/object/instrument” (such as “在中国/跟朋友/用手机”).

**Conclusion**

This article quantitatively and qualitatively analyzes the types of Chinese “prepositional phrase-verb” word order used by foreign students who are native speakers of Indonesia, Japan and South Korea in the interlanguage corpus. It found that students whose mother tongue features VO and OV word order mostly produce pre-placement structure of “prepositional phrase+verb”, which is similar to Chinese word order and hence reflects an overt influence of the target language. However, when producing post-placement structure of “verb+prepositional phrase”, VO type L1 speaking students slightly outnumber those OV type L1 speaking students, which indicates limited influence of L1 transfer. In addition, other factors such as the relator principle and the temporal iconicity principle also exert certain influence on the word order acquisition of ‘prepositional phrase-verb’ structure.

**References**