

L1 Russian L2 Chinese speakers' acquisition of the Chinese conjunction *hé*

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Abstract

From the perspective of features, this paper conducts an empirical study to examine L1 Russian L2 Chinese Speakers' acquisition of the Chinese conjunction *hé*. Specifically, the result shows that the vitality of an extraneous feature decreases until learners' language proficiency reaches an intermediate level. Eventually, it is difficult for learners to remove this extraneous feature. It suggests that this feature becomes dormant.

Keywords: SLA, Russian-speaking L2 learners, Chinese conjunction *hé*, feature

Introduction

The Chinese conjunction *hé* is one of the most common functional words in Mandarin Chinese, and its core function is to connect two Determiner Phrases (DPs) that indicate a coordinating relation (Lü and Li, 1980).

When L1-Russian speakers learn this word, they always match it with its Russian equivalent - the conjunction *и*. However, the function of *и* is not exactly the same as *hé* - it also indicates a coordinating relation and can connect DPs, but it can also connect Complementizer Phrases (CPs) (Кузнецов, 1998).

This research marks the feature that represents the coordinating relation as [COOR], the feature that can connect DPs as [DP-LINK], and the feature that can connect CPs as [CP-LINK]. The feature sets as shown in Figure 1.

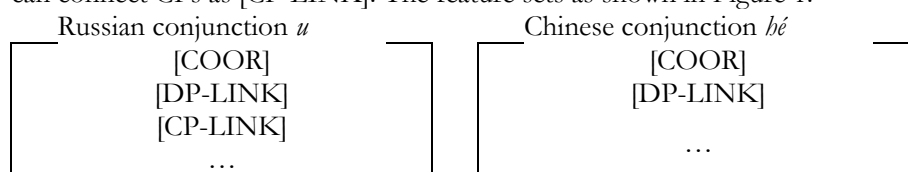


Figure 1. The feature sets.

Lately, *feature* has become a core concept under the framework of *the Minimalist Program* (Chomsky, 1995). The Feature Reassembly Hypothesis (Lardiere, 2008, 2009) explained that if the feature sets of the L1 and L2 are similar but not identical, then the learner will map the features of the L1 to the L2 lexical item, and features will be reassembled if successful. Furthermore, the Dormant Feature Hypothesis (Yuan, 2014) claims that there is not always enough evidence to help learners confirm or disconfirm features in the L2 input, and these features gradually lose their vitality and remain in a dormant state.

Empirical study

Research questions

- Can learners successfully establish a mapping between *hé* and *u*?
- Can learners map the [COOR] and [DP-LINK] onto the L2 lexical item?
- Can learners map the [CP-LINK] onto the L2 lexical item? If they can, will it be removed as the learner's language proficiency improves?

Participants

There were 18 L1 Chinese speakers and 66 L1 Russian L2 Chinese speakers. L2 speakers were divided into 3 proficiency groups.

Instruments and procedures

Translation task

This task required the participants (only L2 groups) to translate a Russian sentence with the conjunction *u* into Chinese with 1 point for a correct answer and 0 points for an incorrect answer. When translating “DP₁ *u* DP₂”, the participants should translate *u* into *hé*, and when translating “CP₁, *u* CP₂”, the participants should not translate *u* into *hé* because *hé* cannot connect CPs.

Acceptability judgment task

This task required the participants to judge the acceptability of five types of sentences, including: “DP₁ *hé* DP₂”; “CP₁, *hé* CP₂”; “CP₁, CP₂”; “CP₁”; “CP₂”. The score depended on the participants' acceptability.

Sentence-making task

This task required the participants to connect the given words into grammatical sentences with 1 point for a correct answer and 0 points for an incorrect answer. There were two types of sentences: “DP₁ *hé* DP₂” and “CP₁, *hé* CP₂”.

Results

Translation task

Table 1. The mean scores of the translation task.

Groups	Number	DP ₁ <i>hé</i> DP ₂	CP ₁ , <i>hé</i> CP ₂
elementary	19	0.92	0.59
intermediate	27	0.92	0.80
advanced	20	0.98	0.84
native	18	N/A	N/A

In type “DP₁ *hé* DP₂”, one-way ANOVA analysis indicated that there were no significant differences between the groups ($F(2, 261) = 1.485, p > 0.05$). However, in type “CP₁, *hé* CP₂”, there were significant differences in each group ($F(2, 261) = 7.643, p < 0.05$), while the *post hoc* Scheffé tests indicated that

the intermediate and advanced groups tended to reject using *hé* to translate the Russian coordinating compound sentence with *и* ($p < 0.05$).

Acceptability judgment task

Table 2. The mean scores of the acceptability judgment task.

Groups	Number	DP ₁ <i>hé</i> DP ₂	CP ₁ , <i>hé</i> CP ₂	CP ₁ , CP ₂	CP ₁	CP ₂
elementary	19	3.66	2.87***	3.65	3.79 *	3.73 *
intermediate	27	3.66	1.98***	3.76	3.89	3.81
advanced	20	3.90	1.91***	3.89	3.96	3.95
native	18	3.75	1.17	3.79	3.97	3.94

Notes. *= significantly different from the NS Group at $p < 0.05$; *** = significantly different from the NS Group at $p < 0.001$.

One-way ANOVA analysis shows that there were no significant differences between the groups in type “DP₁ *hé* DP₂” ($F(3, 332) = 3.432, p > 0.05$) and type “CP₁, CP₂” ($F(3, 332) = 2.689, p < 0.05$). However, in type “CP₁, *hé* CP₂”, a very significant difference was found ($F(3, 332) = 38.160, p < 0.001$), while the *post hoc* Scheffé tests indicated that there were very significant differences between L1 and L2 groups ($p < 0.001$). Moreover, the elementary group had a very significant difference from the intermediate and advanced groups ($p < 0.001$). A paired sample T-test analysis showed that there were very significant differences between type “CP₁, CP₂” and “CP₁, *hé* CP₂” of each L2 groups ($t(72) = -30.528, p < 0.001$).

Sentence-making task

Table 3. The mean scores of the sentence-making task.

Groups	Number	DP ₁ <i>hé</i> DP ₂	CP ₁ , <i>hé</i> CP ₂
elementary	19	0.87	0.34 ***
intermediate	27	0.92	0.69 ***
advanced	20	0.96	0.63 ***
native	18	0.94	1.00

Notes. *** = significantly different from the NS Group at $p < 0.001$.

One-way ANOVA analysis shows that there were no significant differences in type “DP₁ *hé* DP₂” ($F(3, 332) = 1.822, p > 0.05$), whereas in type “CP₁, *hé* CP₂” a very significant difference was found ($F(3, 332) = 30.252, p < 0.001$), the *post hoc* Scheffé tests indicated that there were very significant differences between L1 and L2 groups ($p < 0.001$).

Discussion

In the translation task, the L2 groups could all translate *и* that connects DPs to *hé*. This shows that in the initial stage, learners could match *hé* with *и*, and map the [COOR] and [DP-LINK] to the L2 lexical item. However, the mean scores of the elementary group was significantly lower than that of other two learner's

groups, which indicates the [CP-LINK] feature was attached to the elementary learners' L2 grammars.

In the acceptability judgment task, the mean score of all L2 groups of “CP₁, *hé* CP₂” was significantly different from the L1 group's, the [CP-LINK] feature was active in the learners' L2 lexical item. In addition, the elementary group had a very significant difference from the intermediate and advanced groups, indicating that the vitality of the [CP-LINK] feature decreases with the improvement of language proficiency, but the feature's vitality did not change after language proficiency reached a certain level. What's more, learners were sensitive to the difference between “CP₁, *hé* CP₂” and “CP₁, CP₂”, but all learners could not reject “CP₁, *hé* CP₂”, which means that the [CP-LINK] feature still randomly affects the judgments of these learners. According to the Dormant Feature Hypothesis (Yuan, 2014), it is believed that that the [CP-LINK] feature has entered a dormant state.

In the sentence-making task, The L2 groups could produce a sentence using *hé* to connect DPs, just like the L1 group. However, even advanced learners still produce type “CP₁, *hé* CP₂” sentences, which means that even advanced learners could not completely remove the [CP-LINK] feature from their L2 lexical item.

Conclusion

This study investigated Russian speakers' acquisition of the Chinese conjunction *hé* from the perspective of features. It found that at the beginning of learning, learners matched *hé* with the Russian conjunction *и*. Also, learners mapped the features of *и* [COOR, DP-LINK, CP-LINK] onto the L2 lexical item *hé*. As language proficiency improved, the vitality of the [CP-LINK] feature decreases, but the feature still randomly affects the behaviors of advance learners. It is believed that due to the lack of negative evidence, the [CP-LINK] feature has entered a dormant state.

References

- Chomsky, N. 1995. *The Minimalist Program*. Cambridge, Mass, The MIT Press.
- Lardiere, D. 2008. Feature assembly in second language acquisition. In Liceras JM, Zobl H, and Goodluck H (eds) *The role of formal features in second language acquisition*, 106–40, Mahwah, NJ, Lawrence Erlbaum.
- Lardiere, D. 2009. Some thoughts on the contrastive analysis of features in second language acquisition. *Second Language Research*, 25(2), 173-227.
- Lü, S., Li, L. 1980. *Xiandai hanyu babai ci* [Eight Hundred Words of Modern Chinese]. Beijing, The Commercial Press.
- Yuan, B. 2014. 'wh-on-earth' in Chinese speakers' L2 English: Evidence of dormant features. *Second Language Research*, 30(4), 515-549.
- Кузнецов, С. А. 1998. *Большой толковый словарь русского языка* [Great Dictionary of Russian language]. St. Petersburg: Norint, 1998.