How Difficult is it to be Native-like in Second Language Learning?

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Abstract

This paper looks at the interpretability of a type of colloquial terms in Cantonese, the proposed negative wh-quantifier (‘Neg-whQ’), by adult English-speaking learners. Neg-whQs have the form [mou ‘no’ + wh-word]. Instead of a canonical SVO order, a Neg-whQobj uniquely manifests an SOV order and is variously interpreted as negative ‘nothing’ or existential ‘only a few’. The focus of this study is to test whether the functional morphology of Neg-whQs represents a ‘bottleneck’ [3]. Results suggested that learners, even achieving an advanced level, failed to attain the additional existential reading (apart from the standard negative reading) of Neg-whQs. Deficits in ultimate second language (L2) knowledge are concluded to be a result of the lack of one-to-one morphological mapping between a Neg-whQ and its closest counterpart nowhere in learners’ first language (L1) English. Only a few successful cases from advanced learners demonstrating native-like competence, suggest that it is essential to have experiences in using the L2 in a colloquial context. The results of the experimental work conducted lay insights to future second language teaching. L2 acquisition of Neg-whQs in Cantonese, as a typical colloquial language, by English speakers is problematic, since the relevant facts are neither robustly available from the L2 input, nor are they covered in Cantonese teaching materials. Perhaps, to obtain native-like second language knowledge requires more considerations on how it is talked among native speakers than taught. Future research could usefully follow the recent suggestion by Whong et al. to bring theoretical L2 research to the classroom [4], and investigate whether explicit instructions on Neg-whQs could facilitate acquisition of the different interpretations of this form.

1. Introduction

This paper investigates L2 acquisition of the little-studied negative wh-quantifier (Neg-whQ) in Cantonese by adult English speakers. Neg-whQs are morphologically composed of the negative morpheme mou, an unpronounced quantifier operator Ø and a wh-phrase. While SVO is the canonical word order in Cantonese, a Neg-whQobj construction observes an SOV structure. Nonetheless, Neg-whQs mou-matj ‘no+what’, mou-bingo ‘no+who’ and mou-bindou ‘no+where’ are ambiguous in having both the negative and existential ‘only a few’ reading. This study looks at L2 acquisition of colloquial terms Neg-whQs, in which the amount of L2 input is crucial. Neg-whQs are never covered in classroom and there is no one-to-one morphological mapping of Neg-whQs in Cantonese and English, therefore the current study supports Slabakova’s claim that form-meaning associated with the functional morphology is the ‘bottleneck’ [3]. Having a complex morphology bearing the functional Ø, Cantonese Neg-whQ is predicted to be less likely acquirable by English-speaking learners.

2. Theoretical background

The study follows the proposed structure of Neg-whQs resulting from the merge (mou {Ø, bingo}) [1]. Although there appears a Neg-whQ counterpart in English (e.g. nowhere), nowhere has a simpler morphological structure resulting from the merge (no, DP). While nowhere has only a negative interpretation, the dual reading alternation of Cantonese Neg-whQs is context-dependent in which the context hints the common knowledge or old information in the discourse. A Neg-whQobj has dual interpretation and is obliged to undergo movement to a preverbal position as in (1).

1. Ngo mou-bingou soeng hui t;
   I no-where want go

   a. ‘I want to go to nowhere.’
   b. ‘I want to go to only a few places.’

In contrast, neither the existential reading nor the SOV structure is observed in English nowhere constructions.
Sentence-final particles (SP), where a [+p] feature is supposed, are absent in English grammar and associated to the presupposition of whether or not there is implication in the background shared between the speaker and the addressee in Cantonese. Neg-whQ_{obj} constructions with a SP of [-p] feature (e.g. laa3) tend to push negative readings. However, contexts with SPs of [+p] feature (e.g. zaa3) indicate presuppositions of existence and force existential readings.

3. The experiment

3.1 Research questions and hypotheses

As discussed above, there is a lack of respective linguistic knowledge of Neg-whQs in learners’ L1 English and rare evidence from the L2 input. To investigate L2 acquisition of Neg-whQs, the following research questions are formulated:

1. Can English-speaking learners of Cantonese acquire the semantics of a Neg-whQ_{obj} construction?
2. Is the complex morphology of Neg-whQs a ‘bottleneck’ in adult L2 acquisition?

Following Schwartz and Sprouse’s theory [2], English-speaking learners of Cantonese are expected to rely on their L1 grammar that is transferred to the interlanguage grammar. The negative reading associated to a Neg-whQ is assumed to transfer to L2 learners’ interlanguage grammar and acquiring the existential reading that is missing in learners’ L1 grammar is required in order to achieve successful L2 acquisition. In light of the above, advanced L2 learners will acquire both readings if the bottleneck is successfully overcome. If the bottleneck persists in the L2 development, L2 learners will reject Neg-whQs in existential contexts and accept them only in negative contexts regardless of their Cantonese proficiency level.

2.2 Participants and materials

The participants included 21 Cantonese native speakers (NS), 18 intermediate (Int) and 20 advanced (Adv) English-speaking learners of Cantonese. L2 learners were required to master basic communication in Cantonese and sub-divided into intermediate (score below 19 out of 20) and advanced group (score 19 or above) according to their score of a Cantonese proficiency test they took part in.

Learners’ knowledge was investigated by means of a context-based judgement task (CJT). The CJT included six distractors and 12 experimental items, in which half with designed existential (EX) contexts and the other half with negative (NEG) contexts. A selective written context was displayed on a screen followed by five response options (A – E), in which option A represented the Neg-whQ_{obj}+SP_{[p]} construction under investigation where the existential reading is pushed under the scope of an SP zaa3. Participants made their judgement on a 5-point scale. Sentence structures represented in each option are displayed in Table 1.

Table 1. Options displayed in the CJT

<table>
<thead>
<tr>
<th>Option</th>
<th>Sentence structure</th>
<th>Reading(s)</th>
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<tbody>
<tr>
<td>A</td>
<td>Subj Neg-whQ_{obj} V SP_{[p]} (SOV structure with Neg-whQ_{obj}) e.g. I no-what like zaa3</td>
<td>Existential ‘only a few’ (Lit. ‘I like only a few things.’)</td>
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<tr>
<td>B</td>
<td>Subj Neg V NPI_{obj} (SVO structure with a negator and a negative polarity item) e.g. I don’t like anybody</td>
<td>Negative (Lit. ‘I don’t like anybody.’)</td>
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<tr>
<td>C</td>
<td>Subj NegQ_{obj} V SP_{[p]} (SOV structure with ordinary negative quantifier object) e.g. I nobody like aa_{neutral}</td>
<td>Negative (Lit. ‘I like nobody.’)</td>
</tr>
<tr>
<td>D</td>
<td>Subj V Few_{obj} SP_{[p]} (SVO structure with ‘only a few’ object) e.g. I like only a few people zaa3</td>
<td>Existential ‘only a few’ (Lit. ‘I like only a few things.’)</td>
</tr>
<tr>
<td>E</td>
<td>‘None of the above’</td>
<td></td>
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Option A and D have EX-readings and represent correct options to EX-contexts, whereas option B and C have NEG-readings and represent correct options to NEG-contexts.
3. Results
The results for each experimental item of both EX-contexts and NEG-contexts are presented in this section. The data was analyzed by measuring, in percentage, average selections of each correct option to the 12 experimental items. First, we will discuss results of EX-items and NEG-items separately. Then, we will compare participants’ selection of Neg-whQ+SP_{[+p]} constructions in the two contexts.

One EX-item and two NEG-items were considered problematic and excluded for analysis because NSs consistently selected inappropriate options to the corresponding context. Table 2 summarises results of the five valid EX-items.

<table>
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<th>Table 2. Percentage of selecting correct responses in EX-items (5)</th>
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<tr>
<td>Response</td>
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<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>Correct A and D</td>
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<td>Correct A/D</td>
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The results indicate that all groups were generally accurate in selecting options involving EX-readings, option A or D, and ignoring those with NEG-readings, option B or C. Participants’ responses are highly reliable. Preference for selecting both option A and D for the same item suggests participants’ awareness to the ‘only a few’ reading of the Neg-whQ+SP_{[+p]} constructions. Unlike the NS group, the learners were half as likely to select both options together.

Group results of NEG-items are presented in Table 3.

<table>
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<th>Table 3. Percentage of selecting incorrect and correct responses in NEG-items (4)</th>
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<tr>
<td>Incorrect A and (B or C or both)</td>
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<td>----------------------------------</td>
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<tr>
<td>40% [34.45]</td>
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<tr>
<td>Correct B/C</td>
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All groups were fairly accurate in selecting options B/C. While NSs selected only 7% inaccurate responses, L2 learners selected 40 and 47% inaccurate responses respectively. A 3 (Group) x 3 (Condition) full-factorial ANOVA examined the effects of group and experimental conditions (I. selecting A; II. Selecting A and (B or C or both); and III. Selecting either A or B or C) found the interaction between group and Condition I (F_{2,58} = 3.965, p = .025, partial eta-squared = .124, power = .688) and between group and Condition II (F_{2,58} = 9.606, p = .000, partial eta-squared = .255, power = .976). A games-Howell post hoc test indicates a significant difference between NSs and advanced learners in their incorrect selection of option A (p = .024). In addition, there was a significant difference between NSs and intermediate learners (p=.001) on their mean rating of inaccurate responses selecting option A and (either B or C), but no significant difference between L2 groups (p = .817). NSs were not likely to select option A and (either B or C or both), whereas L2 learners were very likely to select these incorrect responses. Figure 1 reports participants’ percentage of selecting option A in the two contexts.

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**Figure 1. Average selections of Neg-whQ+SP_{[+p]} constructions in both contexts**

![Average selections of Neg-whQ+SP_{[+p]} constructions in both contexts](image_url)

- **Negative Context**
  - Int (n=18): 42%
  - Adv (n=20): 51%
  - NS (n=21): 21%

- **Existential Context**
  - Int (n=18): 14%
  - Adv (n=20): 18%
  - NS (n=21): 36%
The NS group reveals a distinct increase in selecting option A from NEG-contexts to EX-contexts, whereas both L2 groups showed the opposite trend. A repeated measures ANOVA indicates a main effect for the independent variable Context (F[1,56] = 6.419, p = .014, partial eta-squared = .103, power = .702), and a significant interaction between Context and Group (F[2,56] = 6.570, p = .003, partial eta-squared = .190, power = .895). Individual Adv06 showed 100% native-like competence in selecting Neg-whQ+SP[+p] constructions only in existential but not negative contexts, while individual Adv21 also had a 89% tendency in doing the same.

4. Discussion

Findings suggest that L2 learners failed to fully acquire the semantics of Neg-whQs and its complex morphology represents a bottleneck in L2 acquisition. First, L2 learners tended to select Neg-whQ+SP[+p] constructions in negative rather than existential contexts, displaying an opposite pattern of the NS’s one. Even advanced L2 learners did not acquire the existential reading of Neg-whQs. This finding was deduced by their tendency to associate Neg-whQ+SP[+p] constructions with NEG-contexts incorrectly. Second, results showed that learners incorrectly selected Neg-whQ+SP[+p] constructions and negative constructions together for NEG-items at the rate of 40% or more. Therefore, results indicated that L2 learners did not treat Neg-whQ+SP[+p] constructions differently from negative constructions like NSs did. As discussed, the existential reading of Neg-whQs arises from the Neg-whQ+SP[+p] structure. Unless the dual interpretation of a Neg-whQ and the SP that are absent in Learners’ L1 grammar are acquired, learners would not acquire the existential reading of Neg-whQs. A statistically significant difference was found between the NSs and both L2 groups for average rate of incorrect responses, whereby both L2 groups selected incorrect responses to NEG-items to a far greater extent than the NSs. In light of this, I argued that even advanced learners fail to disassociate the Neg-whQ+SP[+p] construction from the negative interpretation.

Next, results from EX-items also suggested L2 learners’ failure to acquire the existential reading of Neg-whQs. L2 learners only selected Neg-whQ+SP[+p] constructions at the rate of 14 to 18% in EX-contexts, while they were generally accurate in selecting the ‘only a few’+SP construction at the rate of 70 to 82%. The NSs were twice as likely to select both correct responses (Neg-whQ+SP[+p] and ‘only a few’ constructions), in contrast to the L2 groups. Eleven out of 18 intermediate and 11 out of 20 advanced L2 learners consistently rejected Neg-whQ+SP[+p] constructions in all EX-items. These findings show that L2 learners failed to associate Neg-whQ+SP[+p] constructions with the existential reading and therefore they struggle with the existential reading of Neg-whQs. It is evident that the complex morphology of Neg-whQs (⟨mou {Ø, wh-words}⟩) is the ‘bottleneck’ and leads to delays in acquisition even for advanced learners.

In spite of the deficit, two individual advanced learners actually demonstrated native-like competence with Neg-whQs. Participant Adv06 in particular has been learning Cantonese for 25 years and living in Hong Kong for 22 years. He/she is obliged to speak Cantonese at work on a daily basis. This has proved that overcoming the ‘bottleneck’ is possible, with sufficient exposure to the L2 input and opportunities to use the L2, in order to stimulate L2 acquisition in achieving native-like competence.

5. Conclusion

The study shows evidence to the difficulty in fully acquiring L2 colloquial terms. The complex morphology, consisting a functional morphology that is absent in learners’ L1 grammar, is particularly difficult and hinder successful acquisition of the meanings associated even in the advanced stage of interlanguage development. The few proving native-like cases suggest that semantics of colloquial terms are attainable with continued exposure to L2 input. To reach the ultimate goal of talking like native, it is important to incorporate communicative teaching and explicit instructions into L2 classroom.

References