Do L2 Speakers’ Problems Originate in Syntax or Syntax-discourse Interface?

Importance of the Study of Acquisition of Pronouns by English Speakers of L2 Japanese

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Abstract

In this article the significance of the study focusing on the acquisition of pronouns by English learners/speakers of L2 Japanese is discussed. The recent studies have reported that optionality is found even in the L2 grammar of near-native or advanced level learners (Sorace 1993, Robertson and Sorace 1999, Montul and Slabakova 2003, Hopp 2004). Optionality means that “two structures are used interchangeably by a single learner” (Bong 2006: 3). If this is the case, does it mean that interlanguage grammar is not fully UG-constrained? Why does optionality exist? Based on the L2 study of Pérez-Leroux and Glass (1999), the possible study and its procedure, the hypotheses and expected results are discussed including the theoretical background. The results would account for the role of UG in L2 grammar, the role of L1 and fossilization to some extent. They also contribute to the progress of both the SLA theory and UG theory.

Key words: Second Language Acquisition (SLA), Universal Grammar (UG), Optionality, Interface, Grammatical features

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1. Introduction

There is a consensus that the ability used for acquiring languages called the Universal Grammar (=UG) (Chomsky, 1981) is available in the first language acquisition. In second language acquisition research, however, when adult (=post-childhood) learners acquire the second language (i.e. L2) after learning their mother tongue, it is still controversial whether the innate language faculty fully functions, partially functions, or does not function¹. Nevertheless, many studies have shown that the second language learners can access UG, either fully or partially.

The recent studies have reported that ‘optionality’ is observed in L2 grammar. Optionality means the phenomena in which L2 learners use two or more constructions or forms when the target language has only one. For example, (1) is the example of optionality phenomena of pronominal subjects in near-native L2 Italian speakers.

(1) a. Perché Giorgio si é licenziato?
   Why did Giorgio resign?

   b. Perché lui non sopportava più il direttore.

   c. Perché _ non sopportava più il direttore.
   Because he couldn’t stand his boss anymore. (Sorace, 2006)

As (1b) shows, they use lui (=he) in the topic context where Giorgio has been introduced in (1a) already. Since Italian is a null subject language like Spanish and Japanese, monolingual speakers of Italian would produce (1c) categorically.

It should be noted that according to Bong (2006, p. 3) there is a difference between variability and optionality. Variability means that ‘two structures are used variably for the learners so that two structures can be observed in interlanguage systems’. On the other hand, pure syntactic optionality exists within an individual learner, which is that ‘two structures are used interchangeably by a single learner’. However, by hypothesis, optionality is not allowed within Minimalist Program (Chomsky, 1995).

Optionality is syntactically not desirable from the point of view of the minimalist assumptions, since a global approach to economy principles demands that each syntactic structure should represent a maximally economical outcome of computation meeting the bare-output conditions imposed by the input although there are relative economical values such as the fact that Merge costs economically less than Move. (Bong, 2006, p. 3)
Optionality is observed even in L2 grammar at near-native or advanced level as we saw in (1) above (Sorace, 1993; Robertson and Sorace, 1999; Montul and Slabakova, 2003; Hopp, 2004; Sorace, 2006). As for the cause of the phenomena, two ideas have been proposed to account for it so far: (i) the problem is related to the level of discourse, that is, Conceptual-Intentional Interface in Chomsky (1995) (ii) the problem concerned lies within syntax. In fact, both ideas claim that the UG is available to adult learners, though the former advocates full availability of UG whereas the latter suggests partial access to UG position because of the existence of a critical period.

Sorace (2005) states that the grammar of native speakers is under ‘soft’ constraint (i.e. syntax-discourse) and ‘hard’ constraint (i.e. purely syntactic). From this view, she suggests the advantage of analyzing the syntax-discourse interface as follows:

...this distinction allows a more fine-grained analysis of syntactic variation in individual speakers than would be possible within current syntactic theories.

(p. 55)

On the other hand, there are many studies pointing out that the problems adult L2 near-native or advanced learners have exist in syntax; either functional features are failed or uninterpretable features are missing. It is argued, for example, in the studies of the acquisition of wh-questions (Hawkins and Chan, 1997; Hattori, 2004; Hawkins and Hattori, 2006), case and gender features in pronouns (Franceschina, 2002), gender features in articles (Hawkins and Franceschina, 2004; Velasco, 2006), verb inflections (Lizka, 2003) and so on. In the case of argument realization as (1) above, do L2 learners have a syntactic problem, too?

Comparing syntax and interface from the viewpoint of features, Sorace (2006) offers the two accounts below².

(2) a. Narrow syntax

‘Narrow’ syntax features drive syntactic derivations (and may be parameterized).

b. Discourse-interface

Discourse interface features ‘exploit’ parametric options and have interpretive effects; they can be ‘read’ by the conceptual/intentional systems of cognition.

(Sorace, 2006: 4)

Is it required to extend our examination of L2 learners’ problems to syntax-discourse interface, or is it the case that the problems are lying within syntactic computational system?
2. The study of syntax/interface

2.1 Importance of the study

It is assumed that optionality phenomena (as we saw in (1) above) are particularly crucial. Hawkins (2001, p. 346) has even suggested that it is in the differences between the grammatical knowledge established by L1 and L2 speakers that the real role of UG in SLA is to be found:

...A more compelling reason, I suggest, comes from the hypotheses that result from attempts to explain L2–L1 difference from a UG perspective... Such hypotheses represent real progress in understanding the nature of SLA and may even shed light on the structure and organization of the innate language faculty.

Regarding L2 acquisition, optionality phenomena and syntax/interface, one possible study will be suggested. For example, Japanese is a language which allows both null subjects (i.e. pro) and null objects while English is not, as shown in (3).

(3) a. Null subject
   Tanaka san-wa konban φ gitaa-o hiku to itteimasu yo
   Tanaka Mr-Tp tonight guitar-Ac play that is-saying
   'Tanaka says that he will play the guitar tonight.'

   b. Null object
   Koji san wa soto-de Tanaka san ga φ matteiru to it-teimasu yo
   Koji Mr. Tp outside-at Tanaka Mr. Nm is waiting that says
   'Koji says that Tanaka is waiting for him outside.'

The property gives us a good testing ground for exploring optionality phenomena and syntax/interface. Can English speakers of L2 Japanese whose proficiency level is advanced correctly use null forms in the contexts illustrated as in (3)? In addition, there are two reasons why the study needs to be conducted. Firstly, from the views of optionality and its cause, problems learners have and syntax/interface levels, the study of acquisition of pronouns in L2 Japanese has hardly been conducted so far. Secondly, in her PhD thesis, Yamada (2005) investigated the use of Japanese pronouns by English learners of L2 Japanese in the context where a UG constraint is involved. She concludes that the optionality and variability in pronoun use that her informants (all intermediate level) showed arises from the fact that the learners have not specified appropriate feature
specification in each pronoun (i.e. they just need more time and experience to acquire feature specification of pronouns). However, the results from studies so far indicating optionality even in the grammar of near-native or advanced L2 learners (i.e. residual optionality) would become counterevidence against Yamada’s conclusion.

2.2 The notion of interfaces
Since a relatively large number of studies investigating interfaces have emerged in the field of SLA quite recently, a diagram of interfaces is introduced in this section for the sake of clarity. Recently Lydia White, a leading figure in the field of SLA research, argues the importance of investigating how different UG components of the interlanguage grammar relate to each other. An example schema of UG components is illustrated in (4) to help in the understanding of interfaces.

(4) The diagram of UG

<table>
<thead>
<tr>
<th>Articulatory-perceptual system</th>
<th>Lexicon &amp; Computational system</th>
<th>LF</th>
<th>Conceptual-intentional system</th>
</tr>
</thead>
</table>

As (4) shows the computational system (i.e. syntactic computation) interfaces with both the articulatory-perceptual system and conceptual-intentional system.

According to White (2006, pp. 1-4), the notion of interfaces can be classified in two groups, external interfaces and internal interfaces. Moreover, each interface is classified into three types as shown below (pp. 1-4).

(5) a. External interfaces
   (i) The syntax/discourse, pragmatics, information structure interface
   (ii) The grammar/parsing interface
   (iii) The syntax/articulatory-perceptual interface
b. Internal interfaces
   (i) The syntax/morphology interface
   (ii) The morphology/phonology interface
   (iii) The syntax/semantics interface

White suggests that the consideration of interfaces allows for a more nuanced explanation of the role of UG in SLA.
2.3 Theoretical background

Let us now return to the present study. In the generative grammar ‘pro-drop’ parameter has been proposed as one of the parameters related to pronouns (Chomsky 1981). Pro means the pronouns that are phonetically null. For example, Japanese has pros because both subjects and objects are dropped if their meanings are recoverable in the relevant contexts. On the other hand, English is called a non-pro-drop language. As for the distribution of pronouns in discourse, Lozano (2003) states that null pronouns are used in pro-drop language to refer to ‘topic’ (i.e. old information), while phonetically overt pronouns are used to show ‘comparison’ or ‘focus’ (i.e. new information) which is observed in (6)5.

(6) A: Sasaki san no tokoro, goshujin wa daigaku no sensei de,
Sasaki Mr. Gn home husband Tp university gn teacher and
okusan no Hiroko san wa daikigyou no buchou san nano
wife Gn Hiroko Mrs Tp big company Gn general manager

B: dochira no shuunyu ga ooi no kana
Which Gn salary Nm much Q
A: Kanojo no hou mitai yo
She Gn on side seem

However in English overt pronouns are also used to indicate ‘comparison/focus’, by putting stress on the pronouns phonetically.

(7) A: Mr. Sasaki is a professor at a university and Mrs. Sasaki is a general manager at a big company.
B: Which one earns more money?
A: She does.

The grammatical features related to discourse are [topic] feature and [focus] feature (in the ‘split CP’ hypothesis in Rizzi 1997, Puskás 1997). From this point of view, the features of pronouns in Japanese and English are compared as below;

(8)

<table>
<thead>
<tr>
<th></th>
<th>Japanese</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>null pronoun</td>
<td>[+topic, -focus]</td>
<td>[-topic, +focus]</td>
</tr>
<tr>
<td>overt pronoun</td>
<td>[-topic, +focus]</td>
<td>[topic]</td>
</tr>
</tbody>
</table>
2.4 The SLA study focusing on discourse: Pérez-Leroux and Glass (1999)

In the context where discourse is involved, Pérez-Leroux and Glass (1999) investigated the acquisition of Spanish by English speakers. There is no doubt that their study will become a cornerstone of the proposed study, so it will be summarized in this section. Pérez-Leroux and Glass (1999) examined whether there are differences in developmental patterns in the acquisition of null pronouns when discourse is involved. That is, topic and focus. The L2 learners tested were North American English speakers learning Spanish in a formal setting. They were divided into three groups according to their proficiency level (elementary, intermediate and advanced). As control, one native-speaker group (with members from Latin America, Spain and the Caribbean) was included in the experiment. A total of 101 subjects participated in the study (elementary=30, intermediate=31, advanced=21, natives=19). The method was an elicitation task. Interpretation of the pronoun was controlled by the use of questions. Thus, when a question is asking about an embedded subject, an overt pronoun is required in that position, whereas when a question is asking about an embedded object, a null pronoun is required in the embedded subject position. The task involved a set of 8 stories illustrated by pictures (to fix the interpretation of the embedded subject as referring to the matrix subject), followed by the questions. Four of the eight stories were asking about the object (i.e. the embedded subject is ‘topic’) The other 4 stories were asking about the subject (i.e. the embedded subject is ‘focus’). An illustration of the test items used is given in (10)

(10) Topic/Focus story

Hace calor y la familia va al jardín.
It is hot and the family goes out to the garden.

- Subject question:
  ¿Quién piensa la abuela que regara las plantas?
  ‘Who does the grandmother think will water the plants?’

- Target focus response:
  La abuela piensa que ella regara las plantas.
  ‘She thinks that SHE will water the plants.’ (embedded subject is focused)

- Object question:
  ¿Qué piensa la abuela que hará en el jardín?
'What does the grandmother think that she will do in the garden?'

Target topic response:
La abuela piensa que regara las plantas.
'She thinks that (she) will water the plants.' (embedded subject is topic) (p.236)

The results were that L2 learners’ use of null pronouns increased with their proficiency level, when they were required to answer about the object position. However, in the focus condition, their use of null pronouns was low throughout. The results are given in table 1:

<table>
<thead>
<tr>
<th></th>
<th>Topic stories</th>
<th>Focus stories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Null  Overt  Other</td>
<td>Null  Overt  Other</td>
</tr>
<tr>
<td><strong>Elementary</strong> (n = 30)</td>
<td>30.8%  9.2%  60.0%</td>
<td>20.0%  20.0%  60.0%</td>
</tr>
<tr>
<td><strong>Intermediate</strong> (n = 31)</td>
<td>36.3%  11.3%  52.4%</td>
<td>29.0%  26.6%  44.4%</td>
</tr>
<tr>
<td><strong>Advanced</strong> (n = 21)</td>
<td>57.1%  7.1%  35.7%</td>
<td>19.0%  42.9%  38.1%</td>
</tr>
<tr>
<td><strong>Native control</strong> (n = 19)</td>
<td>47.4%  15.8%  36.8%</td>
<td>7.9%  56.6%  35.5%</td>
</tr>
</tbody>
</table>
All groups used more null subjects when the pronoun was a topic, and they used fewer null subjects when the pronoun was interpreted as focus. In the two contexts, the advanced learners discriminated null pronoun use more than the other two groups: elementary and intermediate. Thus, time and experience are needed for L2 learners to acquire null pronoun use in topic/focus contexts. Presumably the learners can ultimately acquire null pronouns when discourse (topic and focus) is involved. However, it should be noted that in their study Pérez-Leroux and Glass reported only the group results where individual differences, which is very crucial in considering optionality, would be concealed. Consequently, variability among groups of learners is observed, but not optionality.

2.5 **The present study: hypotheses and expected results**

Can advanced English adult learners of Japanese correctly use Japanese pronouns in both topic and comparison/focus contexts in discourse? The following hypotheses could be formulated;

(11) **Hypothesis 1**: As for topic, they can specify [topic] feature because it is observed in English as well. On the other hand, they cannot specify [focus] feature since English does not have this.

Hypothesis 2: As for topic, they can specify [topic] feature because it is observed in English as well. As for comparison/focus, they can newly acquire [focus] features.

Following both hypotheses above, the results from the present study of the actual use of pronouns would be (12).

(12) **Result 1**: Since the learners cannot specify [focus] features, they sometimes use overt pronouns in the context of topic (i.e. L1 effect). As a result, they show optionality in their use of pronouns.

**Result 2**: The learners can use pronouns appropriately in topic contexts. No optionality is observed.

2.6 **The present study: test items**

In the proposed study, I will extend the study of Pérez-Leroux and Glass (1999) to include interpretation of pronouns not only in subject positions but also in object positions. This is
due to the fact that Spanish has only null subjects while Japanese has both null subjects and objects.

In order to examine the embedded object positions, another set of 8 stories illustrated by pictures (to fix the interpretation of the embedded subject as referring to the matrix subject) are added to the questionnaire used in the original study of Pérez-Leroux and Glass (1999). An illustration of the test items in terms of the interpretation of embedded object positions is given in (13) below.

(13) **Topic/Focus story**

たろう君は教科書を忘れてしまった。運悪く、それを先生にみつかってしまった。
'Taro left his textbook in his house. Unfortunately his teacher noticed that.'

- Object question (asking person):
  先生は、誰を叱ろうと考えている？
  'Who does the teacher think he will scold?'
- Target focus response:
  先生は、たろう君を叱ろうと考えている
  'He thinks that he will scold TARO.' (embedded object is focused)

- Object question (asking action):
  先生は、教室でたろう君をどうしようと考えている？
  'What does the teacher think that he will do in the classroom?'
- Target topic response:
  先生は、叱ろうと考えている。
  'He thinks that he will scold (him).'</p

2. 7 **Further issues**

However, several questions will be raised. For example, does discourse itself decide the usage of the features [topic] and [focus]? Even if they have such features, L2 speakers

<table>
<thead>
<tr>
<th>Table 2: The patterns of interlanguage grammar</th>
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<tbody>
<tr>
<td>Discourse</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>?L2 speakers</td>
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<tr>
<td>?L2 speakers</td>
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<tr>
<td>?L2 speakers</td>
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<tr>
<td>Native speakers</td>
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</table>
would not use null/overt pronouns correctly without knowing in which contexts those pronouns, either null forms or overt forms, are used (i.e. the pragmatic principle). On the other hand, is it impossible for L2 speakers to be sensitive to the pragmatic principle? Table 2 shows the patterns of interlanguage grammar.

Thus, the relationship between the grammatical features and discourse-pragmatic factors will need to be clarified. Moreover, in terms of subject realization of null subject languages, Sorace (2006, p. 4) states that ‘null subjects are syntactically licensed but their distribution is governed by discourse-pragmatic factors’. Does it apply to the object realization in Japanese? Are there any difference in distribution of overt/null pronouns between subject positions and object positions? Whether or not the hypotheses in (11) and the expected results in (12) are confirmed awaits the result of the proposed study.

**References**


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2 As interface features, for example, [+topic shift] and [+focus] features are considered (Serratrice, Sorace and Paoli 2004: 188). The pragmatic principle of informativeness is that ‘omit uninformative arguments’ (p. 199).

3 The syntactic status of null objects is controversial (see Huang 1984 & Cole 1986).

4 The meaning of this sentence including a null object might be ambiguous. In the experiment, however, when informants fill in questionnaires, they will be given a picture in order to interpret a null object, which would fix a meaning of sentence with a null object in a sense.

5 It is considered that ‘focus position in a sentence is a position occupied by a constituent which is highlighted in some way (usually in order to mark it as containing ‘new’ or ‘unfamiliar’ information)’ (Radford 2004, p. 452). As for topic, ‘An expression which represents ‘old’ or ‘familiar’ information ... is said to be a topic’ (Radford 2004, p. 481).