Semantics of Second Language Reflexives

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Abstract
One of the major findings in previous research on reflexive coreference in a second language context is that learners of English violate the locality requirement of the English reflexive form x-self more readily when it appears in the subordinate infinitival clause than when it is found in the subordinate tensed clause. This paper attempts to show that the cause of this asymmetry is the difference in the event structure inherent to the situation to be described, rather than the difference in the structural type of the sentence per se. In an experiment that was conducted to test the validity of this postulation, the learners responded differently to the different degrees of factivity presumed in individual sentences, in line with the prediction. This result is important not only in theoretical terms but from a pedagogical point of view as well.

INTRODUCTION
Anaphoric relations in languages have been extensively discussed from various perspectives in the history of linguistics and have also been addressed in the second language context. In the second language literature, the coreference possibilities of reflexives involved in (1) and (2) have been a special focus of debate:

(1) a. Betty$_i$ knows that Chris$_j$ will talk about himself$_{ij}$
    b. Nancy$_i$ wants Patti$_j$ to introduce herself$_{ij}$.

(2) Lisa$_i$ left Chris$_j$ a note about herself$_{ij}$.

As is widely known, the reflexives in English have to meet the “locality requirement.” Roughly, this regulates that a referent (or an antecedent) of a reflexive needs to be found within the very clause in which the reflexive itself appears. Thus, herself in (1a) refers to Chris but not to Betty, and only Patti can be the antecedent of herself in (1b), as shown by coindexations. (2) manifests a different property of the English reflexive: It is not necessarily “orientated” to the subject. That is, both the element in the subject position and the element in the nonsubject position can be its antecedent.

One of the anaphoric expressions in Japanese, zibun, shows a sharp contrast to the English reflexive in that it permits a “long-distance binding” on the one hand, and is “subject-oriented” on
the other. Thus, *zibun* can refer not only to an element in the same clause where it appears but to an element in the upper clause on the condition that the element is in the subject position, as evidenced in (3) and (4):

(3) *Akiko*-wa *Megumi*-ga *zibun*-wo *semeteiru-koto*-wo *sitteiru.*
    Akiko-TOP Megumi-NOM SELF-ACC is blaming-COMP-ACC knows
    “Akiko knows that Megumi is blaming SELF.”

(4) *Hiroko*-wa *Satoko*-ni *zibun*-no *hanasi*-wo *sita.*
    Hiroko-TOP Satoko-OBL SELF’s story-ACC told
    “Hiroko told Satoko a story about SELF.”

This paper deals with Japanese learners’ understanding of the locality requirement of English reflexives. Of particular relevance are such sentences as (1a) and (1b). The subject-orientation will be given only sporadic references when it has relevance to the central argument. The aim of the discussion is to demonstrate that the previous claim that the learner’s interpretation of the English reflexive differs depending on the syntactic type of the subordinate clause (i.e., whether it is finite or nonfinite) is not a legitimate one. I would like to argue that rather, the learners are influenced by the “event structure” inherent to a sentence. Pedagogic implications of this new perspective are also discussed.

1. A BRIEF HISTORY OF RESEARCH ON SECOND LANGUAGE REFLEXIVES

The first influential study of reflexive coreference in the second language context was carried out by Finer and Broselow (1986). Through an experiment that incorporated the two types of English sentence represented in (1), i.e., sentences having subordinate finite clauses and those containing subordinate nonfinite (inflinitival) clauses, the researchers found that in both types of sentence, the locality requirement was not always observed. However, the rate of violation was remarkably higher for the sentences containing infinitival clauses. This is the response bias that Yuan (1994), several years later, called the “tensed-infinitive asymmetry.” The tendency has also been confirmed in many other studies published to date (e.g., Akiyama, 2002; Hirakawa, 1990; Matsumura, 1994, to name only a few). Based on the observation that there are languages, like Russian, that embody this asymmetry in their grammar, Finer and Broselow (1986), argue that a learner’s grammar falls within the range that is sanctioned by Universal Grammar (UG), an alleged blueprint of human language, even if it is not identical to the target grammar; hence UG is available to all learners.

In the 1990’s, prompted by the emergence of syntactic theories that attempt to give an integrative account of the locality and the subject-orientation (e.g., Cole, Hermon & Sung, 1990), second language researchers contrived alternative ways to investigate whether or not the grammar of the learner is UG-sanctioned. For example, taking note of the fact that there are no reflexives in the world languages that are bound to a long-distance, nonsubject antecedent, Thomas (1995) assumed that the real test of UG-accessibility was whether or not the learners would accept the
nonlocal object in her study of Japanese language acquisition by English-speaking learners. Interestingly, contrary to what Finer and Broselow (1986) claim, the results of her experiment showed that the grammar of the learner was not constrained by UG, with a considerable percentage of her learners accepting a nonlocal, nonsubject antecedent of zibun.

There is no doubt that the revised theoretical perspective put a new light on the study of reflexive coreference in a second language. However, it had one drawback: It effectively detracted researchers’ attention from the phenomenon of tensed-infinitive asymmetry. Note that the structural type of the subordinate clause, is simply irrelevant to Thomas’ (1995) argumentation. However, the attested asymmetry is still of great theoretical significance, for, without understanding the nature and the psycholinguistic origin of the phenomenon, we cannot gain insights into exactly what representation the learner’s interlanguage has and what kind of cognitive change motivates learners to go, if at all possible, beyond the stage of asymmetry.

At this juncture, it is worth mentioning one recent study that reports a different aspect of the tensed-infinitive asymmetry. In his experiment, Akiyama (2002) brought a developmental perspective into the picture. He found that the rate of the illegitimate long-distance binding steadily decreased for those sentences containing subordinate tensed clauses as the general proficiency of the learner increased, whereas the long-distance binding continued to characterize the interlanguage grammar in regard to the sentences containing infinitival clauses. While discovering this intriguing fact, however, Akiyama did not succeed in providing an adequate explanation for these observed developmental patterns in reference to the theory of UG which was his theoretical underpinning (Akiyama, 2002, p. 45). The mechanism of the asymmetry remains to be elucidated. The aim of this paper is to shed some light on the issue.

2. THE NATURE OF THE TENSED-INFINITIVE ASYMMETRY
Syntactic Considerations
As mentioned above, recent syntactic theories have attempted to treat the locality and the subject-orientation in an integrative manner. Roughly, in most of the proposals, it is assumed that $X^0$ reflexives like Japanese zibun and Korean ziji, having such a representation as $\text{[NP[Nzibun]]}$, raise cyclically into the IP positions of the embedded and upper clauses for interpretation, resulting in the long-distance binding, while an $X^{\max}$ reflexive like the English $x$-self ($\text{[NP[\text{SPEC-X}][N\text{-self}]})$ remains in its original location and hence locally bound. In this postulation, the subject-orientation of the $X^0$ reflexive is a natural consequence of its raising, for only the element in the subject position $c$-commands the IP position.

If this account is extended to the second language context, the attested tensed-infinitive asymmetry should be the result of the learners treating $x$-self as an $X^0$ reflexive when it appears in a finite, tensed clause on the one hand, and as an $X^{\max}$ reflexive when it is in a nonfinite, infinitival clause on the other. However, rather than accounting for the mechanism of the asymmetry, this line of consideration only gives rise to the next question: “Why do they?” It never explain what psycholinguistic mechanism is responsible for the differential treatment of the reflexives in different types of clause. Thus, it does not seem to be wise to confine our exploration to the syntactic realm in our effort to work out the cause of the asymmetry.
Cognitive/Semantic Considerations

**Viewpoint.** Given the limitation of syntactic considerations, I would like to readdress the issue by referring to Matsumura (1994). He was the first to report that Japanese learners of English approached the correct target grammar after struggling in the stage in which the long-distance antecedent was allowed.\(^1\) This is a contradiction to the learnability theorem that assumes that retreat from a broad first language grammar to a narrower second language grammar without negative evidence is impossible. Matsumura explains this counter-theoretical progress of the learners by incorporating the notion of “viewpoint,” which has its origin in Sawada (1975, 1993). In brief, zibun is a marker of the first person, and in Japanese, we may take the view of any person appearing in the sentence (the “in-sentence view”). In consequence, any person whose perspective is employed qualifies itself as an antecedent of zibun. Thus, in (3), zibun refers to Akiko from the viewpoint of Akiko, for the first person for Akiko is Akiko herself.\(^2\) And it is when the reflexive is processed from Megumi’s perspective that zibun in (3) is interpreted to be referring to Megumi.

Matsumura (1994) further argues that Japanese learners are influenced by the way zibun is processed in their first language in their interpretation of the English reflexive. According to Matsumura’s viewpoint-based analysis, the choice of the long-distance antecedent of the English reflexive is the result of an adoption of the perspective of the main clause subject, with which they are familiar in the processing of zibun.\(^3\) Thus, for Japanese learners, accommodating themselves to the locality requirement of x-self is tantamount to a nonadoption of the view of the main clause subject.\(^4\) In this framework, the fact that the locality is often violated in sentences with subordinate infinitival clauses implies that there should be a reason(s) the learners are motivated to employ the viewpoint of the main clause subject and, further, a reason(s) they have considerable difficulty in escaping from it, particularly in those sentences. The following section sets out to search for the reason(s) for this by examining inherent characteristics of the infinitival clause.

**The infinitival clause.** In order to gain a clear understanding of the function of the infinitival clause as opposed to the finite clause, two proposals in cognitive grammar will be reviewed. First, Langacker (1995) argues that the difference between (6a) and (6b) lies in that the subject of the subordinate clause functions as a “reference point” only in the latter infinitival clause construction:

\[(6)\]  
\[\begin{align*}  
&\text{a. } We\ expect\ that\ Don\ will\ leave. \\
&\text{b. } We\ expect\ Don\ to\ leave. 
\end{align*}\]

That is, in (6a), we represents the event described in the subordinate clause as a whole entity, while we in (6b) takes Don as a reference point and represents the event of leaving from the perspective of John. This entails that in (6b), the boundary between the main and the subordinate clauses is relatively “transparent,” so that the perspective of the main clause subject rather freely intrudes into the representation of the event delineated in the subordinate clause.

The second proposal of relevance is one advanced by Horie (1995). He emphasizes that the type of subordinate clause chosen by the speaker on a particular occasion reflects his or her
cognitive evaluation of the situation. Particularly with regard to the finite versus infinitival clauses, Horie argues that the former is used for objective description of a situation while the latter is a device for subjective description. For example, the difference between \textit{I find that this chair is comfortable} and \textit{I find this chair to be comfortable} is that the latter implies that the speaker himself has experienced the comfortableness of the chair by actually sitting on it, the implication that the former sentence does not have. Further, referring to the contrast between \textit{I regret that I didn't attend the party} and \textit{I regret to tell you this, but...}, Horie argues that the finite clause is “reality-oriented” whereas the infinitival clause is “potentially-oriented.” In the former, the event that the embedded clause describes is an established fact of the past, and the main clause subject has no present effect on it, whereas in the latter, the content of the embedded clause does not belong to the past; rather, the event of telling itself is what the main clause subject is regretting.

From these considerations, it may be possible, and be reasonable, to draw a conclusion that the inherent function of the infinitival clause is to imply “mental access” of the main clause subject to the event described in it, and/or to imply subjective cognizance of the potential event that has not yet been established as a fact. Note that the subjective world of the main clause subject is the very world that is perceived by his/her own eyes, hence the relevance of the theoretical construct of “viewpoint,” from which our discussion started.

It is interesting at this point to reconsider the difference between the sentences in (1) in these terms. In (1a), the content of the subordinate clause is “untouchable,” or inaccessible to Betty in the sense that Betty as a main clause subject perceives the occurrence of the event as given (cf. Hooper, 1975). In contrast, the subordinate clause of (1b) does not have any factual basis: The event exists only in Nancy’s subjective mind in the form of expectation.

Here, a possibility arises that the difference in the degree of accessibility, or subjectivity, of the subordinate clause is the cause of the tensed-infinitive asymmetry. That is, it is possible that the response bias that has long been attributed to different sentence structures is caused by a semantic factor. The more subjective/accessible the embedded clause is, the higher the potentiality may be for the reflexive in the subordinate clause to be interpreted beyond the clause boundary. And this consideration brings us to suppose that sentences with accessible or subjective clauses may motivate the learner to “go a long distance,” \textit{even if the subordinate clause is not infinitival}. Assumedly, an accessible, non-infinitival clause may be the clause that delineates an imaginative world of the main clause subject (typically, but not necessarily, written in the subjunctive).\textsuperscript{5} The following part of this paper attempts to investigate whether or not this prediction is borne out.

3. THE EXPERIMENT

Participants
39 Japanese-speaking learners of English (8 males and 31 females) participated in the experiment. All of them were students of Aichi Prefectural University who were enrolled in an obligatory intermediate-level English course. The experiment was carried out before the day’s class in December, 2003. Eight native speakers of English also participated in the experiment to form a control group. All were teachers of English in universities or high schools in Japan. They were individually asked to provide answers to the same questions that were given to the learners.
Materials and Procedures

The participants were requested to make ten story-based truth-value judgements. The testing technique was chosen because it had been shown to be the best way to avoid the "preference effect" in learner response (White, Bruhn de Garavito, Kawasaki, Pater, & Prevost, 1997). The ten questions were of five structural types, each having two tokens:

Type A: Sentence with the want to-infinitive construction
1. George wants the manager to praise himself.  
2. Patti wants Judy to talk about herself to the manager.

Type B: Subjunctive sentence with the main verb wish
1. John wishes Paul would respect himself.  
2. Mary wished the witch would change herself into a bird.

Type C: Subjunctive sentence with the main verb insist
1. The queen insisted that Susan write about herself.  
2. Alan insisted that Pete shave himself.

Type D: Sentence with the configuration of be eager to know if-clause\(^6\)
1. Frank is eager to know if Dave will vote for himself.  
2. Alice is eager to know if her mother loves herself.

Type E: Sentence with a subordinate that-clause in which the main verb is know
1. Helen knows that her mother always sees herself on television.  
2. Jim now knows that Bill is blaming himself.

The sentences in Types B through D have subordinate clauses that delineate subjective worlds of the main clause subjects and for which factivity is not yet established. The sentences in Types A and E were drawn up for the purpose of comparison.

Each sentence was preceded by a context (different for different sentence) and the participants were required to consider if each sentence was true or not in light of the story. Every question was so constructed that the stimulus sentence matches the context when the long-distance antecedent was allowed, so that "No" was always the correct answer. On the basis of the arguments in the previous sections, a higher rate of long-distance binding (the "Yes" answer) for a particular sentence is assumed to indicate that the inherent event structure of the sentence has motivated the learners to process the sentence from the perspective of the main clause subject.

Other than the ten experimental items, nine distractors were prepared. Five were the "local versions" of Types A through E in the sense that the choice of the local antecedent of the reflexive always matched the context, so that "Yes" would be the correct answers to them. The stimuli in the other four distractors were single-clause sentences of the type in (2) above, in which the choice of object antecedent (which is allowable in English) matched the context. These effectively counterbalanced the relative place in the stimulus sentence of the referent that the context implied: The person farther from the reflexive is always implied in the ten experimental items, while the closer antecedent matches the context in the nine distractors.

The sentences were presented to the participants in three different orders so that any unanticipated effect of the order would be offset. Each participant was assigned to one of the three versions on a random basis and was requested to go through the pages at his/her own pace. At the bottom of each page were given Japanese equivalents of expectedly difficult words and phrases appearing in the context or the stimulus sentence on the page. The quickest learners finished the task in approximately fifteen minutes and the slowest few finished in approximately...
thirty-five minutes.

Hypothesis
Based on the preceding discussion, it is hypothesized that the locality requirement of the English reflexives would be most readily observed in Type E (sentences containing embedded *that*-clauses), and would be violated more often in all the other types.\(^7\)

Results
Descriptive statistics are presented in Table 1. Note that one point is given to observation of the locality requirement (i.e., the provision of the “No” answer) and no point was given to acceptance of long-distance binding, which was represented by the “Yes” response. There being two test items in one type, the maximum score for each type amounts to 2.00. The higher the score, the more readily the locality is observed by the participant.

Table 2 shows the results of the ANOVA repeated measures executed on the learner data.\(^8\) The effect of the sentence type is significant (\(F(4, 152)=12.76, p<.01\)). The results of post hoc LSD measures reveal that the difference in the means is: Type A < Type B = Type D < Type C = Type E (MSe=0.4058, \(p<.05\)). Type A comes first in the order of acceptance rate of the long-distance binding and Type E last. Contrary to the prediction, Type C is as resistant to the long-distance interpretation as Type E. Types B and D occupy the middle position, with no significant difference between them. This means that the hypothesis is partially supported.

Table 3 presents the number of learners who permit the long-distance binding for each sentence in a descending order. Generally, many learners failed in observing the locality for the sentences in Types A, B, and D, in line with the result of the mean-based analysis. Interestingly, the sentences of these types have a particular characteristic in common: All of them explicitly state

**Table 1.** Mean scores for the experimental and control groups for each type

<table>
<thead>
<tr>
<th>Type</th>
<th>Experimental Group (N=39)</th>
<th>Control Group (N=8)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Type A</td>
<td>0.64</td>
<td>0.73</td>
</tr>
<tr>
<td>Type B</td>
<td>1.08</td>
<td>0.73</td>
</tr>
<tr>
<td>Type C</td>
<td>1.46</td>
<td>0.71</td>
</tr>
<tr>
<td>Type D</td>
<td>0.95</td>
<td>0.71</td>
</tr>
<tr>
<td>Type E</td>
<td>1.51</td>
<td>0.59</td>
</tr>
</tbody>
</table>

**Table 2.** ANOVA results for the learner group (repeated measures design)

<table>
<thead>
<tr>
<th>SV</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sentence Type</td>
<td>20.7179</td>
<td>4</td>
<td>5.1795</td>
<td>12.76 **</td>
</tr>
<tr>
<td>Participants</td>
<td>33.3949</td>
<td>38</td>
<td>0.8788</td>
<td></td>
</tr>
<tr>
<td>Participants (\times) Sentence Type</td>
<td>61.6821</td>
<td>152</td>
<td>0.4058</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>115.7949</td>
<td>194</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p<.01**
some form of wish or desire embraced by the main clause subject. Table 3 also shows considerable discrepancies in the number of unsuccessful learners, even in the same type, especially in Types B and E. What these results suggest will be discussed below.

### 4. DISCUSSION

The reported results generally confirm the prediction. Thus, the locality requirement is often violated in sentences in which the main clause subject expresses a wish, irrespective of the structural type of the subordinate clause. In terms of the argumentation presented above, this in turn indicates that Japanese learner's interpretation of English reflexives is influenced by the event structure projected onto a sentence.

At this point, I would like to address some peculiarities in the results and discuss their implications. In the main, the considerations will lend further support to the conclusion that the learner is influenced by the event structure involved. First, as noted above in reference to Table 1, it is impressive that the sentences in Type C did not induce as many errors of long-distance binding as expected, especially in comparison with the sentences in Types B and D. Though unexpected, however, this result, has an implication: Given that the learners responded differently to the sentences in Types B and C that have exactly the same structure, the structure of the sentence should by no means a critical factor in learner judgement. As to the cause of the difference, I only can speculate that it might be an effect that an epistemological difference between "embracing a desire (wishing)" and "pronouncing a desire (insisting)" brings forth. Possibly, in the latter, the subordinate clause subject may be more of the nature of an objective to be operated on and this may influence cognizance of the event by the learners.

I now turn to the inconsistencies in the learner's responses to the sentences within a single type. The thrust of the argument is that a subtle difference in wording may motivate a shift of viewpoint and results in different acceptance rates of the long-distance binding. Consider Type E. The number of learners who permitted the unlicensed coreference for E2 is by far larger than in the case of E1, with the result that E2 is in sixth place in Table 5 while E1 comes last. What is the

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**Table 3.** The number of learners (out of 39) who permitted the long-distance binding for each individual stimulus

<table>
<thead>
<tr>
<th>Rank</th>
<th>Sentence</th>
<th>Structure</th>
<th>N (out of 39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A1</td>
<td>want to-infinitive</td>
<td>27</td>
</tr>
<tr>
<td>2</td>
<td>A2</td>
<td>want to-infinitive</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>B2</td>
<td>wish (subjunctive)</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>D2</td>
<td>eager to know if-clause</td>
<td>22</td>
</tr>
<tr>
<td>5</td>
<td>D1</td>
<td>eager to know if-clause</td>
<td>19</td>
</tr>
<tr>
<td>6</td>
<td>E1</td>
<td>know that-clause</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>B1</td>
<td>wish (subjunctive)</td>
<td>13</td>
</tr>
<tr>
<td>8</td>
<td>C1</td>
<td>insist (subjunctive)</td>
<td>12</td>
</tr>
<tr>
<td>9</td>
<td>C2</td>
<td>insist (subjunctive)</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>E2</td>
<td>know that-clause</td>
<td>4</td>
</tr>
</tbody>
</table>
reason for this? Note that in the stimulus sentence of E2, Helen knows that her mother always sees herself on the television, the subordinate clause subject (her mother) happened to be described from the perspective of the main clause subject (Helen). This may have undermined the effect of the inherent event structure (i.e., strong factivity) of the sentence and have disposed the learners to process the whole sentence from the viewpoint of the main clause subject, Helen. The same argument may hold for Type D, in which a larger number of learners permitted the long-distance binding in D2 (Alice is eager to know if her mother loves herself) than in D1, though the difference in the number is smaller. Even though this is only a speculation and needs further confirmation, it again suggests that such nonstructural factors as viewpoint and perspective on an event have an influence on the learner, affecting the choice of the antecedent of a reflexive.

5. CONCLUSION AND FINAL COMMENTS
In this paper, I have argued that the structural type of the subordinate clause is not a critical factor in determining the extent to which the locality of the English reflexive is observed by the learner. Rather, the learners are likely to go a long distance when the sentence depicts the subjective world of the main clause subject, especially when expressing a wish of the person in some manner.

However, there are reasons why this conclusion should be considered to be tentative. First, there were only two test items in each structural type in the present experiment. This was mainly to avoid any potential disorders caused by participant fatigue. However, this small number gives rise to a reliability problem and undermines the conclusion. Further, some of the theoretical constructs need be elaborated on in the future, especially the notions of subjectivity and viewpoint. They need to be further specified so that a plausible account of the different behavior of the learners on Types B and C is provided. Studies in second language acquisition and cognitive linguistics could support each other in such an enterprise.

Despite these reservations, the findings in this paper carry an important pedagogic implication. It has been revealed that the learners unnecessarily considered certain dimension of the event structures inherent to individual sentences in interpreting the English reflexive. Although we have to be cautious not to overgeneralize, it may be suggestive to language teachers that learners on occasions formulate a unique representation of the target grammar, which is deviant from the target but still has its own "principle."

ACKNOWLEDGEMENTS
I would like to thank Yamaoka Toshihiko, Antoine Stebbins, Yokota Hideki, and Shimada Katsumasa for their comments and advice on earlier drafts of this paper.

NOTES
1. While Matsumura (1994) reports that an increase in general proficiency in English leads to an improvement in judgement on sentences with tensed clauses as well as on sentences with infinitival clauses, Akiyama (2002) found improvement only for the former, as noted above in the text. I acknowledge that there were several methodological flaws in Matsumura's (1994) experiment. Most seriously, there was a "preference problem" that undermines the validity of his results. Therefore, it is likely that Akiyama draws a more accurate picture of learner development.
2. According to this account, the referent of zibun is limited to the clause subject because its antecedent has to be in the status of agent of the potential behavior of "viewing."
3. The Japanese language also has the reflexive forms x-zisin and zibun-zisin, both of which are, to a majority of Japanese speakers, bound only locally. Then, one may naturally wonder why Japanese learners do not rely on the property of these forms when such a strategy leads to success. I can only speculate on this point, but it may be worthwhile to note that x-zisin and zibun-zisin are rarely used, especially in colloquial Japanese. Therefore, it may be no surprise if in the second language processing, Japanese learners are influenced mainly by the way zibun is processed in their first language.

4. There are different theories as to what the “target” representation of reflexive coreference is (e.g., Chomsky’s, 1981, Binding Condition A and O’Grady’s, 1987, semantico-syntactic account). Although my preference is for O’Grady’s view, this paper is neutral on this point. How one sees the native speaker representation of reflexive coreference does not affect the arguments in this paper.

5. Whether the subjunctive clause is finite (i.e., has tense) or not is controversial. But see, for example, Lasnik (1995) for an analysis that it is finite.

6. The sentences in Type D are anomalous in that they are tri-clausal, with the most embedded clause being tensed and the intermediate clause infinitival. Nonetheless, they serve well for the present purpose: If the reflexive in the most embedded clause refers beyond the two clause boundaries to the main clause subject, it will evidence that finiteness of the clause is not a crucial factor. Further, if the learners extensively permit the long-distance antecedent in Type D, it will demonstrate that the learners go not only beyond the boundary of a subjunctive clause, as in Types B and C, but an indicative tensed clause as well.

7. The present argument makes no prediction as to whether or not the acceptance rate of the long-distance antecedent in these subjective sentences is comparative to the rate for the “genuine” subjective construction (i.e., the infinitival construction).

8. Following general statistical advice that ANOVA is unlikely to produce reliable statistics when the numbers of the participants in different groups are considerably large, I excluded the native speaker data in the analysis of data. The difference in the responses between the learner group and the control native-speaker group must be obvious, however, from Table 1.

REFERENCES


