TOPIC CONTINUITY IN JAPANESE-ENGLISH INTERLANGUAGE

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The present study examined how a new topic was introduced, maintained, and changed in the Japanese-English interlanguage data of a 45 minute interview between a native and a non-native speaker of English. Retrospective accounts recorded after the interview were used to complement the interlanguage data. In order to achieve a more comprehensive perspective of the interlanguage, the function and distribution of certain topic marking devices in the present data were compared with those of equivalent devices in both native Japanese and English data. Results indicate that, although the topic marking system of the interlanguage shared some features with the first and second languages, it maintained features independent of these languages. Furthermore, the interlanguage data confirmed to two language universal hypotheses of Givón's (1984) topic continuity hierarchy and Du Bois' (1987) preferred argument structure. Possible causes for some unique features observed in the interlanguage were also discussed.

Although the issue of topic maintenance and continuity has recently attracted researchers' attention (e.g., Chafe, 1980, 1987; Givón, 1983a, 1983b; Gundel, Hedberg & Zacharski, 1993; Hinds, 1984), few studies have examined these issues with respect to interlanguage (e.g., Chaudron & Parker, 1990; Givón, 1984; Walters, 1986; Williams, 1988). Givón (1984), in a pioneering study, examined three different kinds of early inter-language data (i.e., data from a Stage I Hawaii Pidgin English/Korean speaker, a Stage I Hawaii Pidgin English/Philippine speaker, and an earlier stage English/Spanish speaker), and compared the use of topic marking devices observed in grammatical subjects and objects. Givón (1984) used a quantitative measurement ("referential distance," see also Givón, 1983b) that made cross-linguistic comparison possible. Despite superficial differences, Givón reported striking similarities in the three data sets. In conjunction with other cross-linguistic studies, he proposed "discourse-structure universals of topic-continuity marking" (p. 126) that transcend both cross-linguistic and development differences.

In contrast, Walters (1986) focused on one learner (an uninstructed Japanese speaker of English), but examined a greater variety of topic marking devices and strategies used in broader discourse contexts. Based
on a comparison with the learner's first and second language nominal referencing systems, Walters analyzed noun phrases (NPs) in subject position, ellipsis, and the roles of topics in conversation data. Despite the learner's syntactic deficiencies, Walters (1986) found that the learner was highly successful in establishing and maintaining topics with the help of numerous types of communication strategies. She also found that the use of such strategies, although not target-like, was nonetheless systematic in its own way.

In two more recent studies, Williams (1988) and Chaudron and Parker (1990) examined multiple numbers of learners. Williams (1988) used Givón's (1983b) quantitative measurements (referential distance and potential ambiguity), and compared the use of zero anaphora observed in the conversation data of three speaker groups: native speakers, second language learners, and speakers of an institutionalized variety (Singaporean English). She reported that the two nonnative speaker groups tended to use zero anaphora more often than the native speaker group, but even the native speakers failed to conform to prescriptive standards by omitting pronouns in obligatory contexts. Williams concluded that all speakers, including native speakers, are controlled by "the production principles of hyperclarity and economy" (p. 367). According to this principle, speakers tend to remove redundancy at the expense of economy when their control is limited (i.e., in an unplanned speech, or with limited proficiency).

Chaudron and Parker (1990) used 40 Japanese learners of three different proficiency levels, and investigated how their use of English NPs would change according to three discourse contexts: current, known, and new reference to topics. The data come from controlled tasks involving manipulation of these discourse contexts. Unlike Williams (1988), Chaudron and Parker examined several noun forms with different degrees of structural markedness (e.g., zero anaphora, pronoun, definite noun, and existential indefinite noun). In the area of topic continuity, Chaudron and Parker (1990) reported (1) that learners at all levels distinguished different discourse contexts by different topic markers; and (2) that learners (especially of low proficiency) tended to use pronouns and definite nouns in the known and/or new contexts more often than native speakers who tended to use indefinite nouns in the same contexts.

Although informative, these previous studies mainly dealt with limited aspects of topic marking devices (e.g., zero anaphora in subject position)
and/or failed to quantitatively compare the topic marking system of the learners' first language with that of the interlanguage. In order to account more completely for the second language learners' language behavior, it is important to understand the first language system (see Larsen-Freeman & Long, 1991, for example). Therefore, the present study attempted a preliminary, but more comprehensive approach. Interlanguage topic marking devices in both subject and object positions were compared with topic marking devices in both the native and target language data. In addition, the speaker's own retrospective accounts were used to understand the intentions underlying the data. Although the present study is limited by the nature of a case study, it is an important first step in exploring complex topic marking systems of interlanguage.

Hypotheses

The working hypotheses of the present study based on previous research were as follow:

**Hypothesis 1:** Introduction and maintenance of a new topic (or a referent NP) in the interlanguage data is different from what one would find in the native or target language.

**Subhypothesis 1.1:** The proportions of zero anaphory, pronouns, and full NPs in the interlanguage *subject* positions are different from the proportions of equivalent forms in the native or target language.

**Subhypothesis 1.2:** Introduction and maintenance of a new topic in the interlanguage *subject* position is different from what one would find in the native or target language.

**Subhypothesis 1.3:** The proportions of zero anaphora, pronouns, and full NPs in the interlanguage *object* positions are different from the proportions of equivalent forms in the native or target language.

**Subhypothesis 1.4:** Introduction and maintenance of a new topic in the interlanguage *object* position is different from what one would find in the native language.²

**Hypothesis 2:** Introduction and maintenance of a new topic (or a referent NP) is systematic.
Method

Participant

The participant of the present study was Michiko, a 26 year old Japanese housewife who had received formal English instruction for eight years prior to going to the United States. She had received a B. A. in science education from a Japanese university before coming to the United States to marry her husband, who had been working at a Japanese movie company's Los Angeles office. At the time of the interview, she had been in the United States for one and a half years. For one year after her arrival, she had been taking courses in English as a second language and French in local community colleges. Her interlanguage was estimated to be in the upper mesolang stage in terms of Stauble's (1984) interlanguage developmental continuum (Sasaki, 1988).3

Data Collection

The interlanguage data were collected by means of a 45 minute interview at Michiko's house on January 18, 1988 in collaboration with Diana Savans, an English native speaker. In order to keep the language data as natural as possible, Michiko was not initially informed of the true intentions of Diana's visit, namely, to collect Japanese-English interlanguage data. Instead, Michiko was told that the purpose of the interview was to record her feelings about her experiences in the United States. The interview was informal, and Michiko was cooperative. The data was recorded with a portable tape recorder, and transcribed immediately after the interview. The transcription was made in traditional orthography except where a finer phonological record was necessary.

A week after the interview, when the entire transcription was complete, I visited Michiko again, and collected her retrospective accounts of the interview in Japanese. Michiko and I sat down together and listened to the recorded interview and read the corresponding transcription. I asked Michiko about the referents of all zero anaphorya and pronouns in the transcripts as well as her feelings and intentions underlying each topic. These accounts were especially useful when it was difficult to determine referents from the syntactic surface structure
of the transcript. All her retrospective accounts were also recorded with a tape recorder and transcribed after this session.

Analysis

In order to test subhypotheses 1.1 and 1.3, token frequencies in the subject and object positions were calculated for the three categories: zero anaphora, pronouns, and full NPs. The chi-square procedure was applied to test the significance of the differences found among the three languages (i.e., interlanguage, Japanese, and English).

For subhypotheses 1.2 and 1.4 related to topic continuity of different noun forms, two of the quantitative measurements developed by Givón (1983a) were employed: referential distance and decay. The definitions of these terms were summarized in Givón (1984, p. 111, see also Givón, 1983b).^4

**Referential Distance:** The distance from the present mention of a topic NP and the last clause where the same referent was a semantic argument within the clause, in terms of number of clauses.

**Decay:** The Number of clauses to the right, from the locus under study, in which the same topic/referent persists in the discourse register as argument of some clause.

Considering constraints on human short-term memory, Givón set the upper limit of referential distance at 20. That is, if a topic was not mentioned in the previous 20 clauses, it received a value of 20. Thus, the referential distance value ranged from 1 to 20, depending on the continuity of each topic. If a topic NP was mentioned in the clause just before the present mention, it received a value of 1, indicating the greatest continuity. If a topic NP was new or had not been mentioned in the last 20 clauses, it received a value of 20 indicating the least continuity. The decay value represented another aspect of topic continuity: persistence. It provided information about how long a topic continued to be referred to in successive mentions. If a topic NP was mentioned by the third clause to the right of the present mention, it received a decay value of three. The higher the decay value, the more persistent the topic.

Several noun forms were excluded from the calculation of both referential distance and decay values. First, the first and second person pronouns (I, we, you) were excluded because they did not need an overt grammatical antecedent to be considered as “given” information.
Second, wh-phrase were also excluded from all analyses because they did not contribute to nominal referencing. Third, all quoted material was excluded from the analyses in order to avoid possible referencing complications. Because quoted material created its own world, it was difficult to determine the topic continuity of these elements in relation to the speaker-hearer's non-quoted world (cf. Williams, 1988).

Finally, Hypothesis 2 was tested using the methods described above in addition to more qualitative discourse analyses of the data.

*Native Japanese Data and Native English Data*

The results from Hinds (1983) were used as the native Japanese data for both the subject and object noun forms, and those from Givón (1983b) were used as the native English data for the subject noun forms. The types of discourse dealt with in these two studies were similar to that of the present study. Moreover, the results of application of both referential distance and decay measurements were at least partly available in these two studies. In comparing the proportions of different object noun forms (Subhypothesis 1.3), however, the data from Clancy (1980) were used because no such data were available in Givón (1983b). Although Clancy's data include only third person human referents used in all positions in a different type of discourse text (i.e., story telling), they nevertheless provide a general picture of nominal referencing in English.

*Results*

*Referent NPs in subject position*

Table 1 presents the type token ratio of zero anaphora, pronouns, and full NPs used in subject position in Michiko's interlanguage data, comparing the results with Hinds (1983) and Givón (1983b). Because Givón's (1983b) results did not include 1st/2nd person pronouns, results from the interlanguage data excluding 1st/2nd person pronouns were compared with the English data. The interlanguage and the English data appear similar in that about 60% of the subjects were expressed as pronouns. In contrast, a majority (65.8%) of the subjects in the Japanese
data were expressed as zero anaphora whereas only 7.1% of the subject nouns were pronouns. The results of the chi-square tests indicated significant differences both between the present data and the Japanese data ($X^2 = 389.642$, $df = 2$, $N = 606$, $p < .0001$), and between the present data and the English data ($X^2 = 13.276$, $df = 2$, $N = 864$, $p < .001$). Thus, subhypothesis 1.1 was supported: the subject forms in the interlanguage data were different from those in the Japanese and the English data. However, the interlanguage data were closer to the English data than to the Japanese data.

**Table 1: Frequency of referential forms used in subject position**

<table>
<thead>
<tr>
<th></th>
<th>Zero Anaphora</th>
<th>Pronoun</th>
<th>Full NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interlanguage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(all tokens)</td>
<td>#</td>
<td>5</td>
<td>235</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>1.8</td>
<td>83.6</td>
</tr>
<tr>
<td>Interlanguage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(excluding 1st/2nd person pronouns)</td>
<td>#</td>
<td>5</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>4.1</td>
<td>62.3</td>
</tr>
<tr>
<td>Native Japanese</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Hinds 1983)</td>
<td>#</td>
<td>214</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>65.8</td>
<td>7.1</td>
</tr>
<tr>
<td>Native English</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Givón 1983b)</td>
<td>#</td>
<td>117</td>
<td>440</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>15.8</td>
<td>59.3</td>
</tr>
</tbody>
</table>

Next, subhypothesis 1.2 was investigated. Figure 1 provides the average values of referential distance for zero anaphora, pronouns, and full NPs that appeared in subject position. Results from Hinds (1983) and Givón (1983b) are also presented for comparison. Overall, the figures for the interlanguage data appear more similar to those of the English data than to those of the Japanese data. Both the interlanguage and the English data shared relatively low referential distance values for zero anaphora and pronouns, and high values for full NPs. The large difference between the zero anaphora (1.20) and pronoun (2.35) values, and those for the full NPs (15.56) in the interlanguage data, suggests that unlike in the Japanese data, full NPs were not often repeated as a continuity marking device in the interlanguage. Thus, Hypothesis 1.2 was partly
disconfirmed: although the topic continuity system for the interlanguage subject positions was not similar to that of the native Japanese data, it was similar to that of the native English data.

Figure 1, Referential distance of subject NP

The average decay values for subject referents in each data set are presented in Figure 2. It appears that all three noun forms in the interlanguage data were less persistent than their counterparts in both the Japanese and English data. However, the overall pattern of decay values for the interlanguage data was more similar to that for the English data.
than that for the Japanese data: pronouns survived the longest, zero anaphora second, and full NPs the shortest.

Figures 1 and 2 both suggest that Michiko had acquired a more or less target-like nominal referencing system regarding the subject position, which was quite different from her first language system. A closer look, however, reveals that she also used her own topic marking strategies, different from those of either Japanese or English. For example, Michiko often (45% of the time) used the pronoun “they” without establishing a clear referent, which raised the referential distance value for her pronouns use. Although such use of “they” was nontarget-like, it was none-
theless systematic because the pronoun always referred to "the people related to the currently focused location." For instance, in Example 1, the pronoun "they" in line 368 referred to a new referent, "people working for the UCLA International Student Center Women's Club," not the closest plural noun "Japanese another wives."6

**Example 1**

Diana (D): and then so um you after you got over that first shock maybe um when you uh did you eventually did you eventually go out and walk around a little bit? whe- and where did you live did you live in this neighborhood?

361: no um + we're living ah um near Griffith Park Los Feliz (D: huh huh-)
362: um s-
363: ah at first I went to ah UCLA's ah International Student yea-ah Centers
364: ah Women's Club (D: huh huh)
365: and + uh + that's my first experience (D: huh huh)
366: and ah + so + there um I met ah Japanese another um wives and
367: +um hm I was shocked
368: because um *they* say um um
369: they say
370: uh just you don't say
371: "but I can't"
372: it's hard for me
373: "why you don't you don't go out everyday?
374: you go you don't go to school?"
375: "why?" (D: huh huh) they asked so
376: # I'm very afraid and + "but"
377: I said, "but"
378: they they said "no but!"
379: you you "I can't" so#
380: that's all ah
381: I think
382: that's very hard for me

(+: a pause, -: interrupted word or phrase, #: laughter)

Michiko's nontarget-like, but systematic use of pronouns was also seen in her use of "he," which was used without its overt referent having been established whenever it referred to her husband. This phenomenon also raised the referential distance value of Michiko's pronoun use.

Another noteworthy phenomenon related to Michiko's nontarget-like but systematic use of nominal reference was seen in her use of the demonstrative pronouns "it" and "that." Compared with other pronouns (usually used as topic continuation devices), they had low decay values because they were often used as a kind of topic framing device (see Sasaki, 1988 for more details). Seventy percent (14/20) of "that" and 43
percent (3/7) of "it" served either as a "topic closing" or "commentary" device, as seen in Example 2:

**Example 2**

**I. Topic closing**

(Diana: when you ah when you first came to the U.S. did anything strange or funny happen to you? did you have any strange or funny experience?

463: **my first surprise** is ah people make a long line to buy something or to ah buy a ticket

465: so **I was surprised** (huh huh. )

466: and people + ah don't get angry (huh huh) to make a line

467: maybe Japanese Japanese # get ang- angry (huh huh) angry so

468: Japanese don't like to wait something

469: that's all um **my surprise** *(the end of the topic "my first surprise in the USA")*

470: I think ah ah American is a very ah +++ mm *(the beginning of a new topic "my impressions on American people")*

471: ah I can't say um very

472: say anything

**II. Commentary**

363: ah at first I went to ah UCLA's ah International Student yea-ah Center's

364: ah Women's Club (D: huh huh)

365: and + uh + that's my first experience (D: huh huh)

366: and ah + so + there um I met ah Japanese another um wives and

367: + um hm I was shocked

368: because um they say um um

369: they say

370: uh just you don't say

371: "but I can't"

372: **it's hard for me**

373: "why you don't you don't go out everyday?

374: you go you don't go to school?"

375: "why?" (D: huh huh) they asked so

376: # I'm very afraid and + "but"

377: I said "but"

378: they they said "no but!"

379: you you "I can't" so#

380: that's all ah

381: I think

382: **that's very hard for me**

(+: a pause, -: interrupted word or phrase, #: laughter)

Because these pronouns were usually located at the end of an "equi-topic chain" (Givón, 1983a, p. 15), their decay values were zero, that is, the referents they introduced did not continue into the following clauses.
As discussed above, the special uses of "they" and "he", and the topic closing/commentary functions of "that" and "it" had their own systems although they did not conform to either the Japanese or English topic marking systems. Therefore, they provided positive evidence for Hypothesis 2: Introduction and maintenance of a new topic (or a referent NP) is systematic.

Referent NPs in object positions

Table 2 presents the type token ratio for zero anaphora, pronoun, and full NP that appeared in object position in the interlanguage data, along with the results from Hinds (1983) and Clancy (1980). The interlanguage data appear similar to the Japanese data in that the majority of the objects were expressed as full NPs (71.1% for the interlanguage data and 64.6% for the Japanese data). In contrast, only 15.7% of the object nouns in the English data were full NPs. Chi-square test results indicated that the interlanguage data were similar to the Japanese data ($X^2 = 3.449, df = 2, N = 148, p > .1$), whereas the interlanguage data and the English data were significantly different ($X^2 = 163.875, df = 2, N = 1378, p < .0001$). Thus, subhypothesis 1.3 was partly confirmed and partly disconfirmed. Unlike her nominal referencing in subject position, Michiko's use of nominal forms in object position was dissimilar to the English system: it tended toward the Japanese system.

Table 2: Frequency of referential forms used in object position

<table>
<thead>
<tr>
<th></th>
<th>Zero Anaphora</th>
<th>Pronoun</th>
<th>Full NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interlanguage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>11</td>
<td>13</td>
<td>59</td>
</tr>
<tr>
<td>%</td>
<td>13.3</td>
<td>15.7</td>
<td>71.1</td>
</tr>
<tr>
<td>Native Japanese</td>
<td>#</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Hinds 1983)</td>
<td>16</td>
<td>7</td>
<td>42</td>
</tr>
<tr>
<td>%</td>
<td>24.6</td>
<td>10.8</td>
<td>64.6</td>
</tr>
<tr>
<td>Native Englisha</td>
<td>#</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Clancy 1980)</td>
<td>339</td>
<td>1056</td>
<td>260</td>
</tr>
<tr>
<td>%</td>
<td>20.5</td>
<td>63.8</td>
<td>15.7</td>
</tr>
</tbody>
</table>

a The native English data include only third person human referents used in all positions in a narrative text.
Next, subhypothesis 1.4 was tested. Figure 3 presents the values of referential distance for each category appearing in object position in the interlanguage data. The data from Hinds (1983) are also presented for comparison. As illustrated, the progression of referential distance values for the interlanguage data was similar to that for the Japanese data: the greatest continuity was achieved by zero anaphora, the next greatest by pronouns, and the least by full NPs.

*Figure 3. Referential distance of object NP*

Another notable difference between the interlanguage data and the Japanese data (Hinds, 1983) was found by comparing the decay value for
each noun category. Zero anaphora and full NPs in the interlanguage data had higher values than those in the Japanese data (see Figure 4). This indicates that NPs appearing in object position in the interlanguage data were more persistent and "survived" longer than those in the Japanese data. Such differences support subhypothesis 1.4 because the topic maintenance system of the interlanguage was different from that of the Japanese data.

Finally, no unique-but-systematic use of nouns, as was seen for the subject pronouns (e.g., the use of "it" and "that" as topic framing devices), was found in object position in Michiko's interlanguage.

Figure 4. Decay of object NP
General trends

The findings presented above can be summarized in the following manner. The two subhypotheses related to the ratio of nominal forms in subject and object positions (Subhypotheses 1.1 and 1.3) were partly supported although the interlanguage subject forms tended toward English, and the object forms toward Japanese. The subhypotheses related to the topic continuity system (Subhypotheses 1.2 and 1.4) were also partly confirmed, but partly disconfirmed. In spite of some differences, the topic continuity patterns of the interlanguage subject noun forms was similar to the English pattern whereas that of the interlanguage object forms was at least partially similar to the Japanese pattern. Finally, Hypothesis 2 concerning the systematicity of the interlanguage was supported by Michiko's unique, but systematic use of several pronouns (e.g., "that" and "it").

In addition to such individual analyses of subject and object noun forms, cross-comparison of the nouns in these two positions revealed the general trends of Michiko's nominal referencing system. First, the three nominal forms investigated shared similar patterns of topic continuity across subject and object positions. In both positions, the greatest continuity was achieved by zero anaphora, the next greatest by pronouns, and the least by full NPs in both subject and object positions (recall Figures 1 and 3). Similarly, in terms of persistence, pronouns survived the longest, zero anaphora second, and full NPs the shortest in both subject and object positions (recall Figure 2 and 4). This indicates that, regardless of where it appeared, a new topic tended to be introduced as a full NP, and that once introduced, the topic tended to continue as a pronoun or zero anaphora.

Another result of the cross-comparison of the subject and object noun forms was that subjects tended to be expressed as pronouns (83.6%), whereas objects tended to be expressed as full NPs (71.1%). Integrating these two findings led to the identification of Michiko's most frequently used topic introduction/continuation strategy. That is, she tended to introduce a new topic in object position as a full NP (with the least topic continuity), and continued the topic in subject position either as a pronoun or zero anaphora (with less degree of topic continuity and greater degree of persistence) in subsequent clauses. A typical example of this sequence is given in Example 3:
Example 3

323: yeah + at first I was worried ah but ah to speak English with someone
325: so I couldn't go out ah + alone
326: and I worried
327: I don't like elevator
328: because that's a small place and +
329: if ah um someone u- using Ø
330: what shall I do? so ...

(+: a pause, -: interrupted word or phrase)

Here the new topic "elevator" was introduced in object position in line 327, and passed over to the next clause as a demonstrative pronoun in subject position. Furthermore, it was referred to with zero anaphora in object position in the next line.

Discussion

The present results suggest that the superficially different tendencies of subject and object noun use in the interlanguage data could be converged into one general trend representing Michiko’s nominal referencing system: the introduction of a new topic as a full NP in object position, and continuation of the topic as zero anaphora or a pronoun in subsequent clauses. Such characteristics can be explained as idiosyncratic or influenced by both the first and the target languages, but they also can be explained in terms of language universals. That is, the seemingly unique trend of Michiko’s nominal referencing might have been motivated by some universal principles underlying human languages. This speculation is feasible because Michiko’s nominal referencing system was found to conform to two language universal hypotheses. First, the fact that the greatest continuity was achieved by zero anaphora, the next greatest by pronouns, and the least by full NPs both in subject and object positions conforms to Givón’s (1984) universal topic continuity hierarchy. Givón (1984) maintained that this hierarchy is achieved by the “quantity universal” (p. 126), which states that topics with greater continuity tend to be marked by structurally less marked (or less complex) forms such as pronouns or zero anaphora (see also Chaudron & Parker, 1990; Givón, 1983a). The same universal might have influenced Michiko’s use of nominal forms.
Another universal hypothesis to which Michiko's interlanguage data appear to conform to is Du Bois' (1987) Preferred Argument Structure hypothesis. Du Bois (1987) has argued that certain argument structures tend to be preferred in spoken discourse. One of the constraints of this hypothesis is the "Non-lexical A Constraint," which states that new information expressed as lexical nouns tends to appear either in the intransitive subject role or in the transitive direct object role. It was found in the present analyses that the interlanguage subject nouns tended to be pronouns (non-lexical), and that the object nouns tended to be full NPs (lexical). Although it is not clear whether the intransitive subjects tended to be lexical because transitive and intransitive subjects were collapsed for the analysis, the ratio of full NPs in object position surely provides positive support for this hypothesis (see also Kumpf, 1992 for more evidence from interlanguage data). Du Bois (1987) argued that speakers' choice of noun forms to fill in particular argument positions tends to be constrained by the speakers' capacity to cope with the "information pressure" (p. 834) in the given discourse. That is, speakers may not be able to introduce a new topic in an A (transitive subject) position because it is often already filled with the thematic agent of the discourse. A similar logic might have motivated Michiko to choose full NPs for the object positions.

The fact that the overall trend of Michiko's nominal referencing conformed to two language universal hypotheses indicates the autonomy of her interlanguage. Although it might have been influenced by both the first and the target languages, it also had its own controlling systems shared with other human languages. The autonomous nature of Michiko's interlanguage was also evidenced in the unique strategies she used for topic marking. They can be divided into two types according to her pragmatic motivation behind their use. The first type is related to Michiko's anaphoric assumptions, which were probably influenced by her first language. As we have seen, the pronouns "they" and "he" sometimes referred to a particular referent even if that referent had not been previously established. For example, the pronoun "they" in Example 1 referred to a new topic, "the people working in the International Student Center's Women's Club." As explained above, such "stranded" use of the pronoun "they" was always accompanied by a previous mention of a "location." In other words, the discourse topic's locative "frame" had already been established. In such cases, one need not mention those who are related to the location when one wants to refer to them in Japanese
probably because they could be regarded as a "semi-active concept" (Chafe, 1987, p. 25).

This phenomenon was demonstrated in the retrospective interview with Michiko, where she tried to explain the same situation in Japanese.

**Example 4**

Miyuki (the researcher): \textbf{SAISHO NO BUN WA} \text{first GEN sentence TOP}

\textit{"you don't say but you can't" TO IU NO WA?} \text{QT say NOM TOP}

(What does the first sentence "you don't say but you can't" mean?)

Michiko: \textbf{AA DAKARA “but” TOKA “I can’t” TOKA} \text{INJ because “but” QT “I can’t” QT}

\textbf{ITTE WA IKENAI TO IWARETAN DESU} \text{say TOP mustn't QT was told SE}

\textbf{SONO ø Women’s Club NI ITTA TOKI MO} \text{that Women’s Club to went time also}

(It means that I was told not to say "but" or "I can't (do this or that)" when I went to the Women's Club, too.)

(Note: GEN: genitive, TOP: Topic marker, QT: quantitative, NOM: nominal marker, INJ: injection, SE: sentence ending particle)

Here, the verb "tell" was passivized, and the agent of "telling" remains unarticulated. To frame the discourse, only the locative topic "Women’s Club" was articulated as a full NP. The referent for "people working there" was taken for granted, and not phonetically realized. It can be speculated that Michiko had transferred this "economical" assumption of her first language to her interlanguage (cf. Williams 1988).

A similar speculation is possible for Michiko’s use of "he." The pronoun “he” in Japanese is not only used as a third person male singular pronoun, but also as a referent for a boy friend or husband. When it is used with the latter meaning, it functions more like a full NP than a pronoun. Thus, in Japanese, “he” can be used without being preceded by a full NP referent. Because all such uses of “he” in Michiko’s data referred only to her husband, it is possible that she transferred this use of “he” as her husband from Japanese to her interlanguage nominal referencing system.
The second type of nontarget-like but systematic strategy is not related to Michiko's first language, but to her motivation to communicate. Michiko's use of the demonstrative pronouns "it" and "that" as topic framing devices falls in this category (recall Example 2). She apparently needed these kinds of strategic devices to ensure that the listener would be able to follow the same topic that she was pursuing. Because of her limited English proficiency, the conversation sometimes broke down. Michiko, as she said later in the Japanese interview, sometimes did not understand the interviewer's question. In such cases, she established her own topic frame so that she could carry on the conversation somewhere within the scope of that topic frame. Even if the topic deviated from the interviewer's question, the interviewer could follow what Michiko was talking about with the help of these overt topic markers.

Conclusion

The results of the present analyses indicate that the seemingly different nominal referencing observed in the subject and object positions in the interlanguage data could be converged into one general trend that conformed to two language universal hypotheses. Such convergence was not visible in the previous studies where only subject or object position was examined (e.g., Walters, 1986), or where these positions were collapsed for investigation (e.g., Chaudron & Parker, 1990). The present analyses also showed the usefulness of Givón's (1983b, 1984) quantitative measurements of referential distance and decay in assessing the overall topic continuity of the interlanguage data as well as in comparing them with other data. However, these quantitative measurements tended to overlook subtle qualitative differences among the data. As demonstrated, some kind of qualitative analyses should accompany quantitative measurements in order to capture a more complete characterization of the interlanguage topic marking system.

Because the present study was limited to only one participant with one first language background, the results must not be overgeneralized. Similar studies need to be conducted with a greater number of Japanese participants at various interlanguage levels in order to determine the overall effect of the first language, and with speakers of other first
language backgrounds in order to compare typological differences in the acquisition of topic continuity systems in English.

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NOTES
1. There are many other studies (e.g., Gundel, Stenson, & Tarone, 1984; Hilles, 1986; Polio, 1995) that have dealt with the acquisition of particular noun forms related to topic maintenance/continuity (e.g., zero anaphora, pronoun, full noun phrase), but their focus was not on the use/function of these forms in the given discourse, which is the main concern of the present study.
2. No English data were available for topic continuity systems in object position, and thus, comparison with the English system was not included in subhypothesis 1.4.
3. Michiko's interlanguage negation system was characterized by partially analyzed "don't" and target-like use of modals. Her tense/aspect system was fairly well-developed with the progressive -ing forms supplied in most obligatory contexts, and past tense markers (e.g., -ed) supplied in about 60% of the obligatory contexts.
5. Clancy's (1980) data are also limited to referents from the second mentions on, that is, first mentions were not included.
6. Whether Michiko's interlocutor could understand the true referent was another matter. In fact, the exchange following Example 1 indicated that Diana mistook the referent of "they" in line 368 for "Japanese another wives" based on English functional grammar (e.g., Halliday, 1985).
7. A post hoc analysis revealed that the percent of full (lexical) NPs in the transitive subject position (11.4%) was smaller than that in the transitive subject position (19.0%), thus supporting the Non-Lexical A Constraint. However, it should also be noted that the data were skewed with the exclusion of the first and second person pronouns.

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REFERENCES


