

The Acquisition of Null Subjects and Null Objects in Japanese: A Preliminary Investigation

Kazumi Yamada

日本語の空主語と空目的語の習得： 予備調査から

山 田 一 美

Abstract

In second language research based on generative grammar, it has been reported that learners of English show asymmetry in their use of pronominals in subject and object positions. However, such asymmetry was also found in the acquisition of Japanese (Hasatani 1993). In this paper, two models, the *syntactic model* by Park (2004) and the *interface model* by Sorace (2007), are introduced. The present pilot study addresses both models by comparing learners of Japanese whose L1 is either Korean or English.

Key words : asymmetry of subjects and objects, syntactic model, interface model, full NP, shallow processing

(Received September 27, 2008)

抄 録

生成文法を枠組とする第二言語習得研究では、英語学習者が主語と目的語の位置での代名詞使用に非対称性を示すことが報告されているが、架谷（1993）では日本語学習者が主語と目的語位置で代名詞使用の非対称性を示した。本稿では、非対称性の説明として Park（2004）の統語モデルと、Sorace（2007）のインターフェイスモデルを取り上げる。そして、ディスコースにおける代名詞習得の先駆け的研究である Pérez-Leroux and Glass（1999）の実験手法に基づき、韓国語・英語を母語とする上級日本語学習者を対象とした実験結果を報告する。本研究結果から得られた新しい点に関する考察を通し、2つのモデルの比較・検証を行う。

キーワード：主語・目的語の非対称性、統語モデル、インターフェイスモデル、
主題名詞句、浅い処理

(2008年9月27日受理)

Introduction

Since the 1990's an asymmetry relating to null subjects and null objects has been observed in the acquisition of English (Zobl, 1994; Yuan, 1997; Wakabayashi & Negishi, 2003; Park 2004). The asymmetry is that learners drop more objects than subjects in their L2 English¹. In the acquisition of Japanese, however, such asymmetry was also observed by Hasatani (1991). She found that English and French learners of Japanese, whose proficiency level was elementary, dropped more subjects than objects in their Japanese essays. In Japanese a noun phrase in both subject and object positions could be null if the meaning is recoverable from the context (Kuroda, 1965; Yano, 1981; 1983; Hasegawa, 1996). Here, one question is raised. Do advanced L2 learners also show such subject-object asymmetry in their pronoun use in discourse? They should have been exposed to a lot of L2 input. Do they use null objects as Japanese natives do if the meaning is recoverable from the context? Or will the asymmetry disappear? If advanced L2 learners show the asymmetry, which is not native-like behavior, what prevents them from producing null objects?

The present study investigates the use of null subjects and null objects in discourse by advanced Korean and English L2 learners of Japanese. As far as I know, there are few studies which have examined acquisition of pronominals in discourse in L2 Japanese in a generative framework (Chomsky 1995). In this paper, two accounts will be discussed. Park (2004) proposes a mechanism where null subjects and null objects are produced in the framework of the Minimalist Program (Chomsky 1995). He explains L2 learners' non-native-like behavior with the mechanism. On the other hand, Sorace (2007) assumes that the problem of L2 learners (i.e. the case where overt forms are used in a topic context) lies at the syntax-discourse interface level, but not within syntax. Through the current study, it will be claimed that the syntax-discourse account can explain better the data from 'advanced' L2 learners of Japanese than the syntactic account.

Accounts for L2 learners' Non-Native Like Behavior

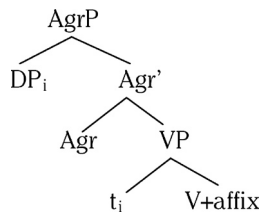
Syntactic Account: Licensing Conditions on null subjects/null objects

Park (2004) gives us a linguistic account which suggests licensing conditions on null subjects and objects. He examined the data of six Korean children learning English as an L2², and found that they rarely dropped subjects from the early stages while dropped more objects. His analysis is as follows.

First, Park claims that a licensing condition of null subjects extends over two levels: the syntactic level and the pragmatic level. Park's claim is based on Alexiadou and Anagnostopoulou (1998) where it is argued that null subject phenomena relate to feature

checking of extended projection principle in the framework of Chomsky (1995). According to Alexiadou and Anagnostopoulou, the D feature exists in the head of Agreement phrase (i.e. Agr) to be checked against the D feature in an element which is like a subject. In a language like English, which has weak agreement because it has a poor verb inflection system, an affix is attached to a verb in the Verb Phrase (i.e. VP). As a result, the internal subject in the specifier position in the VP needs to be raised to the specifier position in AgrP since the D feature in Agr needs to be checked by the D feature in an element like subject. The DP in the specifier position of VP merges into AgrP: XP merge. Therefore, English does not allow null subjects since the specifier position is filled with the subject. The diagram of agreement phrase (=AgrP) is shown in (1).

(1) Weak Agr (English)



(Park 2004: 16)

Furthermore, Alexiadou and Anagnostopoulou suggest languages like Spanish have the [+interpretable] agreement feature since the affix can be considered as nominal and has a semantic content, while languages like English have the [-interpretable] agreement feature since the affix of English verbs has no such content.

As for Korean, Park claims it is classified in the group of weak Agr languages such as English because Korean has agreement morphology encoding honorificity and mood. It should be noted here that Japanese also could be classified in the weak agreement group as it has agreement morphology which is, however, limited to human/animate agreement (honorification and *aru/iru* alternation) (Niinuma, 2003:59). Thus it is considered that Korean and Japanese have [-interpretable] agreement feature.

However, the account for null subject phenomena by Alexiadou and Anagnostopoulou does not include languages like Korean and Japanese which have [-interpretable] but allow null subjects. Therefore, Park (2004) considers the level of pragmatics to explain the case of Korean and Japanese. According to him, licensing conditions on null subjects involve not only rules of syntax but also rules of discourse/pragmatics. The difference between English and Korean/Japanese lies on the pragmatic level where several options of morphemes (e.g., zero pronominals, overt pronouns) are available. Table 1 summarizes the licensing conditions on null subjects.

Table 1: Licensing conditions on null subjects

	Pragmatic level (topic-referring NP)	Syntactic level
English	pronoun	[-interpretable]; XP-merge
Korean Japanese	zero anaphora	[-interpretable]: XP-merge

(Based on Park, 2004: p22)

Park (2004) also discusses the licensing condition of null objects following Bošković and Takahashi (1998) where a parameter based on the strength of the theta-features is proposed. Park extended their analysis to null object phenomena. According to Bošković and Takahashi, English verbs have a strong theta-feature and the feature should be checked before it is spelled out. That makes the object position phonetically overt. From their assumption, Park supposes Korean verbs have a weak theta feature, so the features do not need to be checked before they are spelled out, but they could be checked at the level of LF. Thus, the object position could be null in Korean. Again, the level of pragmatics is also considered here and Park's idea is shown in Table 2. Since Japanese also allows null objects, it would be classified in the group with Korean.

Table 2: Licensing conditions on null objects

	Pragmatic level (Topic-referring NP)	Syntactic level
English	pronoun	strong theta-feature
Korean Japanese	zero anaphora	weak theta-feature

(Based on Park, 2004: p27)

Syntax-Discourse Interface Account: Underspecified Features and Shallow Processing

It can be predicted that as L2 learners' proficiency levels increase, they gradually acquire the grammar of the target language. However, many studies where acquisition of L2 Italian was examined, have reported that even advanced learners show non-native-like use of pronouns in discourse (Belletti, Bennati and Sorace, 2007; Filiaci, 2003; Sorace, 2003; 2005a, b; Sorace & Filiaci, 2006)³. English learners of L2 Italian produce phonetically overt pronouns in the topic context in which native Italian speakers use null pronoun since the meaning is recoverable from the context. However, as the learners also use null forms in the topic

context, they use both forms optionally. The learners' error is as follows.

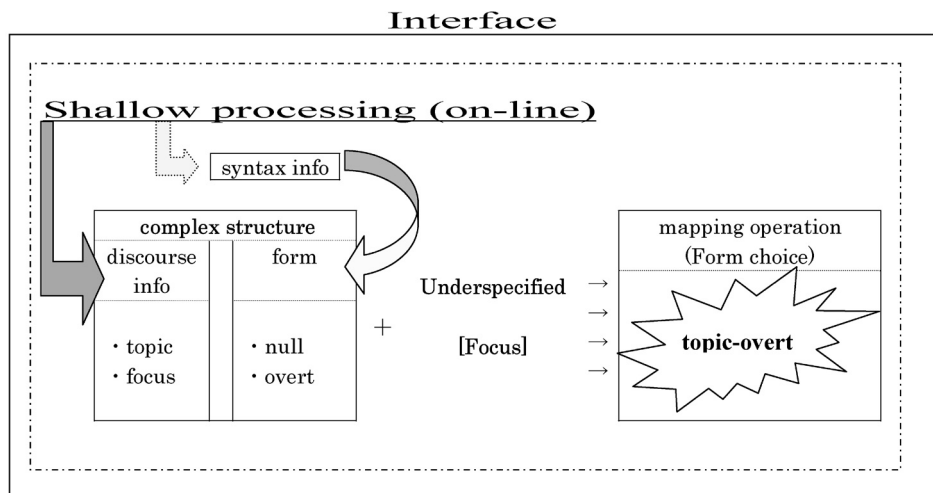
- (2) A : Perchè Maria non ha parlato con nessuno?
Why Maria not has talked to anyone?
Why has Maria not talked?
- B : Perchè **lei** */ \emptyset è troppo timida. (* = ungrammatical)
because **she**/ \emptyset is too shy
Because she is too shy.

Both Italian and Japanese allow null forms in the subject position, though the licensing conditions differ. According to the studies by Sorace & Filliaci (2006), Sorace (2005ab), Sorace (2007), Filliaci (2003), the errors shown in (2) result from a problem at the level of syntax-discourse interface.

Sorace (2007) assumes two problems are involved at the interface level in L2 grammar. First, at the interface level, interpretable features such as [Focus] are underspecified, which causes indeterminacy in pronominal use. [Focus] triggers the use of phonetically overt forms. Therefore, if the [Focus] is underspecified, overt forms are possibly used by L2 learners in topic context where null forms should be used in the grammar of natives. The second problem is the incorrect "coordination of information from different domains-syntax, on the other hand, and discourse-pragmatics, on the other" (Sorace, 2007:9). In the case of Italian, the structure of discourse information and form selection is more complex than English because Italian has a null form which English does not. Moreover, this complex structure should be processed on-line since actual communication speed is really fast. This on-line processing causes 'shallow' processing which depends more on discourse information rather than syntactic information⁵. This might make [Focus] underspecified, and leads L2 learners to wrong form selection. Therefore, they produce an overt form in a topic context.

Finally, Sorace's working hypothesis above is shown in the diagram below.

Figure 2: Sorace's (2007) working hypothesis & form choice error



It should be noted that “the shallow processing is an option available to the human processor” (Sorace, 2007:10). Therefore, even adult native speakers also use this option under circumstances in which they are under a lot of time-pressure, or when they are in a great hurry, and so on.

If we extend the hypothesis in Sorace (2007) to L2 grammar of Japanese, especially object position, we can explain the L2 error. Japanese also has two forms (overt and null), so it has a complex structure, as shown in the diagram above. Because of underspecified [Focus] and shallow processing, English L2 learners of Japanese select a phonetically overt form even in a topic context.

Research Questions and Predictions

Our research questions are as follows, and predictions based on Park (2004) and Sorace (2007) are given in (4ab) and (4c) each.

(3) Research questions

- a. Do advanced L2 learners of Japanese whose L2 is either English or Korean still show asymmetry in null subject and null object use?
- b. If they show the asymmetry, what actually causes it?

(4) Predictions

- a. Korean learners can use zero pronouns in both subject and object positions correctly as

Japanese natives do since the two languages have the same feature values, [-interpretable] agreement feature and weak θ feature.

- b. English learners will use more phonetically overt forms in object position than Korean and Japanese groups, if English learners have not acquired the weak θ feature and do not know yet that a zero pronoun can also be used to refer to the antecedent in discourse.
- c. Since null form is available in Korean, too, Korean has a complex structure just as Japanese does. On the other hand, null form is not available to English. Therefore, English learners will make more form choice errors than Korean.

Empirical Study

Test: Forced-Written Elicitation Task

The test consisted of 20 sets of stimulus sentences. One set included a sentence(s) that describes a situation, followed by a picture showing the situation, and a question sentence which asks about the situation. Test items were created following Pérez-Leroux and Glass (1999), which is a pioneering study of acquisition of pronominals in discourse in second language acquisition research. In the experiment, two kinds of context are included-topic and focus-, and two positions, subject and object, are examined. Since Pelez-Leroux and Glass examined the acquisition of Spanish, which has only null subjects but does not allow null objects, I created new test items for object positions. The example sets of stimulus sentences are as follows.

- (5) a. SUBJECT:TOPIC: embedded subject = ϕ

Sentence: minnade kakurenbo o shiyou to shiteimasu

'They are playing hide and seek together.'

Question: sono otokonoko wa nani o shiyou to kangaeteirudeshou ka

'What is the boy thinking he will do?'

(Target topic sentence: ϕ ϕ kuroozetto no ushiro ni kakureyou to kangaeteiru)

'He/* ϕ is thinking he/* ϕ will hide behind the closet.'

- b. OBJECT:TOPIC: embedded object = ϕ

Sentence: kyoudai wa naka ga waruku, mata kenka o shiteimasu

'The brother and sister don't get along with each other and they're fighting again.'

Question: okaasan wa musuko o dou shiyou to kangaeteirudeshou ka

'What is the mother thinking she will do to her son?'

(Target topic sentence: ϕ_j ϕ_k ϕ_i shikarou to kangaeteiru
'She/* ϕ_j is thinking that she/* ϕ_k will scold him/* ϕ_i ' .

c.SUB-FOCUS: embedded subject $\neq \phi$

Sentence: gakkou de undoukai ga arimasu
'An athletic meeting is held at school.'

Question: Hiroshi kun wa dare ga 100m sou de katu to kangaeteiru deshou ka
'Who is Hiroshi thinking will win the 100m?'

(Target focused sentence: ϕ **zibun** ga katu to kangaeteiru. / **Zibun**)
'He/* ϕ is thinking that **self** will win.'

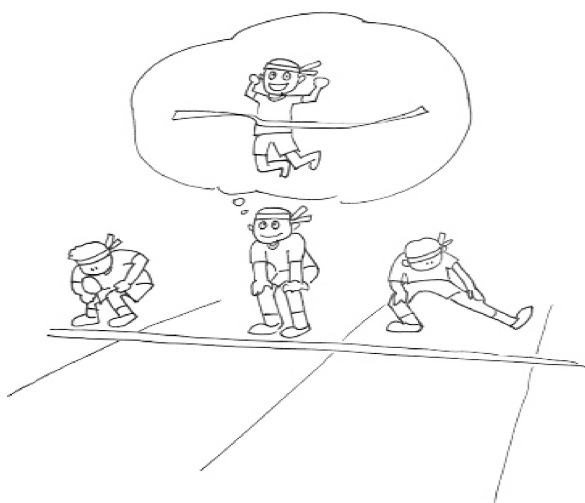
d.OBJ-FOCUS: embedded object $\neq \phi$

Sentence: eigo no tesuto ga hajimarimashita. Kenichi kun wa omoidashiteimasu.
'An English exam has begun. Kenichi remembers.'
maiban kyoukasho wo yonda koto, tango o oboetakoto,
'To read the textbook every night, to remember vocabulary words,
maiasa risuningu renshuu o shitakoto
to practice listening every morning...'

Question: Kenichi kun wa dare o shinjiyou to kangaeteirudeshou ka
'Who is Kenichi thinking he will believe?'

(Target focused sentence: **Zibun**)

Figure 3: Picture



Five of the 20 stories were asking about the object (i.e. the embedded subject is 'topic'), another five stories were asking about the subject (i.e. the embedded subject is 'focus'), and the other 10 stories, which were not tested in Pérez-Leroux and Glass (1999), were asking about what the subject did to a person who is shown in pictures: interpretation of pronouns in object position (i.e. the embedded object is 'topic'), and also asking about who the subject does something to (i.e. the embedded object is 'focus').

The participants were given a practice session to learn how to complete the questionnaire. In the session, they were asked to read a sentence setting out a situation, to look at a picture and answer a question asking about the situation. The participants were allowed to ask the meaning of vocabulary words on the questionnaire if they encountered any word that was unfamiliar to them.

Informants

The informants in the present study were five advanced Korean L2 learners of Japanese (mean age: 19), five advanced English L2 learners of Japanese (mean age: 43), and five control native speakers. They were asked to take the MJT (Minimal Japanese Test) (Maki, Dunton, and Obringer, 2003) in order to obtain their current proficiency level unless they have 1st grade in the Japanese proficiency test authorized by Japan Educational Exchanges and Services. Although there seems to be a gap between the two groups of learners in the mean age, the MJT confirms that all learners are advanced. All of them got 39-46 correct answers out of 46 questions, which indicates they are advanced learners.

Results

As Table 3 shows, all groups use zero pronouns in SUB-TOP context. One of the English native speaking learners used reference NPs repeatedly four times out of five. Although using reference NPs is not wrong in Japanese, the native Japanese speakers in the present study always used zero pronouns in that context. Korean learners produced 'other' answers, but they just misunderstood the questions though they understood the situation.

Table 3 : SUB-TOP context

	English learners n=5	Korean learners n=5	Japanese natives n=5
Zero pronoun	84% (21/25)	92% (23/25)	100% (25/25)
Overt form	16% (4/25)	0% (0/25)	0% (0/25)
Other	0% (0/25)	8% (2/25)	0% (0/25)

In SUB-FOC context, no groups used zero pronouns⁶. They allowed overt pronouns (Table 4). One English learner produced *kare / kanojo*, who repeated reference NPs in subject position. Most of the answers which Korean learners produced are *zibun* or *zibunzishin*. On the other hand, English learners produced *zibun* but never used *zibunzishin*. Japanese natives used several forms: *zibun*, *zibunzishin*, a full NP, full NP *zishin*.

Table 4: SUB-FOC context

	English learners n=5	Korean learners n=5	Japanese natives n=5
Zero pronoun	0% (0/25)	0% (0/25)	0% (0/25)
Overt form	100% (25/25)	92% (23/25)	80% (20/25)
Other	0% (0/25)	8% (2/25)	20% (5/25)

While the three groups behaved in the same way when they were asked for an interpretation of subject position, their answers in object position somewhat vary (Table 5). Both Korean and Japanese native groups allowed zero pronouns in topic context (96% and 88% each). However, English learners used both zero pronouns (60% of the time) and a full NP (40% of the time). Three out of five English learners produced full NPs, and one of them always answered with full NPs. She is the same informant who repeated full NPs in SUB-TOP context. The other two English learners used full NPs in three or four sets out of five. As for Japanese natives, we found only three cases where they produced overt forms, namely full NPs.

Table 5 : OBJ-TOP context

	English learners n=5	Korean learners n=5	Japanese natives n=5
Zero pronouns	60% (15/25)	96% (24/25)	88% (22/25)
Overt form	40% (10/25)	0% (0/25)	12% (3/25)
Other	0% (0/25)	4% (1/25)	0% (0/25)

In OBJ-FOC context, overt pronouns were used by all the groups (Table 6). Each group of informants categorically chose overt forms. The option most preferred among the informants was *zibun*.

Table 6 : OBJ-FOC context

	English learners n=5	Korean learners n=5	Japanese natives n=5
Zero pronoun	0% (0/25)	0% (0/25)	0%(0/25)
Overt form	96% (24/25)	100% (25/25)	96%(24/25)
Other	4% (1/25)	0% (0/25)	4%(1/25)

Discussion

Let us go back to two research questions. The first question was do advanced L2 learners of Japanese whose L2 is either English or Korean still show asymmetry in null subject and null object use? The results of the experiment indicate that subject-object asymmetry was observed in advanced L2 grammar of English learners. In SUB-TOP contexts, the English learners categorically selected zero pronouns. In OBJ-TOP contexts, on the other hand, they show optionality; the learners' responses are not categorical (zero pronouns 60%, a full NP 40%). So they produced more null forms in the subject position than in the object position. On the other hand, the results from Korean learners are almost the same as Japanese natives' results. Thus, at least advanced Korean L2 grammar does not seem to involve such subject-object asymmetry.

The second research question is, if they show asymmetry, what actually causes it? Why can English learners drop subjects but not objects?

First, we focus on the object position. Remember that three out of five English learners produced full NPs; one of them always answered with full NPs, the other two used full NPs in three or four sets out of five. Thus, the following considerations would be observed from the result in the light of Park's (2004) claim. Among the English native speaking learners two out of five informants have already acquired weak θ features in Japanese since they always used zero pronouns in OBJ-TOP context as Japanese natives did. It is suggested that it is possible for English learners to finally acquire the feature value of weak θ features that is different from the value in their L1. As for the other three English learners who produced full NPs, their behavior was not wrong in Japanese. However, full NPs use in the focused context is more natural (Kanzaki, 1993). Moreover, Korean learners never allowed full NPs in OBJ-TOP contexts, which confirms that the task itself does not have a problem. Therefore, it is assumed that the three English native speaking learners acquired weak θ features, but at the pragmatic level, they are unable to select zero pronouns. As a result, full NPs become their choice. Actually, Zyzic (2008) reports a similar pattern. In oral production tests, his English native speaking learners of L2 Spanish produced a full NP in OBJ-TOP contexts. First, they

produced null forms, and then they noticed their form selection was wrong (since Spanish does not allow the object position to be null). They immediately self-corrected to include ‘the full NP’. They knew that the context is the topic, but they could not select an overt pronoun, so they produced a full NP. It should be noted here that, in Zyzic (2008), the error that the English speakers used null form in OBJ-TOP contexts is not relevant to their L1 English, since neither languages, English and Spanish allows null objects. If we follow the claim of Park (2004), his claim could not explain their null object production. This is because under his syntactic mechanism, both languages have the same feature value ‘a strong theta feature’ which keeps null forms from the object position. Thus, Park’s (2004) feature account could not capture the fact that English speakers used null objects in OBJ-TOP context in their L2 Spanish. From this assumption, English learners in the present study might have selected a full NP since, for some reason, the null form was not available at a pragmatic level. Therefore, it would be reasonable to consider that the full NP selection is a form choice error at the syntax-discourse interface level, as claimed by Sorace (2007). Because of underspecified [Focus] and shallow processing, English L2 learners of Japanese chose a phonetically overt form even in a topic context. At the interface level, Korean has as complex a structure as Japanese does since null form is available to Korean, too (see Figure 2). On the other hand, the null form is not available to English. This leads their mapping operation to go wrong, which forces English learners to make more form choice errors than Korean. Therefore, their error is not syntactic but morphological.

So, what makes the English learners select null form correctly in TOP-SUB contexts? As Park (2004) suggests, at the level of syntax, all the three languages, English, Japanese, and Korean have the same licensing conditions on null subjects (see Table 1). Considering that English learners acquired the conditions, something should happen at the interface. Because of on-line processing, the processing becomes shallow. Furthermore, there is a distance between the subject position and the object position, as shown in (6).

(6) a. SUB-TOP context

ϕ ϕ kuroozetto no ushiro ni kakureyou to kangaeteiru)
 ‘He/* ϕ is thinking he/* ϕ will hide behind the closet.’

b. OBJ-TOP context

ϕ j ϕ k ϕ i shikarou to kangaeteiru
 ‘She/* ϕ jis thinking that she/* ϕ k will scold him/* ϕ i’ .

Since their processing is limited, the distance may intervene in the learners’ null object use. This would account for one possibility. English learners know the meaning of the object

is retrievable from the context, but the distance is the cause which makes their mapping operation work improperly. From the hypothesis above, we can predict that in the case where there is more distance between the subject position and the object position, the optionality (zero vs. overt) observed in object position (see Table 5) will become unclear. Learners will choose more overt forms than zero pronouns. We can see a clear-cut subject-object asymmetry in some sense.

Conclusion

In the current study, the acquisition of null subjects and null objects in Japanese has been examined. We observed the non-native-like behavior of English native speaking learners. They preferred overt objects (full NPs) in OBJ-TOP contexts. Therefore, their L2 grammar, even if their proficiency level is advanced, still involves the subject-object asymmetry. It seems that Park (2004) nicely accounts for why it is easier for English learners to produce null forms in subject position than in object position. English and Japanese have the same feature value in subject position, while the two languages differ in the feature value in the object position. However, under his syntactic model, the L2 English error of the Spanish informants in Zyzic (2008) cannot be explained. They used null objects in a topic context in Spanish, though null objects are not allowed in either language. Therefore, we do not consider that cross-linguistic influence is relevant in a full NP selection by the English learners in our study. Rather, following Sorace (2007), the non-native-like behavior is caused by shallow processing and unspecified [Focus] at the interface level. One way to enhance our assumption is to test informants with sentences which have more distance between the subject and object positions, as suggested at the end of the discussion above. Whether this is an appropriate line of enquiry awaits further research.

Acknowledgments

I wish to express my gratitude to two anonymous reviewers for reading the entire text in its original form. All remaining errors and inadequacies are, of course, my own.

Appendix

Test sentences

(a) SUB-TOP context

1. Short story: みんなでかくれんぼをしようとしています。

Question: その男の子は、何をしようと考えているのでしょうか？

2. Short story: 放課後、その兄妹は家に帰って遊びたいと思っています。
Question: その女の子は、放課後何をしようと考えているでしょうか?
3. Short story: キッチンにコーラが1本しか残っていません。でも、みんなとてものがが渴
いています。
Question: その男の子は、何をしようと考えているでしょうか?
4. Short story: 今週末、その家族は海へ旅行に行く予定です。
Question: その男の子は、浜辺で何をしようと考えているでしょうか?
5. Short story: 今日は運動会です。これから 100 m走が始まります。
Question: ひろしくんは、100 m走で何をしようと考えているでしょうか?

(b) SUB-FOC context

1. Short story: 今週末、その家族は海へ旅行に行く予定です。
Question: その男の子は、誰が浜辺で魚釣りをすると考えているでしょうか?
2. Short story: 放課後、その兄弟は家に帰って遊びたいと思っています。
Question: その女の子は、誰がその動物たちと遊ぶと考えているでしょうか?
3. Short story: 今日は運動会です。これから 100 m走が始まります。
Question: ひろしくんは、誰が 100 m走で勝つと考えているでしょうか?
4. Short story: キッチンにコーラが1本しか残っていません。でも、みんなとてものがが渴
いています。
Question: その男の子は、誰がコーラを飲むと考えているでしょうか?
5. Short story: みんなでかくれんぼをしようとしています。
Question: その男の子は、誰がクローゼットの後ろに隠れると考えているでしょうか?

(c) OBJ-TOP context

1. Short story: たろう君は、兄夫婦の家に遊びにきました。
Question: たろう君は、赤ちゃんをどうしようと考えているでしょうか?
2. Short story: たろう君は、学校で教科書を忘れたのに気がきました。それを運悪く、先
生にみつかってしまいました。
Question: 先生は、その学生をどうしようとしているでしょうか?
3. Short story: その兄妹は仲が悪く、またケンカをしています。
Question: お母さんは、息子をどうしようと考えているでしょうか?
4. Short story: みんなでかくれんぼをしています。花子さんがオニです。
Question: 花子さんは、木の後ろの人をどうしようとしているでしょうか?
5. Short story: 明日は日曜日で、その家族はピクニックに出かけます。
Question: お母さんは、朝6時にけいこをどうしようと考えているでしょうか?

(d) OBJ-FOC context

1. Short story: まことくんは失恋をして、思いました。ジムに通うこと、おしゃれになること、勉強すること...

Question: まことくんは、誰を変えようと考えているのでしょうか？

2. Short story: 会議中です。まゆみさんはとても疲れて、思いました。マッサージに行くこと、休暇をとること、温泉へいくこと...

Question: まゆみさんは、誰をいたわろうと考えているのでしょうか？ (いたわる = be considerate of ~, be kind to ~)

3. Short story: まりちゃんは思いました。学校から帰るときは友達と帰ること、明るいうちに帰ること、携帯を持つこと...

Question: まりちゃんは、誰を守ろうと考えているのでしょうか？

4. Short story: 英語のテストが始まりました。けんいちくんは、思い出しています。毎晩教科書を読んだこと、単語を全部覚えたこと、毎朝リスニング練習をしたこと...

Question: けんいちくんは、誰を信じようと考えているのでしょうか？

5. Short story: けんさんは、大学生になって思いました。外国人と話すこと、外国へ1人旅に出ること、イギリス留学すること...

Question: けんさんは、誰を試そうと考えているのでしょうか？

References

- Alexiadou, A. & Anagnostopoulou, E. (1998). Parameterizing Agr: word order, V-movement and EPP-checking. *Natural Language and Linguistic Theory* 16, 491-539.
- Bošković, Z. & Takahashi, D. (1998). Scrambling and last resort. *Linguistic Inquiry* 29, 347-66.
- Belletti, A, Bennati, E. & Sorace, A. (2007). Theoretical and developmental issues in the syntax of subjects: evidence from near-native Italian. Ms, University of Siena and University of Edinburgh (submitted).
- Chomsky, N. (1995). *The Minimalist Program*. The MIT Press.
- Cole, P. (1987) Null subjects in Universal Grammar, *Linguistic Inquiry*, 18/4, 597-612.
- Filiaci, F. (2003). The acquisition of the properties of Italian null and overt subjects by English native speakers. Unpublished MSc. Dissertation, University of Edinburgh.
- Hasatani, M. (1991). Nihongo no shugo to mokutekigo no shouryaku-gakushuusha no shuutoku katei [Acquisition of subjects and objects in Japanese-acquisition process of learners]. *Nihongogaku* 10, 65-74.
- Hasegawa, N. (1996). Shouryaku sareta daimeishi no kaishaku [Interpretation of pronouns which are dropped]. *Nihongogaku* 14, 27-34.
- Huang, C.-T. (1984). On the distribution and reference of empty pronouns. *Linguistic Inquiry*. 15 (4): 531-74.
- Kuroda, S. (1965). Generative grammatical studies in the Japanese language. Unpublished Ph.D. dissertation, MIT.
- Maki, H., Dunton, J. & Obringer, C. (2003). What grade would I be in if I were Japanese? *Bulletin of the Faculty*

- of Regional Studies*, Gifu University, Vol. 12, February 2003, 109-118.
- Niimura, F. (2003) *The Syntax of Honorification*. Unpublished doctoral dissertation, University of Connecticut.
- Park, H. (2004). A minimalist approach to null subjects and objects in second language acquisition. *Second Language Research* 20, 1-32.
- Pélex-Leroux & Glass, W. (1999). Null anaphora in Spanish second language acquisition: probabilistic versus generative approaches. *Second Language Research*, 15, 220-249.
- Radford, A. (2004). *Minimalist Syntax*. Cambridge: CUP.
- Sorace, A. (2003). Near-nativeness. In Long, M., and Doughty, C. (eds.), *Handbook of Second Language Acquisition*, 130-152. Oxford: Blackwell.
- Sorace, A. (2005a). Selective optionality in language development. In Cornips, L., and Corrigan, K. (Eds.), *Syntax and Variation* (55–80).
- Sorace, A. (2005b). Syntactic optionality at interfaces. In Cornips, L. and Corrigan, K. (Eds.). *Syntax and Variation: Reconciling the Biological and the Social*, Amsterdam: John Benjamins, 46-111.
- Sorace, A. (2007). Optionality at the syntax-discourse interface in near-native L2 speakers. *Second Language* 6, 3-15..
- Sorace, A. & Filiaci, F. (2006). Anaphora resolution in near-native speakers of Italian. *Second Language Research* 22/3. 339-368.
- Wakabayashi, S. & Negishi, R. 2003. Asymmetry of Subjects and Objects in Japanese Speakers' L2 English. *Second Language* 2,
- White, L. (1985). The pro-drop parameter in adult second language acquisition. *Language Learning* 35, 47-62.
- Yano, Y. (1981). Danwa ni okeru meishiku no shouryaku ni tuite [About NP omission in discourse]. *Nihongo Kyouiku* 43, 89-102.
- Yano, Y. (1983). Bun o koeru bunpou [Grammar over sentences]. *Nihongogaku* 2, Tokyo: Meiji Shoin.
- Yuan, B. (1997). Asymmetry of null subjects and null objects in Chinese speakers' L2 English. *Studies in Second Language Acquisition* 19, 467-97.
- Zobl, H. (1994). Prior linguistic knowledge and the conservation of the learning procedure: grammaticality judgments of unilingual and multilingual learners. In Gass, S. and Selinker, L., editors, *Language transfer in language learning*, Amsterdam: John Benjamins, 176-96.
- Zyzik, C. E. (2008). Null objects in second language acquisition: grammatical vs. performance models. *Second Language Research*, 24/1. 65-110.

(Footnotes)

- ¹ One possibility which accounts the asymmetry is that there is enough positive evidence in L2 input: English sentences have a phonetically overt subject. This is an extra-linguistic factor. It might make L2 learners to notice that English does not allow null subjects. However, as for an object position, a lot of researchers have been trying to explain the reason why learners drop objects in English. For example, Yuan (1997) accounts the issue from the syntactical point of view: topic chain. Wakabayashi and Negishi (2003) give an account from the lexical semantic point of view: verb categorization. In addition,

the syntactic status of null objects is also still controversial, either variable (Huang, 1984) or pro (Cole, 1986) in the field of theoretical linguistics. Thus, a null object has been a key phenomenon in the field of second language acquisition and theoretical linguistics.

- ² The data were collected by the National Center for Bilingual Research (NCBR).
- ³ The data from L2 Greek in Tsimpli and Sorace (2006) also shows optionality in pronominal use in discourse.
- ⁴ Universal Grammar is 'those aspects of grammar which are universal, and which are assumed by Chomsky to be part of the innate knowledge which a child is born with' (Radford, 2004:482).
- ⁶ It would be obvious that informants do not select zero pronouns in focused contexts. Interestingly, however, the study by Pérez-Leroux and Glass (1999) shows that their L2 learners of Spanish, even advanced learners, chose null pronouns in focused contexts (about 20-30% of responses). Therefore, I thought a zero pronoun should be included as an option in focused contexts to confirm the results of Pérez-Leroux and Glass (1999). However, as the Table 4 and 6 show, no one selected a zero form in focus context. Since the current study followed the questionnaire and method of Pérez-Leroux and Glass, inconsistency between their results and that of the current study is a puzzle.

