英語を母語とする子供と英語を第2言語とする子供の言語発達に関する考察

A Note on Native English Speaking and ESL Children's Language Development

Minako YOGI*

1. Introduction

Children around the world, from all cultures and all language communities, manage to become competent speakers of their native language within the first five years of life. How children gain such a command of their native language with all its intricate systems of sound, meaning and grammatical structure in such a short period of time is a fascinating question. We cannot ask children how they are doing it, nor can we remember how we did it ourselves. Much of the insight into the course of language development that we do have, has come from an analysis of the language that children actually produce. In the process, they make mistakes. These mistakes, however, are not random ones. They reflect the rule systems that the children are building for themselves and provide an insight into the kinds of 'educated guesses' that they are making about the way their language works. By the time they are a year old, babies already seem to understand several words. They have also started to communicate with the people around them by their gestures and tone of voice. Then, at about this age, children produce their first recognizable, meaningful words. They have started to communicate with language (cf. Peccei, 1994).

This paper deals with some of the phonological, morphological, syntactic, and semantic characteristics of native English speaking and ESL children. The study is based on tape-recorded conversational data from four children: The utterances of two American children, Tylor and Annie (both two years old, living in East Lansing, MI.) and two Japanese children, Miwa and Tomo (3 years old living in Buffalo, N.Y.). Tylor's data gathering took place at a day care center where he talks with the caregiver, Cathy. Annie was having a conversation with her mother at home. Miwa and Tomo's data gathering took place at home where they talk with their father. Due to limited space, only Annie and Miwa's transcript extracts were introduced in the appendix. The present paper shows that both the English speaking children and the ESL children demonstrate the same linguistic characteristics in phonological, morphological, and syntactic facets, giving credence to the claim that their language development is closely related to universal linguistic competence.

---

* 英語教育教室

2. Phonological Characteristics

Between the ages of 1; 6 and 4; 0 the young child undergoes considerable development in phonological ability. Starting with a small vocabulary of approximately 50 words, the child proceeds from single-word utterances of very simple phonological form, to multiword utterances that are relatively high in intelligibility. Phonological ability improves through an increase in the ability to produce adult sounds and combine them into more complex phonological structures (cf. Ingram, 1976).

Years ago Jesperson (1922) noted the distinctness of this stage of phonological acquisition. In characterizing it, he emphasized the regularities that occur in the child's words (pp.106-7). As the child gets away from the peculiarities of his/her individual 'little language', the speech becomes more regular, and a linguist can, in many cases, see reasons for the child's distortions of normal words. When the child replaces one sound by another there is always some common element in the formation of the two sounds. There is generally a certain system in the sound substitution of children, and in many instances we are justified in speaking of 'strictly observed sound-laws'. For example, Jesperson indicated that children in different linguistic communities show a tendency to replace velar stops with alveolar ones. The child who says [tæt] for 'cat' will also say [do] for 'go'. This general pattern would then qualify as a sound-law for this stage of development. A child's words at any point could be described within this approach by specifying the sound-laws that are operating in the child's speech.

In recent years, sound laws as described by Jespersen have been referred to as phonological process, a term originated by Stampe (1979). Stampe sees these processes as consisting of a universal set of hierarchically ordered procedures used by children to simplify speech. They are universal to the extent that every child is born with the facility to simplify speech in a consistent fashion. They are hierarchical in a sense that certain processes are more basic than others. Stampe sees phonological development as a gradual loss of these simplifying processes until the child's words finally match their adult models.

Hawkins (1984:290) affirms that the major phonological processes of language development are: Reduplication, Insertion, Final-C deletion, Cluster reduction, Voicing, Fronting, Stopping, Gliding, Vocalization, Glottalization, Syllable-loss, and Consonant harmony. Let us now observe the phonological characteristics of two English-speaking children in the following Table 1:

Table 1

	Tylor (2 years old)		Annie (2 years old)
1)	yellow[yɛwou] l → w	1'	asleep [aswi:p] l → w
2)	those [douz] ð → d	2'	there [dɛr] ð → d
3)	want [wan]	3'	want [wan]
4)	garfield [darfild] g → d	4'	right [waɪt] r → w
5)	coming [tʌmɪŋ] k → t	5'	frogs [fwɔgz] r → w
6)	lunchbox [yunʧpox] l → y	6'	very[wɛry] v → w
7)	apple juice [æpɛjus]	7'	it [i:]
8)	himself [hɪmʃɛlf] s → ʃ	8'	to [də] t → d
9)	birthday [bərʔday]	9'	flamingo [frʌbiŋgo] l → r m → b
10)	stairs [tærz]	10'	bears [bɛz]
11)	library [laɪbæry]	11'	scared [skæd]

It can be seen in 1) and 1' that both children tend to substitute [w] for [l]. Ingram (1976:41) indicates that there seem to be 3 stages in the simplification of liquid sounds [l] and [r]. Stage 1: Stopping [l], [r] replaced by [d]. Stage 2: Replacement with a glide [l]-[y] or [w], [r]-[w]. Stage 3: Replacement with a liquid [r]-[l], [l]-[r]. The case of 1), 1' and 6) can be explained by Stage 2 and 9' by Stage 3. In other words, this phenomenon can be referred to as a "Gliding" which is the replacement of a sound, usually the liquids /l, r/, by glides /j,w/, as in 4' and 5'. It is necessary to note that Tylor is able to pronounce [l] before a consonant but not before a vowel.

Number 2) and 2' indicate [d] (voiced alveolar stop) is substituted for [ð] (voiced interdental fricative). According to Cruttenden (1979:22), this is one of the child's phonemic substitution systems.

As shown in 3), 3', and 7), the final consonant is deleted. Ingram (1976:57) contends that the deletion of final consonants is a widespread process. It can be represented as follows: C→ø / ____ #.

In the case of 4) and 5), velar stops [k] and [g] are fronted to Alveolar stops [d] and [t]. This is called "Fronting". Fronting describes the replacement of velar and palato-alveolar consonants by alveolars. At an early stage of development, /k, g, ŋ/ are regularly realized as [t, d, n].

From 8), it can be seen that [ʃ] is substituted for a [s]. As Cruttenden (1979:21) asserts, the first fricative phoneme may often be [s] or [f] but is sometimes [h], [ʃ], or [θ]. Free

variation may play a crucial role in phonemic development. A common developmental pattern is exemplified here in the acquisition of /s/ and /ʃ/.

In 7), [l] is substituted with a vowel [ɛ]. This is called a "vocalization" which affects liquids in syllable-final position, where they become vowels.

In 10' and 11', we can see a deletion of /ɪ/. /ɪ/ deletion occurs when it follows a vowel and precedes a consonant or in the final position.

In 9', [m] is pronounced [b]. This may have occurred because [m] and [b] are both bilabials (the same points of articulation), and the child closed the velic so the air did not go out the nose.

Numbers 10) and 11) illustrate consonant cluster simplification. [st] is simplified to [t] and [br] to [b]. Number 9) needs further consideration, but the following should also be brought to attention: birthday [bərθdei]-[bərtdei]-[bərʔdei]. The sound [θ] was substituted with [t] but deleted since it is common that most plosives at the early developmental stage become [ʔ] a glottal stop.

In summary, the data enables the observation of five phonological characteristics of children in the developmental process: (a) Final Consonant Deletion (b) Fronting (c) Gliding (d) Vocalization and (e) Cluster Simplification.

The following examines the data of second language acquisition from the Japanese-speaking children mentioned previously.

Table 2

	Miwa (3 years old)		Tomo (3 years old)
a)	three [θwi:]	a'	good [guʔ]
b)	red [rɛd̥]	b'	wait [wɛɪʔ]
c)	from [fəm]	c'	strawberry [stɔ:bɛri]
d)	telephone [teləfən]	d'	show [ʃɔ:]
e)	paper [pɛɪpʊ]	e'	this [dɪs]
		f'	Buffalo [bahhalo]
		g'	Polar bear [polobɛə]

In a), [r] is replaced with [l], as in the case of Annie's number 9'. a' and b' may be similar to the case of Tylor's number 9), discussed previously. Here the plosive [t/d] is substituted with [ʔ]. Example b) indicates one of the voicing rules; final consonant devoiced at the end. This is a characteristic not seen in Tylor and Annie, but it is a very common feature in phonological development.

c) and c' shows consonant cluster simplification as [fr] became [f] and [str] was changed to [st]. In d) and d', we can see monothongization taking place as diphthong [ou] becomes a monothong [ə] and [ɔ].

In e', [ð] is replaced by [d]. This is the same phenomenon discussed earlier in Tylor and Annie's case number 2) and 2'. Tomo's a' can be explained as a deletion of /e/ in final position, as in the case of Annie's 10' and 11'.

e) is the same case as 7) in Tylor. Here, the liquid [r] is substituted with a vowel [ʊ]. This is vocalization which affects liquids in syllable final position and become vowels. Example f' is a very interesting element which can be explained by Cruttenden (1979:20); the indeterminate fricative phoneme [f] and [h] has the same function.

To summarize, this data reveals five main phonological characteristics of children: (1) Final Consonant Deletion (2) Consonant Cluster Simplification (3) Vocalization (4) Voicing (5) Monothongization. Since the ESL children (Miwa and Tomo) were exposed to an English speaking society at the developmental stage, there were many phonological similarities with the native English speaking children (Tylor and Annie).

3. Functional Morphemes

The following is an examination of functional morphemes of the two English speaking children based on James (1990:76). Both children make use of present progressives which is usually the first form they acquire. [eg. "He's hiding" (Tylor) "I'm singing (Annie)]. They also employ prepositions such as, " in the drawer." (Annie), "on the truck" (Tylor). They apply plurals to nouns such as "panda bears" (Annie), "two blocks" (Tylor). They exercise use of articles such as "an ice-cream" (Annie), "the truck"(Tylor). However, only Tylor demonstrates use of possessives as in "Taffy's party". He also implements regular past tense, as in "knocked him down", and irregular past tense like "fell down". In addition, he also uses a regular third person singular form, as in " this makes tower".

The use of progressives, plurals, and articles is not observed in the ESL children's utterances. Interestingly enough, Miwa makes use of prepositions such as "From Japan". I will discuss the use of functional morphemes in section 3, with particular focus on articles/determiners from a semantic perspective.

3. Syntactic and Semantic Characteristics

This section discusses syntactic and semantic aspects of English and ESL children's languages. Two cases will be analyzed; one is a conversation of Annie with her mother, and the other is Miwa's conversation with her father. These will be discussed from two perspectives. First, the English speaking child's and the ESL child's utterances will be

compared with each other. As we will see, Miwa's utterances show the typical patterns that many researchers have reported. On the other hand, some of Annie's utterances do not resemble what is usually observed. These data will be examined from a theoretical view point. It should be noticed that although Annie produced some interesting sentences that Miwa didn't, as a whole, there is no significant difference between them. Second, differences between children's and adults' grammar will be examined. It will be observed that children's grammar is not so different from adults', unlike the case of sound production which we observed above. In spite of the slight differences between children's and adults' grammar, however, there is an interesting sentence found in Annie's utterances, where the accusative case (objective case) is used as the subject in place of the nominative case (subjective case). It can thus be concluded that as far as syntax and semantics are concerned, English speaking adults, English speaking children, and ESL children in a very early stage like 3 years old, use basically the same grammatical knowledge, which supports Chomsky's claim that knowledge of grammar is innate and universal.

In the following discussion, Chomsky's (1981) Principles-and-Parameters approach (a.k.a. Government and Binding Theory) will be adopted as a theoretical framework for the sake of convenience. Since the main point of the present paper is to analyze real transcribed data, the claim is theory-neutral and not affected by the choice of a framework. The theoretical notions and assumptions that are necessary for discussion will be given in the course of the presentation.

4.1 The English Speaking Child and the ESL Child

The developmental process of child's language acquisition can be classified into 4 stages (cf. Yule, 1985): the pre-language stage, the one-word stage, the two-word stage, and the telegraphic speech stage. At the pre-language stage, approximately by 6 months, children are usually able to produce a number of different vowels and consonants. The sound production at this stage is known as babbling. Between 12 and 18 months, children begin to produce a variety of recognizable single unit utterances, such as 'milk', 'cookie', 'cat', etc. A form like [ʌsǽ:] for 'what's that' is also produced by children at this stage. Therefore, it is suggested that the label of the one-word stage might be misleading, and terms like 'single-unit' or 'single form' may be more accurate. The two-word stage begins around 18-20 months. At this stage, children can produce a variety of combinations such as 'baby chair', 'mammy eat', 'cat bad' and so forth. At the telegraphic stage, which is between 2 and 3 years old, children will begin producing a large number of multiple-word utterances like 'Andrew want ball', 'cat drink milk', and 'this shoe all wet'. It is obvious that the utterances produced at this stage lack grammatical inflections such as *-s* and *-ed*, and determiners like *a* and *the*.

Since Annie is 2 years and 5 months old and Miwa 3 years old, it is expected that their

utterances will show the characteristics of those at the telegraphic stage. Miwa's case is exactly what is expected. She never uses determiners. A typical case is observed in the following conversation (Appendix B 24-27), where the father uses the indefinite determiner *a*, but Miwa does not repeat it.

Father:	Miwa's a small girl?
Miwa:	No, [big gələ] big girl
Father:	Miwa's a bad girl?
Miwa:	No, [gud gələ] good girl

Annie's utterances, on the other hand, have both *a* and *the* (Appendix A 13-16).

Mother:	What is this?
Annie:	The [twain] (train)
Mother:	What is this?
Annie:	A [pweit] (plate)

A particular attention should be paid to Annie's use of *the* in this context. This conversation took place when Annie was coloring, and it might be assumed that this *the* is an deviation of *a*, since '(it is) a train' seems to be an appropriate answer in this situation. While *a* might be considered more suitable here, this does not mean that Annie uses the definite determiner incorrectly. Rather, it might be speculated that her use of *the* is correct; that is, her *the* denotes a unique individual just like adults', and the immaturation of her cognitive system forces her to use *the* in this context. It is easy to imagine that trains are not well distinguishable object for 2-3 year old children and it is rare for them to encounter two or more trains at the same time. Therefore, it is reasonable to presume that for Annie, a train is an unique object. Note, however, that plates are very familiar objects for children, and they know that there are many plates around them. This fact makes it natural for Annie to use the indefinite article *a* with *plate*.

The immediate question is: Does the fact that Annie used *a* and *the* but Miwa didn't use either of them mean that the English speaking child is more matured than the ESL child in developing their grammar? My answer is negative for two reasons. First, the use of determiners by Annie is not consistent. She did use noun phrases with determiners as follows (Appendix B 23-28).

M:	What's this?
A:	bear
M:	What's this?

A: frubingo
M: flamingo! What is this?
A: Shabet

Secondly, in both utterances, most of the sentences have very simple forms like SVO and no complex sentences are observed. It might be pointed out that Annie uttered the *want-to* construction (Appendix A 15-16), which could be analyzed as a complex sentence.

M: What is this?
A: A [pwɛit] (plate) Aha, I wanna wanna ...

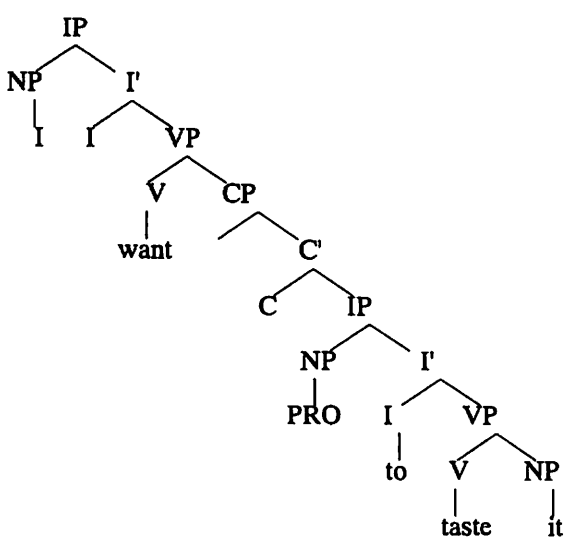
In this example a verb after "to" is not produced, but given that 'want to' goes to 'wanna', it is clear that Annie's sentence has an infinitive as a complement of *want.* In the following Annie's utterance, "to" and a verb are produced.

A: I want to taste it.

Does this fact then suggest that Annie can produce complex sentences that Miwa didn't and therefore the English speaking child is more matured than the ESL child? It depends on syntactic analysis of the *want-to* construction. Two analyses of the *want-to* construction suggest that it isn't necessary to analyze this construction as a complex sentence.

In the government-and-binding theory, 'I want to taste it' is structured as in (1).

(1)



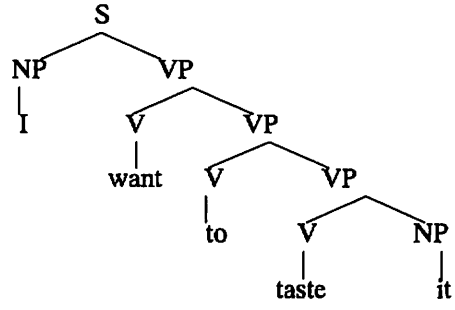
The crucial point is that the infinitive has its own subject PRO, which is anteceded by the matrix subject I, and they make an embedded IP structure. A piece of evidence for the CP complementation of *want*t comes from the fact that the verb *can* takes a *that*-clause as given in (2), although it is a non-standard use.

(2) She wants only that he should stay healthy.

(*PROGRESSIVE English-Japanese Dictionary*)

However, there is another way of analyzing the *want-to* construction. In Generalized Phrase Structure Grammar, the sentence in question is analyzed as in (3).

(3)



In this analysis, *want* is assumed to take a VP complement. Chierchia (1988) provides a semantic argument for (3) over (2) as follows. The structure in (2) is interpreted as expressing 'what I want' is the proposition (= CP) that I taste it. On the other hand, (3) means that 'what I want' is a property (= VP) of 'tasting it'. Now let us consider the following inference. Given two premises (i) John wants whatever Mary wants, and (ii) Mary wants to taste it, it is natural and correct to infer (iii) John wants to taste it. A structure like (3) tells that 'what Mary wants' is the property of 'tasting it'. From the premise (i), what John wants is also the property of tasting it. Consequently, it is determined that 'John wants to taste it' is a correct inference. Under (1), on the other hand, 'what Mary wants' is the proposition that 'Mary tastes it', and since John wants whatever Mary wants, what John wants should be the proposition that Mary tastes it. This leads us to the undesirable deduction that John wants Mary to taste it.

While there will be no further discussion concerning syntax and semantics of English infinitives, it can be concluded that the CP embedded structure in (2) doesn't have to be assumed, and this in turn suggests that there is no strong evidence that Annie's utterances have more complex sentence structures than Miwa's.

4.2 English Speaking Child's and Adult's Grammar

This subsection focuses on an apparent difference between the English speaking child's and adult's grammar, with special reference to accusative case marking. The sentences Annie produced are all simple yet intelligible, and, in fact, grammatical. This fact indicates that her grammar is basically the same as the adult's.

Let us now consider an interesting example of Annie's sentences as follows (Appendix A 29-30).

M: Can you read the songs to me?
A: --- me tell you

This seems to be an ungrammatical sentence, since 'me' instead of 'I' is used in subject position. However, the question of whether this is really ungrammatical or not should be considered. If it is supposed to be ungrammatical, then the next question to be addressed is: In what sense is it ungrammatical? It might be possible to say that it is ungrammatical for adults but grammatical for children. In this case, we have to give a principled account of where this difference comes from. Alternatively, it could be possible to assume that this *me* is just an abuse of the first person pronoun so that there is no reason why Annie used *me* in this position. My position is that neither is accurate. An expression like 'me tell you' is totally grammatical in that it is produced by the same grammatical device as adults. In what follows, Chomsky's Case theory will be introduced and the notion of default Case will be discussed.

In the Government-and-Binding theory, NPs with phonetic matrix are required to have Case to be licensed. Subject is assigned nominative Case from tense. Transitive verbs give accusative Case to their object. Prepositions also give Case to their object. In this framework, an NP in subject position must be assigned nominative Case unless it is a subject of an infinitive or a gerund, which means that Annie's sentence in question would be regarded as ungrammatical.

There is a piece of evidence that this version of Case theory is too strong, however. Let us consider examples in (4), cited from Zhang (1991).

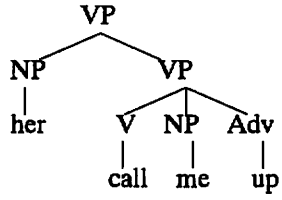
(4) a. What, me worry?! Never.
b. Her call me up?! Sure.
c. My boss give me a raise?! Ha!
d. You/Him/Her get a job at IBM?! Fat chance!

These sentences are known as Mad Magazine sentences, named by Akmajian (1984) since they

are often used in the magazine *MAD*. They are tenseless exclamative constructions characteristically used to express surprise, disbelief, skepticism, scorn, and so on (cf. Akmajian, 1984 and Zhang, 1991). What is interesting for the present discussion is the fact that the subjects have accusative Case. Here, there are two questions to be answered. One is why the subjects in Mad Magazine sentences are not nominative, and the other is where their accusative Case comes from.

As Akmajian and Zhang argue, Mad Magazine sentences are tenseless. This is shown by (4c), for instance, where the verb does not inflect as *gives*. Because of no tense, nothing gives nominative Case to the subjects in Mad Magazine sentences. Let us assume with Zhang (1991) that Mad Magazine sentences are VPs and their subjects are VP-adjunction. (4b), for example, has a structure like (5).

(5)



As for the second question, Zhang's claim is that accusative is a default Case in English. This means that an NP which adjoins to VP receives accusative Case by default, satisfying the Case requirement.

Keeping the idea of accusative as a default case in mind, let us now return back to Annie's 'me tell you'. It is obvious that this sentence has no specific tense, so it is reasonable to assume that this sentence has no IP projection. Without IP, the subject *me* should be generated as VP-adjunction (VP internal subject hypothesis ignored). Then we can apply Zhang's analysis of Mad Magazine sentences to this case. Since *me* receives accusative case by default, no Case theoretic violation takes place.

So far it has been argued that Annie's 'me tell you' is a perfectly grammatical sentence since it can be generated by adult's grammar without any additional rules or assumptions. Zhang's approach can be used to account for Annie's utterance, but notice that no matter what is the correct analysis, as long as Mad Magazine sentences are generated as grammatical forms, the same mechanism can be applied to Annie's sentence.

This section has dealt with syntactic and semantic aspects of the English speaking child's and the ESL child's utterances. It was argued that there is no significant difference between the English speaking child and the ESL child in syntactic and semantic development. In particular, it has been asserted that Annie's *wanna*-construction does not have to be analyzed as a CP

embedded structure. Annie's 'me tell you' was also discussed and it was concluded that this is a generatable sentence even by adult grammar, because of the similarity between this sentence and Mad Magazine sentences.

5. Conclusion

Children vary in their developmental stage in language acquisition since they all demonstrate individual levels of variation. However, children's utterances are not randomly put together, but indeed are developed from a very early stage through grasping the principles of sentence formation..

Along this line, the possibility of innate cognitive and linguistic knowledge is not completely denied. In fact, this paper suggests that children's linguistic development is governed by principles in universal grammar. Children's phonology was discussed in section 2, where it was revealed that the native English speaking children and the ESL children show the same patterns of sound production. It was also argued that there is no significant difference between them in syntactic and semantic development. These facts partially support Chomsky's view that knowledge of language is innate and universal.

*I would like to express my gratitude to Professor Takeo Kurafuji for providing stimulating discussion concerning the syntax and semantics section of this paper and Professor Gaylene Levesque for reading and commenting on an earlier draft of this paper. Any remaining errors are, of course, mine.

References

Akmajian, Adrian. 1984. "Sentence Types and the Form-Function Fit." *Natural Language and Linguistic Theory* 2, 1-23.

Brown, Douglas, H. 1987. *Principles of Learning and Teaching*. Cambridge Univ. Press.

Chierchia, Gennaro. 1988. *Topics in the Syntax and Semantics of Infinitives and Gerunds.* Garland, New York.

Chomsky, Noam. 1981. *Lectures on Government and Binding Theory*. Dortrecht: Foris,.

Cruttenden, Alan. 1979. *Language in Infancy and Childhood*. N.Y.: St. Martin's Press.

De Villers, A., P. and Jill, G. 1979. *Early Language*. Harvard Univ. Press.

Hawkins, Peter. 1984. *Introducing Phonology*. Hutchinson.

Ingram, David. 1976. *Phonological Disability in Children*. Edward Arnold.
Lyons, John. 1981. *Language and Linguistics.* Cambridge Univ. Press.
Neilson, V., Smith. 1973. *The Acquisition of Phonology*. Cambridge Univ. Press.
James, L., Sharon. 1990. *Normal Language Acquisition*. Pro.ed Austin, Texas.
Jespersen, Otto. 1922. *Language: Its Nature, Development and Origin*. N.Y.: W.W. Norton & Company, Inc.
Peccei, Jean. 1994. *Child Language*. Routiledge.
Stampe, David. 1979. *A Dissertation on Natural Phonology*. Garland, New York.
Yule, George. 1985. *The Study of Language*. N.Y.: Cambridge University Press.
Zhang, Shi. 1991. "CP-Adjoined Structure and Unmarked Accusative Case: pros and cons." *WCCFL* 10, 521-536.

Appendix A

English Speaking Child's conversation with her mother

M: Mother A: Annie

1	M:	Would you like another book to read?
2	A:	No
3	M:	Would you like to talk? Would you like to have a conversation? What would you like to talk about?
4	A:	[pænna beːz aː əswiːp^{h}]
5	M:	Panda bears are asleep?
6	A:	Yes
7	M:	Did Annie have a good nap today?
8	A:	Yeh
9	M:	Tell me about the frogs. What color are the frogs?
10	A:	It's gween
11	M:	It's green. OK.
12	A:	Annie color / I nee color
13	M:	You need to color? Try to color with your new placement. What is this?
14	A:	The twain (train)
15	M:	What is this?
16	A:	A [pwɛit] (plate) Aha, I wanna wanna ...

17	M:	What are you coloring Annie?
18	A:	[wid gween]　(with green)
19	M:	What other colors do you have?
		Tell me about what your color is?
20	A:	Ah gween
21	M:	What things do you see in your placement?
		What's that?
22	A:	um [an a:ʃkw:m]
23	M:	an ice cream
		What's this?
24	A:	bear
25	M:	What's this?
26	A:	frubingo
27	M:	flamingo!　What is this?
28	A:	Shabet
29	M:	Can you color the apples?
		Can you read to me from this book?
		Can you read the songs to me?
30	A:	--- me tell you
		role roles
		ruck a by baby
		wake up wake up we got tired
		Oh Mary here Lucy doing dear
		I think
		Oh mommy here whachu doing here.

Appendix B

ESL Child's conversation with her father (Buffalo, N.Y.)

M: Miwa　F: Father

1	F:	Miwa, can you say something?
2	M:	[θwi:]
3	F:	What's your name?
4	M:	[am, θwi:] am three
5	F:	No, I'm asking your name.
6	M:	Miwa

7	F:	Very good! Where are you from?
8	M:	[fəm japæn] From Japan
9	F:	What is this?
10	M:	[dɔg] dog
11	F:	Can you tell me what this is?
12	M:	[tɛləfən] telephone
13	F:	How about this?
14	M:	[ʧɔkoleit] chocolate
15	F:	O.K. Tell me the color. What color is this?
16	M:	[rɛd] red
17	F:	How about this?
18	M:	[yewou] yellow
19	F:	What is this?
20	M:	[pɛɪpʊ] paper
21	F:	Right. A news paper. How about that?
22	M:	[kwismәs twi:] Christmas tree
23	M:	[sæŋklɔθ] Santa Claus
24	F:	Miwa's a small girl?
25	M:	No, [big gәlә] big girl
26	F:	Miwa's a bad girl?
27	M:	No, [gud gәlә] good girl
28	F:	Do you know mommy's name?
29	M:	[wɛ:minit]wait a minute
30	F:	Now can you tell me mommy's name?
31	M:	One, two, three, four, five ....
32	F:	Tell me your friend's name
33	M:	I don't know
34	F:	Is it delicious, Miwa?
35	M:	Yeah!
36	F:	What's that?
37	M:	Japanese ...
38	F:	Japanese what?
39	M:	Japanese cookies
40	M:	Why doing shaving?
41	F:	Why?

＜論文要旨＞

英語を母語とする子供と英語を第２言語とする子供の言語発達に関する考察

本稿では、1）英語を母語とする子供（２名）と英語を第２言語とする子供（２名）の発話データをそれぞれ音韻論、形態論、統語論，意味論の各観点から比較検討を行った。更に、2）英語を母語とする子供の言語と大人の言語の違いについても考察した。第１点に関しては、３歳頃までであれば、いずれの観点から分析を行っても顕著な違いは見られなかった。第２点に関しては、子供の発する言語音は大人の発するものとはかなり異なり、独自の音韻規則を仮定する必要があるが、文構造を生成する規則は大人の文法も子供の文法も類似していることがわかった。