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Very Early Utterances in Child Language: Implications for the Minimalist Theory*

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ABSTRACT

In this paper, we will revisit the grammar of very early utterances that young children produce at around age 2 under the linguistic theory of the past 50 years. We will argue that very young children in the stage of two words and the telegraphic speech, who already know the head-complement relationship, the basic word order, the morphological properties regarding whether or not the language is agglutinative, have a specific system of ϕ -feature agreement then, and the detailed mechanism of the operation of Merge and Labeling proposed in the recent Minimalist thesis can be considered to be still under construction.

Children are free to project unattested hypotheses based on their innately endowed knowledge, and in the course of language acquisition, there are intriguing cases where English-acquiring children fail to match their hypothesis to the input of the target language, thereby producing 'erroneous' scrambled sentences. We argue in this paper that the scrambled sentences that very young English-acquiring children produce (e.g., Powers 2000) can naturally be explained by assuming the child-specific system of ϕ -feature agreement, or the system whose spirit is consistent with AGR/TNS Omission Model (ATOM) (Schütze and Wexler 1996) for the child grammar, and Saito (2016) for the adult grammar.

Key words: Root Infinitives, Root Infinitive analogues, two-word utterances, Minimalist program, scrambling, Universal Grammar

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1. Introduction

All children learn to talk by going through the stages of babbling, one-word utterances, and two-word utterances. The transition to two-word utterances and the telegraphic stage has been, in particular, one of the most disputed issues in the study of language acquisition, because two-word utterances are systematically simple and lack certain elements.

The generality and systematicity of the very early utterances have been explained in different ways due to the development of the theory of syntax. Back in 1960s, Braine (1963), for instance, suggested that very young children have a simple pivot-open grammar that they use to generate two-word utterances, and more recently, Radford (1990) proposed a small clause analysis for very early utterances, suggesting that very early child grammar lacks such functional categories as Inflection and Complmentizer, and that early child utterances are purely lexical.

In the generative linguistic view, the reason that children, without negative evidence or positive reinforcement, acquire the complex system of language is that they are gifted with innate knowledge of Universal Grammar (UG) that guides them to acquire their target grammar (Chomsky 1981; among others). According to the generative linguistic hypothesis, both child and adult grammars are restricted to an innately specified space of grammar. The hypothesis predicts that the child grammar and the target adult grammar basically share the core properties, but may differ in a limited way. In fact, children seem to be free to project unattested hypotheses based on their innately endowed knowledge. Thus, in the course of language acquisition, there are intriguing cases where children know the basic properties of the target language, but sometimes fail to match their hypothesis to the input of the target language, thereby producing 'erroneous' sentences.

In this paper, we will reconsider the typical properties of the utterances children produce at around 2 of age under the recent linguistic theory. It has been pointed out that very young children in the stage of two-word utterances and telegraphic speech already know the head-complement relationship, the basic word order (e.g., Wexler 1996), the morphological properties regarding whether or not the stem of the verb can be

morphologically independent in the target language (e.g., Hyams 2008; Murasugi 2010). In this sense, the children acquire the basic grammatical properties of the target grammar by the earliest observable stage. However, very young children have a specific system of ϕ -feature agreement even in the stage of two-word utterances and telegraphic speech, and hence, the operation of Merge and Labeling proposed in the recent Minimalist thesis can be considered to be still under construction. We argue in this paper that the scrambled sentences that very young English-acquiring children produce (e.g., Powers 2000) can naturally be explained by assuming the child-specific system of ϕ -feature agreement.

2. Word Order in Two-word Utterances

Braine (1963) proposed that children's two-word utterances are actually systematically structured: one word comes from a small class of pivot words fixed in first position or second; the other is drawn from an open class which can occur either first or second. For instance, 'allgone' in the utterances of 'allgone sticky' and 'allgone shoe,' typically produced by the English-acquiring children, is a first-position *pivot*. The choice of the second word is termed *open*. Some of the typical two-word utterances are listed below.

- (1) a. Allgone sock. Allgone sticky. Allgone juice.
 - b. More wet. More taxi. More melon. More cookie. More sing.
 - c. No milk. No Mommy. No bed. No wet.
- (2) a. Adult: What did you draw?

Child: Hayley draw boat.

(Haylay 1;08)

b. Adult: What did you do in your new bed?

Child: Jem get in.

(Jem 1;09) (Radford 1990)

The pivot-open grammar proposed in 1960's described the systematicality in the word order of the two-word utterances, but could not fully explain, for example, how very young children starting with the simple pivot-open grammar eventually attain the complex adult syntax, and hence, was not necessarily problem-free from the learnability

point of view. However, the analysis is clearly quite suggestive: Children even in the stages of two words or telegraphic speech know the basic word-order pattern of the target language, and as we see in (2), such functional elements as tense/aspect and agreement elements are missing in the very early production.

The insight of the pivot-open grammar is more generally captured by the proposal of Wexler's (1996, 1998) Very Early Parameter Setting. Language acquisition studies within the Principles-and-Parameters approach proposed by Chomsky (1981) have demonstrated that the principles of UG constrain the course of acquisition, and this proposal can be extended to the settings of basic parameters. Wexler (1996, 1998), for example, argues that basic parameters, such as parameters relevant to the word order, are set in the adult way by a very early stage of language acquisition. For example, in the speech of the very young children, the adult word order of verb-object (or head-complement) is displayed quite early, and the violations of adult-like word order are few in number.

Wexler's proposal of the very early parameter setting mentioned above is not only consistent with the evidence for pivot-open grammar, but also provides an elegant account for the cross-linguistic commonalites in child language. For instance, it well explains the Japanese-acquiring children's two-word utterances exemplified in (3) as well.

- (3) a. Papa ita. Wanwan ittyatta.

 Daddy there-was doggie is-gone

 'There was Daddy.' 'The doggie is gone.'
 - b. Baba pai
 dirty mimetic (throw away)
 Past gown mimetic (throw away) particle
 'Please throw away the dirt.'
 'I want to take off my gown.'
 - c. Mama nai. Miruku nai.

 Mommy no milk no

 'Mommy is not here.' 'There is no milk.'

As Okubo (1967) points out based on examples like (3c), Japanese-acquiring children's word order at the two-word stage also adheres to the adult order. Her finding can be restated in more recent linguistic theory as the idea that Japanese-acquiring

children attain the adult value of the head-parameter at an extremely young age as Wexler (1996) proposes.

3. Root Infinitive Analogues (Kim and Phillips 1998; Murasugi and Fuji 2008; Murasugi, Nakatani and Fuji 2009)

Then, how can the lack of functional elements found in the production of English-acquiring children at around the stage of two words and telegraphic speech exemplified in (1) and (2) be explained in more recent linguistic theory? In fact, there are a lot of studies indicating that the tense/aspect-related elements and Complementizer-related elements in the sentences are missing in the early child grammar. Support comes from the studies of Root Infinitives (RIs) or RI analogues. In this section, we will briefly summarize our previous work.

RIs are, typically, the infinitival verb forms used by children around two years of age in matrix (root) clauses, a position where they cannot appear in adult grammar. RIs are attested in very young children's speech across a wide variety of languages. In certain languages with overt infinitival morphology such as Dutch (e.g., Haegeman 1995; Blom and Wijnen 2000) and French (e.g., Krämer 1993; Rasetti 2003), among others, children may optionally use the infinitival forms of inflection on the verbs, as shown in (4a) and (4b). In languages lacking overt infinitival morphology such as English, RIs appear in the finite (root) contexts as bare verbs. In adult English, infinitive forms are generally the bare stems, and the children acquiring English produce the bare stems at around the age of two as shown in (4c) and (4d).

(4) a. Peter bal pakken. (2;01) (Dutch)

Peter ball get-INF

'Peter (wants to) get the ball.' (Blom and Wijnen 2000)

Elements in the nominal clauses are considered to exist in early child language at around 1;08-2;01 of age (cf. Bohnacker 1997).

- b. Dormir petit betit. (1;11) (French)
 sleep-INF little baby
 'A little baby sleeps.' (Guasti 1993/1994)
- c. Eve sit floor. (1;07) (English) (Brown 1973)
- d. That truck fall down. (2;00) (English) (Sano and Hyams 1994)

Although the use of non-finite verbs in root contexts by very young children is a universal phenomenon, there are morphological variations associated with the different verbal systems in the children's target languages. That is, the form of RIs is not always infinitival (see also Poeppel 1996; Coene, Taelman, Avram and Gillis 2005; Murasugi, Nakatani and Fuji 2009).

Although the form of the RIs varies across languages, it is well known that there are some salient morpho-syntactic and semantic properties common in RIs, as listed in (5).

- (5) a. RIs are non-finite verbs in root contexts.
 - b. At the RI stage, few T-related/C-related items are found.
 - c. RIs occur in modal contexts (the Modal Reference Effects (MREs)).
 - d. RIs are restricted to event-denoting predicates (the Eventivity Constraint).

(See also Deen 2002; among others.)

Murasugi, Nakatani and Fuji (2009), among others, argue that there are three types of RIs in world languages: the infinitive forms (e.g., Dutch, French, among others), the bare verbal forms (e.g., English, Chinese, among others), and the surrogate forms (e.g., Japanese, Turkish, Kuwaiti Arabic, among others). Children speaking a language whose verbs do not constitute a well-formed word if the form is uninflected choose a default affix, or the surrogate infinitive form. For example, Aljenaie (2000) reports that Kuwaiti Arabic-speaking children at the age of one to two typically produce verbs lacking the marking of present and past tense, and mark the stem with another inflection. That is, the child used a masculine imperative form, or what Murasugi, Nakatani and Fuji (2009) call the surrogate infinitive form as shown in (6).²

² Just like English, very young children speaking Swahili also omit functional elements such as tense and

(6) Eh xalis. (1;11-2;05) (adult form: xalis-at (finish-3f)) (Kuwaiti Arabic) yes finished

'Yes, it is finished.' (Aljenaie 2000)

Similarly, the 'strange verb' found in Kim and Phillips's (1998) longitudinal study of a Korean-acquiring child (2;02-2;07) can also be regarded as the surrogate RI-analogue form. According to Kim and Phillips (1998), Korean-speaking children overuse the default mood inflection -e. That is, a child, who used the mood inflection in question in the adult way as in (7a) through (7c) also used the form in some unappropriate contexts at 2;02 through 2;03, as shown in (7d) and (7e).

- (7) a. mul cwu-e (2 yrs)

 water give-Imperative

 'give water'
 - b. i tak-e (2 yrs)

 teeth brush-Declarative

 '(I'm) brushing the teeth.'
 - c. enni ka-(a) (2 yrs)
 sister go-Question
 'Did sister go?'
 - d. *mek-e emma (2 yrs) (adult: *mek-ca* (propositive))
 eat-Declarative mommy
 'Let's eat, Mommy.'
 - e. *ayki pwo-a (2 yrs) (adult: *pwo-l-kkeya* (presumptive))
 baby look-Declarative
 'Baby (I) will look at it.'

subject agreement (Deen 2002). An RI phenomenon has also been identified for children acquiring languages that do not have an infinitive construction. In Modern Greek, for example, a bare subjunctive/perfective is reported to be the RI analogue (Varlokosta, Vainikka and Rohrbacher 1996; Hyams 2002).

In (7d-e), the default mood marker -e (-a) is 'erroneously' employed in the context where the specific propositive marker -ca and the presumptive marker -l-kkeya should be used in the adult Korean.

Kim and Phillips (1998) analyze the V-e form as an RI-analogue form, as the sentences containing this verbal form have some of the typical properties of Root Infinitives given in (5). First, the V-e form is not marked for tense at a very early stage. In adult Korean, the tense morpheme -ess is obligatory to express completed events as the contrast between (8a) and (8b) indicates. The Korean-acquiring child from 2;02 through 2;03, however, did not use the past-tense morphemes even in the obligatory contexts, as exemplified in (9).

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(8) a. mek-ess-ta (past)
eat-Past-Decl
'I ate.'
b. mek-e (present)
eat-Decl
'I eat.'

(9) *enni ka-(a) (2 yrs)
sister go-(Question)
Intended meaning: 'Did sister go?'
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Second, the V-e form did not co-occur with a nominative Case marker, a tense-related item in the child utterances.³ In adult Korean, nominative Case markers can be dropped in discourse-licensing context as in (10), while they cannot in the scrambled sentences as shown in (11).

(10) emma-(ka) pap-ul mek-ess-e (SOV)
mom-Nom meal-Acc eat-Past-Decl
'Mommy ate the meal.'

In a number of European languages, T- or C-related elements do not co-occur with RIs (Rizzi 1993/1994; Wexler 1994).

(11) pap-ul emma-*(ka) mek-ess-e (OSV)

meal-Acc mom-Nom eat-Past-Decl

'Mommy ate the meal.' (Kim and Phillips 1998)

The child, however, dropped a nominative Case marker even in the scrambled sentence or the obligatory context. According to Kim and Phillips (1998), the child's mother used the nominative Case marker 50% of the time in the discourse-licensing context and 96% in the grammatically required context; the child used it only 1% in the discourse-licensing context and 0% in the grammatically required context.

RIs found around age 2 in certain European languages are known as 'Optional Infinitives' (OIs) because both tensed and tense-less verbs optionally appear in the root clause. However, the Korean-acquiring child used the default mood maker -e (-a) 100% of the time in the full range of environments. All the verbs the Korean-acquiring child produced at the age of 2;02 and 2;03 were associated with the mood marker -e, and after the age of 2;04 other mood markers, such as -ta and -ca, started to appear in the production.

Murasugi, Fuji and Hashimoto (2007), Murasugi and Fuji (2008), Murasugi, Nakatani and Fuji (2009), Murasugi and Nakatani (2013), among others, based on analyses of Sumihare (Noji 1973-1977) and their own longitudinal studies, also argued that (i) there is an RI-analogue stage in Japanese,⁵ (ii) the form in question is the past-tense form V-ta and/or mimetics (sometimes associated with -ta/-sita), (iii) the stage is found much earlier than in European languages, i.e., even at one year of age, and the erroneous verbs with non-finite form are not found with the two-year-old Japanese-

In German, while children produce erroneous non-finite verbs in matrix clause as in (ia) during the RI stage, they also produce adult-like finite verbs as in (ib) (Wexler 1994).

⁽i) a. Thorsten das haben[-finite]. (2;1)
Thorsten that have-INF
'Thorsten have that.'

b. Mein hubsauber hat[+finite] tiere din. (2;1)
my helicopter has animals in it

'My helicopter has animals in it.'

Our results are consistent with Sano (1995) and Kato et al. (2003) in that the erroneous verbs with non-finite form are not found with the two-year-old Japanese-speaking children.

speaking children, and (iv) the properties given in (5) are found in the Japanese RI analogues.

- (12) a. Atti. Atti. i-ta. (S: 1;06) (irrealis/volition) (adult form: *ik-u*, or *ik-e*) there there go-Past
 'I want to go there/ Go there.'
- b. Tii si-ta. (S: 1;07) (irrealis/volition) (adult form: si-ta-i) mimetics (pee) do-Past
 'I want to pee.'
 - c. byuuuu, byuuuu. (Y: 1;08) (irrealis/volition) (adult form: *si-te-hosi-i*) mimetics mimetics 'You draw a picture for me, please.'

Noji (the observer) describes that *i-ta* in (12a) means *ik-u* (go-Pres) while Sumihare used the form *i-ta*, because Sumihare could not say *ik-u* (Noji 1973-1977 I: 195).⁶ Noji also writes important comments for (12b), which convinces us of the Modal Reference Effects given in (5c) at the early stage of Japanese acquisition: Sumihare used *tii-si-ta* when he wanted to pee, or in a volition context. (See Murasugi and Fuji (2008) for details.) (12c) is an example indicating that a bare onomatopoeia is used as an RI analogue given in Murasugi and Nakatani (2013).

Despite the fact that RI analogues produced by Japanese-speaking children apparently look like a finite verb, they are actually used in a volitional context, and show the morpho-syntactic and semantic properties salient in RIs as shown in (5), repeated below.

- (5) a. RIs are non-finite verbs in root contexts.
 - b. At the RI stage, few T-related/C-related items are found.
 - c. RIs occur in modal contexts (the Modal Reference Effects (MREs)).

The context for (12a) is the following: Sumihare's father (Noji, the observer) went out for a walk with his son on his back. Noji was trying to get back home, but Sumihare pointed in a different direction and produced a bare adverbial 'atti (there)' twice, followed by a V-ta form, 'atti i-ta (there go-Past)'.

d. RIs are restricted to event-denoting predicates (the Eventivity Constraint).
 (See also Deen 2002; among others.)

The Tense- and Complementizer-related items, such as nominative Case marker and WH-questions, do not co-occur with RI analogues, and the surrogate infinitives, for example, are produced to express the children's intention, desire, or volition, in various irrealis modal contexts as Hoekstra and Hyams (1998) suggested. It is only after the productive conjugation of verbs with tense gets started appearing in the natural production that the nominative Case markers and the WH-questions associated with verbs also appear in the child production. (See Okubo (1975) for the empirical evidence from longitudinal observational study for this hypothesis.)

Now, an important question is left unanswered. That is, why is it the case that children go through the RI (analogue) stage? In the next section, let us reconsider the mechanism of RI phenomenon, and discuss the implications for the Minimalist Theory.

4. The Acquisition of ϕ -feature and the Implications for Minimalist Theory

Why do children go through the RI (analogue) stage? Rizzi (1993/1994) proposes the Truncation Hypothesis, which states that the child structure of RIs can be truncated, different from the adult one. That is, the child phrase structure can be smaller than the adult phrase structure at the RI stage, as shown in (13), and children in the RI stage may produce a truncated structure smaller than TP, and hence, CP is also missing then. The data given in the present paper is not in contradiction with the Truncation Hypothesis. Japanese-speaking children, too, even at the age of one, naturally and voluntarily build up a small structure missing tense and agreement with the default (surrogate) verbal form of their language to express 'imperative'. The RI-analogue verb forms lack 'tense' when there is no Nominative marker on the nominal elements associated with the verbs, and no C-related items co-occur with the RI-analogue forms in the natural production.

Japanese-type RI analogues are different from the English-type RIs in the sense that they are not Optional-Infinitive (OI). To put it in another way, English-type RIs produced at around the age 2 are different from Japanese-type RI analogues in the sense that they are optionally 'correct' in both the verb conjugation and the Case markers on the subjects.

The lack of functional elements during the OI stage around age 2 where the non-finite verb form appears optionally in a root clause can also be naturally explained by Schütze and Wexler's (1996) AGR/TNS Omission Model (ATOM): Children in the OI stage omit either AGR or TNS or neither. Hence, subjects are sometimes erroneously Case-marked as in 'Her too cold (2;01)' (Pierce 1992) and 'Him is bear (3;03)' (Huxley 1970), but sometimes are adult-like. In fact, ATOM explains the fact that non-nominative-Case-marked subjects alternate with subjects marked by the nominative Case in English-speaking children during the OI stage, but only when the (main) verb is non-finite. When the verbs show agreement, only subjects marked by nominative Case occur, and this follows from ATOM. Furthermore, as Wexler (2000) notes, by assuming that children know the default Case form of their language (e.g., non-nominative Case for English/French, nominative Case for Dutch/German), ATOM explains why Dutch and German children almost never produce non-nominative Case-marked subject, even when an infinitive appears in the root clause.

Now, let us suppose that ATOM, the hypothesis which states that children in the OI stage omit either AGR (agreement) or TNS (tense), or neither, can be reinterpreted in

more recent linguistic theory as saying that the child's system of ϕ -feature agreement is different from the adult one.

Chomsky (2013), as part of his proposal of Minimalist program, proposes that the operation Merge, which combines two elements α and β into $\{\alpha, \beta\}$, a part of Universal Grammar, is minimally required for language. This operation must accompany an algorithm that specifies the nature of the formed object. For instance, when a verbal element and a nominal element form a constituent, information must be provided as to whether the constituent is verbal (VP) or nominal (NP). In the labeling process, ϕ -feature agreement plays a crucial role, and Case is necessary for ϕ -feature agreement. Saito (2016) schematizes the labeling algorithm as shown in (14). ' \Rightarrow ' in (14) means 'requires'.

(14) Merge \rightarrow Labeling $\rightarrow \phi$ -feature agreement \rightarrow Case (Saito 2016)

Saito (2016) raises the question of how this algorithm works for languages such as Japanese that lack ϕ -feature agreement, and attempts to explain why it is the case that English, for example, does not allow DP scrambling or multiple subjects as opposed to Japanese. In order to provide an answer to the questions given above, he proposes that the Japanese Case is an anti-labeling device. That is, in such languages as Japanese, Case marker serves as anti-labeling device that makes a constituent invisible for the labeling, and that is why the DP scrambling and multiple subjects are allowed in such languages.

Given Saito's (2016) analysis, we might expect that English-acquiring children in the OI Stage, who have a different system of ϕ -feature agreement from the adult one, 'erroneously' scramble DPs just like adult Japanese. The expectation seems to be, actually, met.

It has been pointed out since 1960s that English-acquiring children at around 18-24 months sometimes produce the strings like (15).

- (15) a. Book read (meaning 'read book') (Miller and Ervin 1964)
 - b. Balloon throw (meaning 'throw balloon') (Gia 1;07) (Bloom 1970)
 - c. Paper find (meaning 'find paper') (Adam 2;03) (Brown et al. 1968)

- d. Paper write (meaning 'write paper') (Adam 2;03) (Brown et al. 1968)
- e. Kimmy kick (meaning 'kick Kimmy') (Kendall 1;11) (Braine 1976)

Powers (2000: 95) also reports that English-acquiring children temporarily produce scrambled sentences as shown in (16), while scrambled sentences are ungrammatical in the adult grammar.

- (16) a. doggie sew (OV) (Kendall 1;10)
 - b. book read (OV) (Susan 1;10)
 - c. Mommy hit Kendall (OVS) (Kendall 1;10)

If the very young English-speaking children produce the scrambled sentences, then, we might expect that OI stage is the one where an adult-like system of 'proper' ϕ -feature agreement is not fully acquired yet, and hence, Labeling is functioning in a way different from the target grammar's use of ϕ -feature agreement. That is, children seem to be free to project unattested hypotheses based on their innately endowed knowledge, and in the course of language acquisition, there are intriguing cases where English-acquiring children fail to match their hypothesis to the input of the target language, thereby producing the 'erroneous' scrambled sentences.

Note here that Saito's (2016) proposal is that DPs with suffixal Case have an antilabeling property, which in turn makes scrambling possible in languages such as Japanese. In other words, although scrambling of αP to TP creates the configuration $\{\alpha P, TP\}$, which is problematic for the labeling algorithm, the configuration, in fact, is not problematic in languages with suffixal Case because αP has an anti-labeling property, and hence, the label of $\{\alpha P, TP\}$ is uniquely determined as TP.

Here, an important question arises: Do the very young English-speaking children who produce the 'erroneous' scrambled sentences have a case system different from the adult one? One possible answer to the question is that those English-speaking children initially assume that the target language may have the system of suffixal Case just like Japanese does, and hence, DPs can be scrambled. From the learnability point of view, however, it may not be problem-free to conjecture that it is only at a later stage do the

children notice that their language does not have the system of the suffixal Case and reset the value to system of the abstract Case based on the positive evidence available. Another possible answer would be, then, that very young children, who are not still aware of the exact system of Labeling, may create the 'unanalyzed' sentence, grammatical or ungrammatical in the target language, where a nominal phrase and the predicate are semantically put together in the prediactaion relationship. In other words, those very young children producing a phrase composed of a nominal element and the prediate do not know how the Labeling exactly takes place in the target language, and hence, there is no reason for the αP to be barred from being scrambled to the 'sentence'-initial position. That is, because nothing prevents the αP from being scrambled to the sentence-initial position, children may optionally produce such 'erroneous' strings as (15) and (16) during the stage where ϕ -feature agreement is not still adult-like.

If so, then, our study would suggest that the very young children have knowledge of the head-complement relationship, the basic word order, and the agglutinative morphological properties of the target language, while the mechanism of Labeling in the target language is still under construction at around 2 of age. The complete system of Labeling of the target language is attained only after the stage of RI (analogue) when the properties of ϕ -feature agreement in the target language are 'acquired'.

5. Conclusion

There is an RI (analogue) stage in child language, although the forms are not necessarily infinitives. The RI analogues in Asian languages share the properties of RIs in European languages insofar as tense is underspecified, and the typical Tense features (e.g., nominative Case marker) and the verb conjugation are not observed.

In this paper, we argued that the insights found in the pivot-open grammar in 1960s can be recaptured by the hypothesis of the Very Early Parameter Setting proposed by Wexler (1996, 1998) and the cross-linguistic analyses of RIs held in these 30 years. We also suggested that the insights of ATOM, a model proposed for an OI stage can be also naturally re-explained within Minimalist Theory. The hypothesis entertained here is that the ϕ -feature agreement during the OI stage is in part like that of adult Japanese, and

hence, DP scrambling, which is not allowed in the adult English grammar, is also found in the English-acquiring children's utterances during the OI stage.

Although a more detailed descriptive analysis is required, the proposal in this paper is at least consistent with the hypothesis that while child grammars may contain processes that are not present in the target grammar, they abide by the same universal constraints as adult grammars, and the intermediate acquisition processes which do not apparently conform to the target language have direct correlations in other possible adult languages.

The non-adult grammatical behavior of very young children is relevant for the long debate about the innate knowledge of grammar. If the ways where child and adult grammars can differ are restricted to ways in which adult grammars can differ from each other, then this provides support for the innateness of Universal Grammar.

(Proofreader: Liao An-ting)

References

- Aljenaie, Khawla. "The Emergence of Tense and Agreement in Kuwaiti Children Speaking Arabic," *Reading Working Paper in Linguistics*, 4, 2000, pp. 1-24.
- Blom, Elma and Frank Wijnen. "How Dutch Children's Root Infinitives Become Modal," in S. Catherrine Howell, Sarah A. Fish and Thea Keith-Lucas (eds.), *Proceedings of the 24th Annual Boston University Conference on Language Development* (BUCLD). Somerville, MA: Cascadilla Press, 2000, pp. 128-139.
- Bloom, Lois. Language Development: Form and Function in Emerging Grammars. Cambridge, MA: MIT Press, 1970.
- Bohnacker, Ute. "Determiner Phrases and the Debate on Functional Categories in Early Child Language," *Language Acquisition*, 6, 1997, pp. 49-90. doi: 10.1207/ s1532 7817la0601 3
- Braine, Martin D. S. "On Learning the Grammatical Order of Words," *Psychological Review*, 70.4, 1963, pp. 323-348. doi: 10.1037/h0047696
- . "Children's First Word Combinations," *Monographs of the Society of Research in Child Development*, 41.1, 1976, pp. 1-104. doi: 10.2307/1165959
- Brown, Roger. *A First Language: The Early Stages*. Cambridge, MA: Harvard University Press, 1973. doi: 10.4159/harvard.9780674732469
- Brown, Roger, Courtney Cazden, and Ursula Bellugi-Klima. "The Child's Grammar from I to III," in John P. Hill (ed.), *Minnesota Symposia on Child Psychology*, vol. 2. Minneapolis: University of Minnesota Press, 1968, pp. 28-73.
- Chomsky, Noam. Lectures on Government and Binding. Dordrecht: Foris, 1981.
- . "Problems of Projection," *Lingua*, 130, 2013, pp. 33-49.
- Coene, Martine, Helena Taelman, Larisa Avram and Steven Gillis. "Early Bare Infinitives are Universally Non-finite...But Not Always Infinitives!," Paper presented at the 5th International Council for Central and East European Studies, 26 July 2005, Berlin: Humboldt University of Berlin.
- Deen, Kamil Ud. "The Omission of Inflectional Prefixes in the Acquisition of Nairobi Swahili," Ph.D. Dissertation, Los Angeles, CA: UCLA, 2002.
- Guasti, Maria Teresa. "Verb Syntax in Italian Child Grammar: Finite and Non-finite Forms," *Language Acquisition*, 3, 1993/1994, pp. 1-40. doi: 10.1207/s15327817la 0301_1

- Haegeman, Lilliane. "Root Infinitives, Tense, and Truncated Structures in Dutch," Language Acquisition, 4, 1995, pp. 205-255. doi: 10.1207/s15327817la0403_2
- Hoekstra, Teun and Nina Hyams. "Aspects of Root Infinitives," *Lingua*, 106, 1998, pp. 81-112. doi: x10.1016/S0024-3841(98)00030-8
- Huxley, Renira. "The Development of the Correct Use of Subject Pronouns in Two Children," in G. B. Flores d'Arcais and W. J. Levelt (eds.), Advances in Psycholinguistics. Amsterdam: North-Holland, 1970, pp. 141-165.
- Hyams, Nina. "Clausal Structure in Child Greek: A Reply to Varlokosta, Vainikka and Rohrbacher and a Reanalysis," *The Linguistic Review*, 19.3, 2002, pp. 225-269. doi: 10.1515/tlir.2002.001
- _____. "The Acquisition of Inflection: A Parameter-setting Approach," Language Acquisition, 15, 2008, pp. 192-209. doi: 10.1080/10489220802162001
- Kato Sachiko, Sato Yumi, Chikuda Yukiko, Miyoshi Rituko, Sakai Yumi and Koizumi Masatoshi. "Root Infinitives': Nihongo karano Kensho ('Root Infinitives': From the Perspectives of Japanese)," *Tohoku University Linguistics Journal*, 12, 2003, pp. 113-127.
- Kim Meesook and Collin Phillips. "Complex Verb Constructions in Child Korean: Overt Markers of Covert Functional Structure," in Annabel Greenhill, Mary Hughes, Heather Littlefield and Hugh Walsh (eds.), *Proceedings of the 22nd Annual Boston University Conference on Language Development* (BUCLD). Somerville, MA: Cascadilla Press, 1998, pp. 430-441.
- Krämer, Irene. "The Licensing of Subjects in Early Child Language," *MITWPL*, 19, 1993, pp. 197-212.
- Miller, Wick and Susan Ervin. "The Development of Grammar in Child Language," Monographs of the Society for Research in Child Development, 29.1, 1964, pp. 9-34. doi: 10.2307/1165752
- Murasugi Keiko. "The Linguistic Constellations: Relating Phenomena with Parameter Setting," Invited talk presented at GLOW in Asia VIII, 14 August 2010, Beijing: Beijing Language and Culture University.
- Murasugi Keiko and Fuji Chisato. "Root Infinitives: The Parallel Routes the Japanese- and Korean-speaking Children Step in," Paper presented at Japanese/Korean Linguistic Conference 18, 13 November 2008, New York: The City University of New York. (Paper appeared in *Japanese/Korean Linguistics*, 19, 2011, pp. 527-541.)

- Murasugi Keiko, Fuji Chisato and Hashimoto Tomoko. "What's Acquired Later in an Agglutinative Language," Paper presented at GLOW in Asia VI, 27 December 2007, Hong Kong: The Chinese University of Hong Kong.
 - Murasugi Keiko and Nakatani Tomomi. "Three Types of 'Root Infinitives': Theoretical Implications from Child Japanese," *Japanese/Korean Linguistics*, 20, 2013, pp. 263-280.
 - Murasugi Keiko, Nakatani Tomomi and Fuji Chisato. "The Roots of Root Infinitive Analogues: The Surrogate Verb Forms Common in Adult and Child Grammars," Poster presented at the 34th Annual Boston University Conference on Language Development (BUCLD), 7 November 2009, Boston: Boston University. (Paper appeared in the BUCLD 34 Proceedings Online Supplement, 2010, pp. 1-12.)
- Noji Junya. *Yooji no Gengoseikatu no Zittai (The Language Use in Child Age)*, I-IV. Tokyo: Bunka Hyoron Syuppan, 1973-1977. (Also available in CHILDES as NOJI corpus.)
 - Okubo Ai. Yooji Gengo no Hattatsu (Child Language Development). Tokyo: Tokyodo, 1967.
 - _____. Yooji no Kotoba to Chie (Child Language and Knowledge). Tokyo: Ayumi Shuppan, 1975.
 - Pierce, Amy. Language Acquisition and Syntactic Theory: A Comparative Analysis of French and English Child Grammars. Dordrecht: Kluwer, 1992.
 - Poeppel, David. "Commentary on Chapter 10," in Mabel L. Rice (ed.), *Toward a Genetics of Language*. Hillsdale, NJ: Erlbaum, 1996, pp. 291-296.
 - Powers, Susan M. "Scrambling in the Acquisition of English?," in Susan M. Powers and Cornelia Hamman (eds.), *The Acquisition of Scrambling and Cliticization, Studies in Theoretical Psycholinguistics*, vol. 26. Dordrecht: Kluwer, 2000, pp. 95-126. doi: 10.1007/978-94-017-3232-1 5
 - Radford, Andrew. Syntactic Theory and the Acquisition of English Syntax. Oxford: Blackwell, 1990.
 - Rasetti, Lucienne. "Optional Categories in Early French Syntax: A Developmental Study of Root Infinitives and Null Arguments," Ph.D. Disseration, Genéve, Switzerland: Université de Genéve, 2003.
 - Rizzi, Luigi. "Some Notes on Linguistic Theory and Language Development: The Case of Root Infinitives," *Language Acquisition*, 3, 1993/1994, pp. 371-393. doi: 10.1207/s15327817la0304_2

- Saito Mamoru. "(A) Case for Labeling: Labeling in Languages without φ-feature Agreement," *The Linguistic Review*, 33, 2016, pp. 129-175. doi: 10.1515/tlr-2015-0017
 - Sano Tetsuya. Roots in Language Acquisition: A Comparative Study of Japanese and European Languages. Los Angeles, CA: UCLA dissertation, 1995.
 - Sano Tetsuya and Nina Hyams. "Agreement, Finiteness, and the Development of Null Arguments," in Mercè Gonzàlez (ed.), *Proceedings of the 24th Annual Meeting of the North East Linguistic Society* (NELS). Amherst, MA: University of Massachusetts, 1994, pp. 544-558.
 - Schütze, Carson T. and Kenneth Wexler. "Subject Case Licensing and English Root Infinitives," in Andy Stringfellow, Dalia Cahana-Amitay, Elizabeth Hughes and Andrea Zukowski (eds.), *Proceedings of the 20th Annual Boston University Conference on Language Development* (BUCLD). Somerville, MA: Cascadilla Press, 1996, pp. 670-681.
 - Varlokosta, Spyridoula, Anne Vainikka and Bernhard Rohrbacher. "Root Infinitives without Infinitives," in Andy Stringfellow, Dalia Cahana-Amitay, Elizabeth Hughes and Andrea Zukowski (eds.), *Proceedings of the 20th Annual Boston University Conference on Language Development* (BUCLD). Somerville, MA: Cascadilla Press, 1996, pp. 816-827.
 - Wexler, Kenneth. "Optional Infinitives, Head Movement, and Economy of Derivations," in David Lightfoot and Norbert Hornstein (eds.), *Verb Movement*. Cambridge, MA: Cambridge University Press, 1994, pp. 305-335.
 - . "The Development of Inflection in a Biologically Based Theory of Language Acquisition," in Mabel L. Rice (ed.), *Toward a Genetics of Language*. Mahwah, NJ: Lawrence Erlbaum, 1996, pp. 114-144.
 - Explanation of the Optional Infinitive Stage," *Lingua*, 106, 1998, pp. 23-79. doi: 10.1016/S0024-3841(98)00029-1
 - . "Three Problems in the Theory of the Optional Infinitive Stage: Stage/Individual Predicates, Eventive Verbs and Finite Null-Subjects," in Roger Billerey and Brook Daniellee Lillehaugen (eds.), *Proceedings of the 19th West Coast Conference on Formal Linguistics* (WCCFL). Somerville, MA: Cascadilla Press, 2000, pp. 560-573.

幼兒早期話語研究及其對微言主義的意涵

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摘 要

本文探討以日語為母語之幼兒在語言習得過程中所犯的語誤,研究焦點放在兩歲幼兒在詞序上所產生的語誤。研究的結果指出,幼兒在二詞階段 (two-word stage) 與電報式言語階段 (telegraphic speech) 時,即已具備母語中詞組及構詞的相關知識;然而其對詞組性質及詞組互動的認識,則尚在成長建構之中。透過對幼兒的詞序語誤進行分析,本文也修正了近五十年來學界對兩歲幼兒語言習得的認知與研究。

關鍵詞: 非限定主句, 類非限定主句, 語言習得之二詞階段, 微言主義, 變序, 普遍語法

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