Root Infinitives: The Parallel Routes the Japanese- and Korean-speaking Children Step in

Korean and Japanese are head-final agglutinating languages. A lot of commonalities and differences in the syntax of the two languages have been discovered, but few theoretical cross-linguistic analyses have been made for the intermediate acquisition stages. In this paper, we present a case study on the phenomenon of Root Infinitives (=RIs), widely examined in the European languages. We argue, based on the comparative analysis of two longitudinal studies, that what parallels RIs in Korean and Japanese reflects the nature of agglutinative language: Korean-speaking children employ the default mood marker *–e* (Kim and Phillips 1998); Japanese-speaking children employ past-tensed verb form, for the RIs (Murasugi, Fuji and Hashimoto 2007). Our study aims to analyze the commonalities and differences observed in the intermediate acquisition stages in Japanese and Korean, thereby providing some independent evidence for the syntactic analysis of the languages from the viewpoint of language acquisition.

Root Infinitives are the default bare verb forms which children (around two years old) use, while they are not possible in their adult grammar, as shown in (1). This type of intermediate stage has been found in the acquisition of various languages, and their basic properties have been extensively examined. [*1]

(1) a. *Peter bal pakken (2;1) (Dutch)
Peter ball get-Inf 'Peter wants to get the ball.' (Blom and Wijnen 2000)
b. *That truck fall down (2;0) (English) (Blom 2007)

In Japanese and Korean, bare verb stems without being supported by markers (morphemes) are impossible. Hence, it is natural to expect no RI stage to be observed in the language acquisition (Sano 1995).

Kim and Phillips (1998), however, argue that the overuse of the erroneous mood marker *–e* in the early production of a Korean child parallels the RI forms observed in other languages. In adult Korean, the mood marker *–e* functions as a default mood marker, in the respect that it is in free alternation with more specific mood markers. And the child used the default mood marker *–e* in the full range of environments.

(2) a. mul cwu-e (early two) b. i tak-e (early two)
water give-Imper 'give water' *teeth brush-Decl* '(I'm) brushing the teeth.'

(3) a *mek -e emma (early two) (adult form: mek-ca (propositive))
eat-Decl mommy 'Let's eat, Mommy.'
b. *ayki pwo-a (early two) (adult form: pwo-i-kkeya (presumptive))
baby look-Decl 'Baby (I) will look at it.' (Kim and Phillips 1998)

As in (2), the child always attached the default form *-e* to the verb stems in declarative, imperative, and interrogative sentences, where either *-e* or another specific mood morpheme is possible. Furthermore, in the ungrammatical contexts as in (3), where adults must use propositive morpheme *-ca* or presumptive *-i-kkeya*, the child at the age of early two consistently employed the default mood marker *-e* (*-a*) instead.

As for Japanese, Murasugi, Fuji and Hashimoto (2007) argue that the past tensed verb forms (V-*ta*) in the late one-year old of age parallels the RI forms. In the stage, just like other languages, finite *be* (*da/zya*) and C-related elements (e.g., Complementizer and *wh*-phrases) are <u>not</u> found[*2] and the RIs semantically denote irrealis meaning as in (4). MFH (2007) convincingly show that inflectional features are left unrealized in this stage, because no independent spell-out is available.

(4) a. Atti i **-ta** (=it-ta) (1;7) (intention)
there go-Past 'I want to go there.'
b. Meen **-ta** (1;7) (future)
onomatopoeia -Past '(Mommy) will say 'meen' .' (MFH 2007)

This paper provides supporting evidence for the RI stage for Korean and Japanese. Mainly based on the quantitive analysis of natural production data of a Japanese-speaking child, Sumihare (Noji Corpus 1974-1977), from 0;6 through 6;0, we support MFH's findings: Child Japanese (age 1;5-1;10) falls in the RI stage group only with the past tense verbal form associated with *–ta*, and with no present form (0%) nor perfect form (0%).

We then provide supportive evidence for Kim and Phillips (1998). We first argue that Japanese RIs, like Korean, have <u>common</u> properties with RIs in other languages: (i) they are not marked for tense and (ii) the proportion of RIs declines gradually over time. And Japanese RIs, like Korean, have <u>different</u> RI properties from other European languages as well. First, the RI in these languages does not have a specific infinitival form of the verb unlike German, Dutch and French. Second, while RIs (default verbs) alternate the non-default forms in a lot of languages, the Korean and Japanese RI forms are initially used 100% of the

time, i.e., the default mood marker *-e* (Korean) or the past-tensed form (Japanese) is consistently produced (76% correct; 14% for the meaning of present; 2.2 % for perfect, 2.8% for irrealis, 5% for other meanings). Third, correlation between the presence of RIs and that of null subjects found in French (Krämer 1993), Dutch (Weverink 1989, Krämer 1993), German (Poeppel and Wexler 1993), Danish (Hamann and Plunkett 1997), does not hold for Japanese. The usage of null-subjects declines gradually over time, but there is no correlation between the rate of null-subjects and the use of RI forms.[*3]

Based on the comparative analysis of Kim and Phillips (1998) and ours, we argue in detail that RIs in Korean and Japanese reflect the syntactic properties of the agglutinating and discourse pro-drop languages. One of the implications of this paper for adult syntax would be that the default verb form in adult Japanese is past-tensed verb form. In fact, there are some pieces of evidence for this analysis: Japanese imperatives are expressed by past-tensed verb forms as well as by a specific morpheme as in (5), and the two past-tensed verb forms, but not other forms, are conjoined in the idiom-like expression as in (6).

(5) a. kaer-e 'go back (somewhere)' b. kaet-ta kaet-ta 'go back, go back (somewhere)'
go back-Imperative *go back-Past* *go back-Past*

(6) a. tabe-ta ri non-da ri sita
eat-Past *drink-Past* *di*d 'We ate, and we drank.'
b. it-ta ri ki-ta ri de taihen da
go-Past *come-Past* *by troublesome* *Copula* 'It is troublesome (of you) to go back and forth.'

Discussing further examples and analysis, we propose that there <u>is</u> RI stage in the two languages, though the verb forms are not actual infinitives nor bare stems unlike a lot of European languages. Children, even in 2 years of age, step in the verb system, picking up the default form, i.e., the mood marker *–e* in Korean, and the past-tense verb forms in Japanese, and proceed choosing the values of the parameters of each language.

The intermediate acquisition stages show the possible parametric values constrained by Universal Grammar. A lot of values, such as head-final, discourse pro-drop, argument-ellipsis, *etc*, are shared by the two languages, and in the language acquisition also, the parallel errors Japanese- and Korean-speaking children make are found. For example, those children at 2- to 5- years old overgenerate complementizer for the complex NPs. (Kim 1987, Lee 1991, Murasugi 1991, Murasugi and Hashimoto 2004, among others.)

(7) a. Emityan-ga kaita (*no) sinderera 'Cinderella that Emi drew'
Emi -Nom drew Cinderella (Murasugi 1991)
b. Acessi Otopai tha –nun (*kes) soli- ya '(This) is the sound that a man is riding a motorcycle'
uncle motorcycle ride Pres sound be+Dec (Kim 1987)

Murasugi (1991) argues that the parallelism reflects the common parametric value, i.e., the structure of the prenominal sentential modifiers in Japanese and Korean is TP, not CP. The view from the window of language acquisition would foil differences and commonalities among languages. Our study would imply that RI produced even at around two years of age shows the peculiarity of the verb system of the target language.

[*1] See Weverink (1989), Platzack (1992), Guasti (1993/1994), Wexler (1994), Rizzi (1994), Sano and Hyams (1994), Phillips (1995, 1996), Hoekstra and Hyams (1998), Blom and Wijnen (2000), among others.
[*2] See Crisma (1992), Rizzi (1994), Haegeman (1995), and MFH (2007) for the analysis of the absence of WH-element at the RI stage, and Schütze (2004) or the analysis of finite *be* vs. infinite *be*.
[*3] Linear regression for rate of null-subjects (treating individual utterances as data points): default verb marker: intercept (age 2;2) 88.5% (s.e. 6.7%), slope (per month) 12.3% (s.e. 1.5%): non-default verb marker: intercept (age 2;2) 97.8% (s.e. 22.4%), slope (per month) 14.4% (s.e. 3.9%) for Korean (Kim and Phillips 1998), and we obtained parallel results with more gradual regression rates for Japanese.

Selected References

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