

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

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1. Introduction*

In Japanese, bare stems cannot stand alone without tense or aspect morphemes, as shown in (1) and (2).¹

(1) a. *tabe- 'to eat' b. *suwar- 'to sit'

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¹Abbreviations used in this paper are as follows: ACC=accusative Case, ASP=aspect morpheme, DAT=dative Case, DECL=declarative, IMP=imperative, INF=infinitive, MOOD=mood marker, NEG=negation, NOM=nominative Case, PRES=present, PAST=past, PROG=progressive, PROP=propositional, Q=question, RI=root infinitive, VENSTAGE=Very Early Non-finite (Verb) Stage.

- (2) a. *tabe-ru/-ta* eat-PRES/-PAST '(I) eat/ate.'
 b. *tabe-te-i-ru/-ta* eat-ASP-PRES/-PAST '(I) have/had eaten.' / '(I) am/was eating.'
 c. *tabe-te* eat-IMP (preverbal) '(Please) eat.'
 d. *tabe-ta-i* eat-want-PRES '(I) want to eat.'

The verb stem *tabe-* (to eat) is followed by the present-/past-tense morphemes as in (2a), and it is followed by the aspectual morpheme *-te-i* to indicate either the ongoing process or the result state of the event as in (2b).² For requests or imperatives, *-(t)e* forms are employed as in (2c), while for volition, *-(t)a-i* forms are employed as in (2d).

The complex conjugations, however, are not produced at the very early stage of Japanese acquisition. This paper argues that there is a Root Infinitive analogue (Very Early Non-finite (Verb)=VEN) stage in Japanese acquisition, which parallels the Korean RI analogue stage proposed by Kim and Phillips (1998). Although Japanese and Korean RI analogues share central properties with RIs in other languages such as Dutch and English, they have some specific properties attributed to the lack of agreement, and the agglutinating and discourse pro-drop properties of Japanese and Korean.

2. The RI Analogue in Korean (Kim and Phillips 1998)

Kim and Phillips (1998) argue, based on the longitudinal study of a Korean-speaking child, Jiyoung (2;2-2;7), that the overuse of default mood inflection *-e* corresponds to RIs in other languages. In Korean, like Japanese, bare verb stems without being supported by morphemes are impossible.

- (3) a. *mek- 'eat' b. *anc- 'sit'
 (4) a. *mek-e* eat-DECL 'I eat.' b. *mek-ca* eat-PROP 'Let's eat.'

In Adult Korean, the mood marker *-e* functions as a default mood marker (or speech style particle). It freely alternates with more specific mood markers, as shown in Table 1.³

Table 1: Mood Morphemes in Adult Korean

Declarative	Interrogative	Imperative	Propositive
<i>-ta</i>	<i>-ni</i>	<i>-ia</i>	<i>-ca</i>
	<i>-e</i>		

² The abbreviated *V-teru/-teta* forms are used as colloquial expressions in adult Japanese: *tabe-te-ru/-ta* (eat-ASP-PRES/-PAST) '(I) have/had eaten.' / '(I) am/was eating.'

³ According to Lee (1994) cited by Kim and Phillips (1998), the ratio of *-e* and other mood morphemes used in the informal discourse in Adult Korean, was 58:42.

According to Kim and Phillips (1998), while Jiyoung used the default mood marker *-e* in imperative, declarative, and interrogative sentences in the adult way at around the age of two in (5), she also used the form in some ungrammatical contexts at 2;2 through 2;3, as shown in (6).

- (5) a. *mul cwu-e* (2yrs) water give-IMP 'give water'
 b. *i tak-e* (2yrs) teeth brush-DECL '(I'm) brushing the teeth.'
 c. *enni ka-(a)* (2yrs) sister go-Q 'Did sister go?'
 (6) a. *mek-**e** emma (2 yrs) (adult: *mek-ca* (propositive)) eat-DECL mommy 'Let's eat, Mommy.'
 b. *ayki pwo-**a** (2 yrs) (adult: *pwo-l-kkeya* (presumptive)) baby look-DECL 'Baby (I) will look at it.'

The default mood marker *-e* is overused in contexts where the specific propositive marker *-ca* and the presumptive marker *-l-kkeya* should be used in the adult grammar, as in (6a) and (6b), respectively.

Kim and Phillips (1998) analyze the *V-e* form as a RI analogue, pointing out that the form has some RI-like properties. First, the *V-e* form is not marked for tense at the very early stage.⁴ In Adult Korean, the tense morpheme *-ess* is obligatorily attached to refer to the completive events. Compare (7a) with the present tense form in (4a), repeated in (7b). Jiyoung, however, did not use past-tense morphemes even in obligatory contexts from 2;2 through 2;3. An example is given in (8).

- (7) a. *mek-ess-ta* (past) eat-PAST-DECL 'I ate.'
 b. *mek-e* (present) eat-DECL 'I eat.'
 (8) *enni ka φ -(a)* (2 yrs) sister go-(PAST)-(Q) (Intended meaning: Did sister go?)

Second, the *V-e*-form does not co-occur with a nominative Case marker.⁵ In adult Korean canonical word-order (SOV), nominative Case markers can be dropped in discourse-licensing context, while they cannot in non-canonical order.

- (9) *emma-(ka) pap-ul mek-ess-e* (SOV) mom-NOM meal-ACC eat-PAST-DECL 'Mommy ate the meal.'

⁴ RIs are considered to be some kind of disturbance of TP, which is home of both tense and EPP. (See Schütze and Wexler (1996), among others.)

⁵ It has been proposed that T or C-related elements do not co-occur with RIs (Rizzi 1993/1994, Wexler 1994). Here we assume that the nominative Case is assigned by T(tense) and hence, it is one of the T-related elements.

- (10) pap-ul emma-*(ka) mek-ess-e (OVS)
 meal-ACC mom-NOM eat-PAST-DECL 'Mommy ate the meal.'

However, Jiyoung dropped nominative Case markers even in the contexts where they are obligatory. According to Kim and Phillips (1998), her mother used the nominative Case marker 50% of the time in the discourse-licensing context and 96% in the grammatically requested context; Jiyoung used it only 1% in the discourse-licensing context and 0% in the grammatically requested context.

While optionality is one of the well-known properties of RIs,⁶ Jiyoung used the default mood marker *-e* 100% of the time in the full range of environments. All the verbs Jiyoung produced at the age of 2;2 and 2;3 were associated with the mood marker *-e*, and after the age of 2;4 other mood markers, such as *-ta* and *-ca*, started to appear.

While many studies show that there is a strong correlation between RI forms and null subjects (Krämer 1993, Poeppel and Wexler 1993),⁷ Kim and Phillips find no correlation between the use of default verb forms and null subjects. Jiyoung, at the age of 2;2, used null subjects almost 100% of the time, and the rate declines gradually over time both with the *V-e*-form and with the non-*V-e*-form. Thus, Kim and Phillips (1998) propose that the overuse of the default mood marker *-e* corresponds to RIs in other languages.

3. The Very Early Non-Finite Verb Stage in Japanese

Child grammar reflects the common properties that adult Korean and Japanese share. There is also an RI analogue (Very Early Non-finite (Verb)) stage in Japanese. (See also Murasugi, Fuji and Hashimoto 2007, Murasugi and Fuji 2008.) In this section, based on the corpus analysis of Sumihare (Noji 1973-1977),⁸ we argue that (i) there is a VEN Stage in Japanese,

⁶ While children produce erroneous non-finite verbs in matrix clause as in (a) during the RI stage, they also produce adult-like finite verbs as in (b) (Wexler 1994).

a. Thorstn das haben[-finite] (2;1) b. Mein hubsauber had[+finite] tiere din (2;1)
 T that have-INF my helicopter has animals in it
 'Thorstn have that.' 'My helicopter has animals in it.' (German)

⁷ The subject of RIs tends to be null even in some of the non-pro-drop languages. Some of the examples are drawn from German and Dutch in (a-b).

a. Hubsauber putzn (2;1)(German)
 helicopter clean-INF Context: The child is cleaning his toy helicopter with a toothbrush.

b. roeren (2;4) (Dutch)
 stir-INF Context: The child's mother is cooking oatmeal. (Krämer 1993)

⁸ Noji corpus (also available in CHILDES (MacWhinney 2000)) was chosen for this study as it contains detailed contexts for the child's utterances, which helps us to detect the intended meanings. Noji's comments as the observer are also very helpful for making generalizations.

which corresponds to the RI stage in other languages,⁹ (ii) the form in question is the past-tense form *V-ta* for Sumihare, and (iii) the stage is found earlier than in European languages, i.e., even at one year of age. We also argue that there are some properties specific to Japanese/Korean-type languages: The non-finite form is initially (at around 1;6-1;7) used 100% of the time in a full range of environments, and there is no correlation between null subjects and non-finite verb forms, as Kim and Phillips (1998) find for Korean.

Sumihare started using the past-tense form, *V-ta*, referring to a perfective event in the same way as adults at the age of one and a half.

- (11) a. Buu ki-**ta** (1;5) b. Tabe-**ta** (1;6)
 onomatopoeia come-PAST eat-PAST
 'A car came.' '(I)ate(up)(anapple).'
- c. Oti-**ta** (1;7) d. Keityan yuu-**ta** (=it-ta) (1;8)
 fall-PAST say-PAST
 '(It) has fallen.' '(She) said, Keityan.'

At around 1;6 through 1;11, however, Sumihare used *V-ta* form in different ways from adults as well. At this stage, the *V-ta* form semantically denotes the meaning of volition (desire) or request.¹⁰

- (12) a. Atti. Atti. Atti *i-ta* (1;6) (irrealis/volition) (adult form: *ik-u*, or *ik-e*)
 there there there go-PAST 'I want to go there / Go there.'
- b. Tii si-**ta** (1;7) (irrealis/volition) (adult form: *si-ta-i*)
 onomatopoeia (pee) do-PAST 'I want to pee.'
- c. Baba pai-**ta** (1;8) (request) (adult form: *pai-si-te*)
 mud onomatopoeia (throw away)-PAST 'Please throw (this) away.'

Noji (the observer) describes that *i-ta* in (12a)¹¹ means *ik-u* (go-PRES) while Sumihare uttered *i-ta*, because Sumihare could not say *ik-u* (Noji 1973-1977 I: 195). Noji also writes important comments for (12b), which convinces us of the Modal Reference Effects at the early stage of Japanese acquisition: Sumihare used *tii-si-ta* in a volition context when he wanted to pee. As for

⁹ Our results are consistent with Sano (1995) and Kato et al. (2003) with respect that the erroneous non-finite verbs are not found with the two-year-old Japanese-speaking children.

¹⁰ RI typically has a modal or irrealis meaning, expressing volition or request (Hoekstra and Hyams 1998, among others). The infinitive verb expresses the speaker's volition as in: vrachtwagen emmer doen (2;4) (Dutch) (truck bucket do-INF) Context: The speaker wants the observer to put the truck in the bucket.

¹¹ The context for (12a) is the following: Sumihare's father (Noji, the observer) went out for a walk with Sumihare on his back. Noji tried to go back home, but Sumihare pointed to a different direction and produced "Atti" (there) twice. Sumihare got frustrated and said, "Atti *i-ta*" (there go-PAST) angrily again.

(12c), Sumihare produced *pai-ta*, attaching *-ta* on the onomatopoeia *pai* (to throw away), in order to ask his mother to remove mud from a potato.

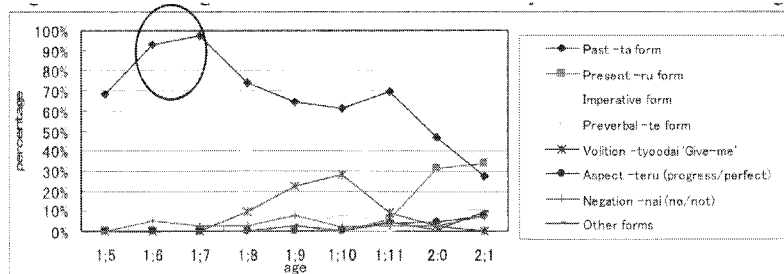
Moreover, the examples listed in (13) indicate the cases where *-ta* is used for the result state, progressive and the irrealis meaning.

- (13) a. Baba tui-**ta** (1;6) (result state)
 threads stick-PAST (adult form: *tui-te-i-ru*)
 'The thread is on the finger.'
 b. Sii si-**ta** (1;7) (progressive)
 onomatopoeia (pee) do-PAST (adult form: *sikko si-te-i-ru*)
 '(She) is peeing.'
 c. Meen-**ta** (1;7) (irrealis)
 "meen"(onomatopoeia)-PAST (adult form: *meen to i-u*)
 '(Mommy would say) "Meen".'

In (13a), Sumihare intended to tell his mother that he found a thread, *baba* (dirty), on his finger. Here, the aspectual morpheme *-te-i-ru* should be attached to the verb stem *-tui*, but he used *tui-ta*. Likewise, in (13b), the *V-ta* form instead of the *V-te-i-ru* form was used for the progressive event. In (13c), Sumihare's mother asked him what she would say if Sumihare wetted his underpants (with pee). His intended meaning was "She would say 'Meen'." Here, the present-tense form *-i-u* (to say) or the future-tense form *-i-u-daroo* are the appropriate forms, but the *V-ta* form was used instead.

As Figure 1 shows, Sumihare predominantly used the *V-ta* form almost 100% of the time at 1;6-1;7, and the rate of *V-ta* form decreases with age.

Figure 1: Percentage of Verbal Forms Produced by Sumihare at Each Stage



Note here that the modals are expressed with other forms as well. The mood morpheme *-naa*, probably the head of Mood Phrase, is attached to the *V-ta* form as well as to nominals to express Sumihare's volition in (14a) and (14b).

- (14) a. Pan-naa (1;5) bread-MOOD 'I want a piece of bread.'
 b. Sii si-ta-naa (1;7) pee do-PAST-MOOD '(I) want to pee.'

After 1;8, modal meaning comes to be frequently produced with *tyoodai*,¹² as exemplified in (15a) and (15b).

- (15) a. Tii tyoodai (1;9) pee give-me 'Please help me to pee.'
 b. Nainai tyoodai (1;10) put away give-me 'Please put this away.'

As Figure 1 shows, the rate of the past-tense form decreases in accordance with the increase of the rate of *tyoodai* (please do/give me) at the later VEN Stage, which resembles the Modal Reference Effects, where RIs receive a modal meaning with overwhelming frequency at the later stage of RIs.¹³

Importantly, even at the time when volition is expressed by *tyoodai*, the perfective and progressive meanings still continue to be expressed with *V-ta*, instead of the aspectual form *V-te-i-ru*, as shown in (16).

- (16) a. Nenne-**ta**-noo (1;9) (result state) (adult form: *si-te-i-ru*)
 sleep-PAST-MOOD '(I)'m in the bed (with Daddy).
 Context: Sumihare (the speaker) is in bed with his father.
 b. Buu maimai-**ta** (1;10) (progressive) (adult form: *si-te-i-ru*)
 airplane go around-PAST 'An airplane is going round.'

The appropriate adult form for the result state in (16a) and the progressive in (16b) would be *si-te-i-ru*, but Sumihare employed the *-ta* form instead. The fact that several types of aspect are realized with verb-*ta* when the modal meanings should be realized with different forms would indicate that MoodP is active but the AspectP is still underspecified at the VEN Stage.

Thus, in Sumihare's case, the VEN Stage starts at 1;6 with an increase of *-ta* forms, and it ends at around 1;11, when non-past *-ru* and *-teru* forms start to appear.

- (17) a. Ik-u-yo (1;11) (present) go-PRES-MOOD '(I)'ll go to (Tiiko's house).
 b. Okku a-ru-yo (1;11) (present) medicine be-PRES-MOOD 'Here is the medicine.'

¹² *Tyoodai* is the colloquial abbreviated mood auxiliary that is equivalent to *kudasai* (please-do/give-me). It is used as the main verb taking a noun complement as in (i) and as an auxiliary associated with a verb as in (ii).

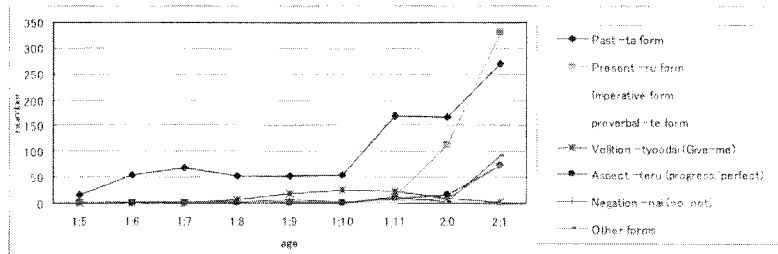
(i) Ringo-(o) tyoodai an apple-ACC give me
 'Give me an apple.'
 (ii) Hayaku si-te tyoodai quickly do-PREVERBAL please-do
 'Do (it) quickly.'

¹³ We thank Kamil Deen for pointing out this possibility at the BU Conference (2008).

- (18) a. Wanwan tyan si-teru (1;11) (result state)
dog sit do-STATE 'A dog is sitting (here).'
- b. Buranko ti-teru (2;0) (progressive)
swing do-PROG '(A scarecrow) is swinging.'

The *V-teru* form is "correctly" used to refer the result state in (18a) and the progressive in (18b). The number of each verbal form is shown in Figure 2.

Figure 2: Frequency of Verbal Forms in Sumihare's Corpus



Evidence for the VEN Stage is also found in the development of onomatopoeic expressions in Japanese. Sumihare used onomatopoeic expressions such as *pai* (discard), *sii/tii* (pee), *uun* (bowel movement), *maimai* (go around), *nainai* (put away) with a verbal meaning, and they exhibit a developmental pattern exactly parallel with other verbs. Unlike in adult usage, onomatopoeic verbs are also followed by *-ta* at the VEN Stage. The parallel developmental pattern is found between, for example, *sii/tii* (pee) and *nainai* (put away) as in (19) and (20).

- (19) a. Sii (1;4) (volition) b. Sii si-**ta**/Tii-**ta** (1;5) (past/perf)
pee 'I want to pee.' pee do-PAST/pee-PAST '(I) peed.'
- c. Sii si-**ta**-naa (1;6) (volition) d. Tii tyoodai (1;9) (volition)
pee do-PAST-MOOD pee give me
'I want to pee.' 'I want to pee.'
- e. Tii site-nai (2;1) (negation)
pee do-PREVERBAL NEG '(I) have not peed.'
- (20) a. Nainai (1;6) (volition) b. Nainai si-**ta** (1;6) (past/perfective)
put away put away do-PAST
'(I'll) put (this car) away.' '(I) put (my socks) away.'
- c. Nainai xxx -na (1;8) (voli) d. Buuwa nainai tyoodai (1;10) (voli)
put away -MOOD light put away give me
'(Daddy) put (xxx, or the bedding) away.' 'Take the bulb and put it away.'

- e. Ohasi nainai tyu-u (=su-ru)-no (2;0) (present/future)
chopsticks put away do-PRES-MOOD
'(I'll) put the chopsticks away.'
- f. Kaatyan ooton (=ohuton) nainai ti-te (2;1) (imperative)
mommy bedding put away do-IMP
'Mommy, put the bedding away.'

As in (19a)/(20a), the bare onomatopoeia is produced without any tense or mood morpheme. At around 1;6, the past tense morpheme *-ta* is attached to the onomatopoeia as in (19b)/(20b). The form is sometimes used for volition and request, and sometimes for past or perfective events (cf. (12)). (19c)/(20c) indicate that the mood morpheme *-na* also appeared at around 1;6. Then, *tyoodai* (give me/please do) for volition and request appeared at around 1;9, as shown in (19d)/(20d). Finally, the other tense or aspectual forms start to be produced after 1;11 as shown in (19e)/(20e-f).

Sumihare did not produce the onomatopoeia + *-ta* forms by merely copying his parents' forms, since our corpus analysis shows that they never produced such forms.¹⁴ Rather, he innovatively employed onomatopoeia associated with *-ta*, using them as the verbal forms at the VEN Stage.¹⁵

Just like European languages, at the VEN Stage, tense and C-related elements are not found with the non-finite *-ta* forms either.

¹⁴ Sumihare's parents did use onomatopoeic expressions followed by *suru/sita/site* (do/did/doing). However, onomatopoeia+*-ta* form were never produced by them.

a. Nenne su-ru? b. Yoo yoo sikko si-ta-ne
sleep do-PRES 'Shall we sleep?' a lot pee do-PAST-MOOD '(You) peed a lot.'

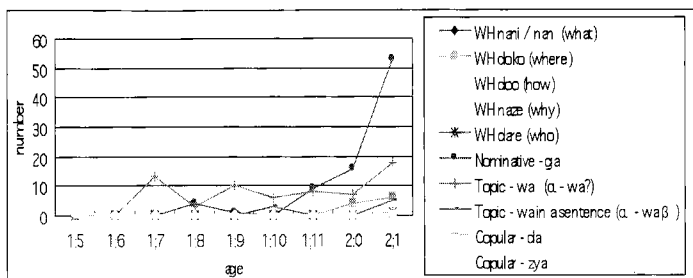
¹⁵ Note that onomatopoeia produced at the VEN Stage is not always associated with *-ta*. For example, *anga* (to step on), *sikko* (to pee), *unko* (to move one's bowels), *dakko* (to hold) and *ombu* (to carry on one's back) are produced then, but they are never followed by *-ta*.

a. Anga (1;8) b. Sikko-naa (1;7) pee-MOOD
step on '(I) want to step on pee-MOOD
(the table).' '(I) want to pee.'

c. Tootyan dakko tyoodai (1;11) d. Ombu-na (1;7)
daddy hold give me carry-MOOD
'Please hold me.' 'Carry me on your back.'

Mamoru Saito (p.c.) suggested to us that children, even at/before the VEN Stage, would have already acquired the basic phonological system of adult Japanese, which prohibits verbs ending with the round vowels, *-a*, *-o*, or *-u* to be associated with *-ta*. Our corpus analysis shows that, in child Japanese, the round-vowel-ending onomatopoeic expressions exemplified above are followed by *-sita* (did), instead of the simple *-ta*, to create the verbal form.

Figure 3: Frequency of C-, T- and D-related Elements in Sumihare's Corpus



The nominative Case marker *-ga* and finite *be* (*da/zya*) are not observed then either, which would indicate that tense is underspecified at this stage.¹⁶

The evidence for the underspecification of tense at the VEN Stage is also found in the lack of tense marking in adjectives produced at that time. Japanese adjectives in adult grammar carry finiteness, as illustrated in (21).

- (21) a. *tiisa-i/-katta* b. *samu-i/-katta*
 small-PRES/-PAST cold-PRES/-PAST

At the VEN Stage, where the non-finite *V-ta* form is used, only present-tensed adjectives are produced. Observe an example of *oisii* (be delicious).

- (22) a. *oiti-i (=oisii)* (1;7) b. *oiti-katta (=oisikatta)* (2;0)
 delicious-PRES delicious-PAST
 ‘(This) is delicious.’ ‘(This) was delicious.’

Sumihare started producing adjectives at around 1;7 only with the present-tensed *-i* form, while the past-tense forms are produced after 2;0. A parallel pattern is found with other adjectives, as shown in Table 2.

Table 2: The Development of Present/Past-tense Form of Adjectives

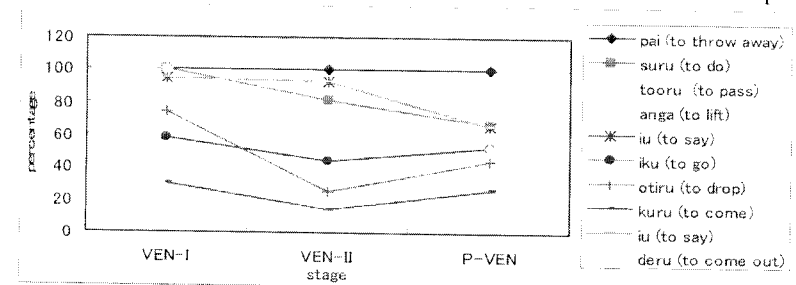
Adjectives	Present-tense	Age	Past-tense	Age
<i>oisii</i> ‘delicious’	<i>oisi-i</i>	1;7	<i>oisi-katta</i>	2;0
<i>tumetai</i> ‘cold’	<i>tumeta-i</i>	1;7	<i>tumeta-katta</i>	2;0
<i>atui</i> ‘hot’	<i>atu-i</i>	1;7	<i>atu-katta</i>	2;3
<i>omoi</i> ‘heavy’	<i>omo-i</i>	1;8	<i>omo-katta</i>	2;2
<i>kurai</i> ‘dark’	<i>kura-i</i>	1;8	<i>kura-katta</i>	2;7
<i>itai</i> ‘painful’	<i>ita-i</i>	1;9	<i>ita-katta</i>	2;0

The lack of past-tense adjectives in Japanese parallels the Korean case in (8), where the past-tense morpheme is not found at the RI analogue stage.

¹⁶ The topic marker *-wa* is produced at a very early stage, only in the form of NP-*wa*, without being associated with verbal predicates.

As for null subjects, there seems to be no correlation between subjects and non-finite verb forms. This property parallels Korean null subjects, but differs from the findings reported in the studies of RIs in non-null-subject languages.

As shown in Figure 4, Sumihare initially produced null subjects frequently, but the frequency differs depending on the verbs.

Figure 4: Proportion of Null Subjects of Each Verb in Sumihare's Corpus¹⁷

The percentage of null subjects of such speaker-oriented verbs as *pai* (to throw away) or *suru* (to do), where the subject tends to be the speaker, stays high even after the inflections appear after P-VEN at the age of two. In contrast, the subject (topic) conveying the new information with eventive verbs such as *oti-ru* (to drop) and *ku-ru* (to come) does not tend to be null even at VEN-I stage.

Although the non-finite verb forms of Japanese children are found only in matrix clauses, the non-finite verb forms are, in fact, found in embedded clauses in adult Japanese. It has been argued that the past verbal inflection *-ta* lacks a tense interpretation (but it is rather aspectual) in such relative clauses as “*yude-ta tamago*” (boil-past egg, meaning boiled egg (property reading)) in adult Japanese (Teramura 1984, Abe 1993, Kinsui 1994, Ogihara 2004, Miyagawa 2009, Murasugi 2009, among others).¹⁸

Two conjuncts which are unspecified regarding tense are conjoined by

¹⁷ P-VEN stands for Post-VEN Stage. VEN-I is the stage where the *V-ta* form is used almost 100% of the time; VEN-II is the stage where *V-ta* forms and *tyoodai* (for modal) are used.

¹⁸ Cinque (2004), for Salentino and Serbo-Croatian, and Michiya Kawai (p.c.) for Japanese, also discuss cases where sentence-ending inflection is a morphological requirement on otherwise tenseless sentences. According to Michiya Kawai (p.c.), the verbs *oyogu* in *Oyogu-no-wa muzukasii* (It is difficult to swim.) and *-da* in *Yamada-wa Sato-o hannin-da to omou* (Yamada consider Taro to be a criminal.), for example, are tenseless, and sentence-ending forms are marked as a morphological requirement. If this line of argument is taken, we expect forms other than *-ta* as well, as RI analogues in Japanese acquisition: Each child would pick up the default sentence-ending form available.

the verbal conjunct with *-ta* forms in (23), and *-ta* forms can be used with irrealis meaning as well, as shown in (24) as well.

- (23) a. Tabe-**ta** ri non-**da** ri su-ru/-ta
eat- drink- do-PRES/-PAST
'We eat/ate, and we drink/drank.'
b. It-**ta** ri ki-**ta** ri de taihen da/dat-ta
go- come- fortroublesome is /was
'It is/was troublesome (of you) to go back and forth.'
- (24) Mosimo watasi-ga ie-o tate-ru/-**ta** nara tiisana ie-o
if I-NOM house-ACC build-PRES/-PAST then small house-ACC
tate-ru/-ta (deshoo)
build-PRES/-PAST 'If I built a house, I would build a tiny one.'

Furthermore, RIs in Italian can be used for imperatives in special contexts (Rizzi 1993/1994). As shown in (26b), *kaetta kaetta!* (went went) can be imperative in special contexts in Japanese as well.

- (25) Partire immediatamente!
go immediately (Rizzi 1993/1994)
- (26) a. Sassa to kaet-**ta** ! kaet-**ta** ! b. Sassato kaer-e
immediately go back- go back- immediately go back-IMP
'Go back (somewhere) immediately.' 'Go back immediately.'

The *-ta* form can be non-finite as well as past-tense in adult Japanese. And children, even at age of one, naturally and voluntarily pick up the non-finite form as the default verbal form of their language.

4. Conclusion

There is a RI analogue stage, or VEN (Very Early Non-Finite (Verb)) Stage in Japanese and Korean, although the non-finite forms are not infinitives. (See also Poeppel 1996, Coene, Taelman, Avram and Gillis 2005.) These RI analogues share the properties of RIs with respect to the fact that tense is underspecified, and that typical T features (e.g., nominative Case marker) and C-related items are not observed with the early non-finite verbs, yet the Mood is active.¹⁹ The volition or imperative is realized with a mood particle *-na* /*V-ta*/*Tyoodai* forms in Japanese, and *-e* in Korean.

The data analysis of Sumihare (Noji Corpus) indicates that the form at the VEN Stage in Japanese is associated with the past-tense form *-ta*, and they are found in one-year-old child. The non-finite form is initially (at around 1;6-1;7) used 100% of the time for past, perfectives, imperatives,

and irrealis meanings. The correlation between null subjects and form is not found. We argued that these peculiar properties are due to the non-agreeing, agglutinating and pro-drop properties of adult Japanese and Korean.

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¹⁹ The findings here are consistent with Hyams (2005).