A Note on the Acquisition of Japanese Complex Predicates

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1. Introduction

In this paper, we will examine Japanese-speaking children's spontaneous utterances of complex predicates (CPreds). In Japanese, CPred formation is highly productive. As will be shown below, however, the CPreds that children initially use are semantically limited to those with aspectual meanings. The following two specific questions will be addressed in this paper: (I) Why do Japanese-speaking children first come to use certain types of CPreds? (II) How do they extend their use of CPreds to other types?

2. Complex Predicates in Japanese

Consider the following examples in (1) and (2).

(1) a. John **made** Bill **work** (English)
b. Ózò **sùá** ágá **dé** (Edo) (Stewart (2001: 13))
Ozo push chair fall
'Ozo pushed the chair down.'

(2) a. John-ga Bill-o **hataraka-se**-ta
John-Nom Bill-Acc work-make-Past
'John made Bill work.'
b. Ozo-ga isu-o **oshi-taoshi**-ta
Ozo-Nom chair-Acc push-down-Past
'Ozo pushed the chair down.'

To describe a causative situation, English and Edo employ two independent words: a causative verb *make* and a verb *work* as in (1a) and a verb *sùá* and a verb *dé* as in (1b). On the other hand, one of the agglutinative languages, Japanese, uses a morphologically complex but phonologically one word: *hataraka-se*(*-ta*) as in (2a) and *oshi-taoshi*(*-ta*) as in (2b). *Hataraka-se*(*-ta*) consists of the stem of the verb *hatarak*(*u*) ('work') and the causative marker *-sase* (and the past tense marker *-ta*). *Oshi-taoshi*(*-ta*) consists of the stem of the

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verb *os(u)* and the other verb *taos(u)* (and the past tense marker *-ta*).

As seen from (2), CPred formation in Japanese is highly productive. Japanese CPreds are classified into several types in terms of their syntactic and semantic properties. In the following subsections, let us classify Japanese CPreds, focusing on the examples related to our discussion (cf. Teramura (1982), Kageyama (1993), Matsumoto (1998)).

*2.1 V V Form vs. V-*te *V Form*

The forms of CPreds are classified into two types in terms of the inflectional form of the first verb (V1). A verb may be attached to a verbal stem as in (3a) or to a gerundive form of the stem (V-*te*) as in (3b). For example, the CPred *utai-dasu* ('begin to sing') is decomposed into a verbal stem *uta(i)* and a verb *dasu*. The CPred *utat-te-iru* ('be singing') is decomposed into a gerundive form of a verb, *utat-te*, and a verb *iru*.[1]

(3) a. V1 V2 (V V form)
e.g. *utai-dasu*
sing-DASU
'begin to sing'

b. V1-*te* V2 (V-*te* V form)
e.g. *utat-te-iru*
sing-TE-IRU
'be singing'

2.2 Aspectual vs. Non-aspectual Complex Predicates

Each type is further divided into two subtypes depending on the semantic role V2 plays in a CPred. In the first type, V2 is taken as an aspectual marker; in this type, V2 is highly grammaticalized and V1 becomes a semantic head.[2] In the second type, V2 is not an aspectual marker; in this type, V2 can be a semantic head.

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[1] In what follows, we will use the following notation. The gerundive marker *-te* in V-*te* is grossed as TE, so that the presence of this marker is clearly indicated. If a verb does not retain its intrinsic lexical meaning as a main verb, the verb in question is grossed with capital letters, like 'sing-TE-IRU' in the gross of *utat-te-iru*.

[2] In Japanese CPreds, V2 is taken as a syntactic head because inflectional affixes are attached not to V1 but to V2. Contrary to the expectation that a semantic head corresponds with a syntatic head, V1 plays a role as a semantic head in this type.

(4) a. V V form
  i. Aspectual
  ii. Non-Aspectual
  b. V-*te* Vform
  i. Aspectual
  ii. Non-aspectual

Let us consider the following examples, comparing CPred use with main verb use of V2. V+*dasu* in (5b) is an example of the type (4ai). In (5a) the verb *dasu* is used as a main verb and in (5b) it is used as V2 in a CPred. In (5a), the verb denotes an action of taking out, while in (5b), it does not denote an action; rather, it functions as an aspectual marker and encodes an aspectual meaning 'begin to.'

(5) a. John-ga poketto-kara saifu-o dashi-ta.
  John-Nom pocket-from wallet-Acc take out-Past
  'John took out his wallet out of his pocket.'
  b. John-ga utai-dashi-ta
  John-Nom sing-DASU-Past
  'John began to sing.'

V+*taosu* in (6b) is an instance of the type (4aii). In (6a) the verb *taosu* ('fell') is used as a main verb and in (6b) it is used as V2 in a CPred. Unlike *dasu* in (5b), *taosu* in (6b) retains its intrinsic lexical meaning as a main verb. As in (6a), *taosu* in (6b) denotes an action of felling. (6a) and (6b) differ in that in (6b) the manner of felling is specified by V1, *kiru* ('cut').

(6) a. Kikori-ga ki-o taoshi-ta
  woodcutter-Nom tree-Acc fell-Past
  'The woodcutter felled a tree.'
  b. Kikori-ga ki-o kiri-taoshi-ta
  woodcutter-Nom tree-Acc cut-down-Past
  'The woodcutter cut down a tree.'

V-*te*+*shimau* in (7b) is an example of the type (4bi). As shown in (7a), the verb *shimau*, as a main verb, expresses an action of putting something into somewhere. In (7b), the verb *shimau* serves as an aspectual marker; (7b) denotes that an action of doing one's homework has already been performed.

(7) a. John-ga kaban-ni shorui-o shimat-ta
John-Nom bag-into document-Acc put into-Past
'John put the documents into the bag.'
b. John-ga shukudai-o owara-se-te-shimat-ta
John-Nom homework-Acc finish-make-TE-SHIMAU-Past
'John has finished his homework.'

The CPreds, V-*te+iru* and V-*te+aru*, which will be closely examined in section 2.4, also belong to this type.

V-*te+morau* in (8b) is an instance of the type (4bii). In (8a) the verb *morau* ('receive') is used as a main verb and in (8b) it is used as V2 in a CPred; (8a) denotes that Mary received a book from John, while in (8b), Mary is understood as an recipient of the action denoted by V1 (*kasu* 'lend'), which was performed by John.

(8) a. Mary-ga John-ni hon-o morat-ta
Mary-Nom John-from book-Acc receive-Past
'Mary was given a book by John.'
b. Mary-ga John-ni hon-o kashi-te-morat-ta
Mary-Nom John-from book-Acc lend-TE-MORAU-Past
'Mary got to borrow a book from John.'

2.3 Unambiguous vs. Ambiguous Complex Predicates

As we have seen in the previous section, Japanese CPreds are divided into two types depending on whether or not V2 is an aspectual marker: aspectual and non-aspectual CPreds. Some instances of CPreds, however, belong to more than one types. In the case of V-*te+iru*, V-*te+aru*, and V-*te+shimau*, V2 is unambiguously taken as an aspectual marker. Unlike *-iru*, *-aru*, and *-shimau*, *-iku* and *-kuru* can be used as aspectual markers or can retain their intrinsic lexical meaning of main verb use. In this paper we will refer to the CPreds in which V2 is unambiguously taken as an aspectual marker as unambiguous CPreds and those in which V2 can be an aspectual marker or a non-aspectual marker as ambiguous CPreds.

(9) exemplifies the main verb use of *iku* or *kuru*: *iku* denotes an action of going and *kuru* denotes an action of coming.

(9) Mary-ga gakkoo-e {it-ta/ki-ta}
Mary-Nom school-to go-Past/come-Past
'Mary went/came to school.'

(10) and (11) are instances of aspectual use of *-iku* or *-kuru*.

(10) Roosoku-no hi-ga kie-te-iku
candle-Gen fire-Nom go out-TE-IKU
'The light of the candle is going out.'

(11) Piano-no oto-ga kikoe-te-kuru
piano-Gen sound-Nom hear-TE-KURU
'The sound of a piano is coming (from somewhere).'

(12) is an instance of non-aspectual use of *-iku* or *-kuru*. In each CPred, the verb *iku* or *kuru* retains its intrinsic lexical meaning as a main verb and V1 modifies *iku* or *kuru*: the verb still denotes an action of going or coming and V1, *aruku* ('walk'), specifies the manner of going or coming.

(12) Mary-ga gakkoo-e {arui-te-it-ta/arui-te-ki-ta}
Mary-Nom school-to walk-TE-go-Past/walk-TE-come-Past
'Mary went/came to school on foot.'

(13) is another instance of non-aspectual use of *-iku* or *-kuru*. (12) and (13) differ in that (12) expresses a single event, while (13) expresses a sequence of events. (13) denotes that one event denoted by V1 occurred first, and another event denoted by V2, *iku* or *kuru*, followed.[3]

(13) Koohii-o non-de-{it-ta/ki-ta}
coffee-Acc drink-TE-go-Past/come-Past
'(Someone) had coffee and went/came.'

2.4 Semantic Complexity of Aspectual Predicates: Primary Aspect vs. Secondary Aspect

Generally, two types of aspect can be distinguished: grammatical aspect and lexical aspect. Grammatical aspect is encoded in a sentence by the use of auxiliaries or inflectional affixes (or both). Lexical aspect is encoded inherent to the lexical meaning of a verb (cf. Olsen et al. (1998) and Li and Shirai (2000)).[4] If we follow this distinction, V2 of aspectual CPreds functions as a grammatical aspectual marker.

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[3] Unlike V-*te-it-ta*, V-*te-ki-ta* can be used to express one's experience. In that case, the sentence 'Koohii-o non-de-ki-ta' means that 'someone has had coffee.'
[4] Wagner (1997) refers to lexical/grammatical aspect as "situation/viewpoint aspect."

Aspectual properties of sentences marked by grammatical aspectual markers are divided into two major types: perfective aspect and imperfective aspect. Grammatical aspectual markers are further divided into two subtypes depending on their semantic complexities: primary aspectual markers and secondary aspectual markers. A CPred whose V2 is a primary aspectual marker is semantically simpler than a CPred whose V2 is a secondary aspectual marker. As we have seen in (7b), V-*te+shimau* denotes completion of an action and it is classified as a perfective aspectual CPred. V-*te+aru* is another instance of perfective aspectual CPreds. (14) implies that someone had already performed an action of opening a window and as a result the window was open.

(14) Mado-ga ake-te-at-ta
window-Nom open-TE-ARU-Past
'The window was in the state of having been opened.'

In a sentence with V-*te+shimau* or V-*te+aru*, the result of an action is foregrounded. As shown in (15), however, V-*te+aru* differs from V-*te+shimau* in that *-aru* imposes some restriction on V1: *-shimau* can take an unaccusative verb as V1 as in (15a), but *-aru* cannot take such a verb as in (15b).

(15) a. Mado-ga ai-te-shimat-ta
window-Nom open-TE-SHIMAU-Past
'The window happened to be open.'
b. *Mado-ga ai-te-at-ta
window-Nom open-TE-ARU-Past
'The window was open.'

This indicates that compared with V-*te+shimau*, V-*te+aru* is semantically more complex in that the person who performed the action is also implied. In this sense, among perfective aspectual markers, *-shimau* is classified as a primary aspectual marker, while *-aru* is classified as a secondary aspectual marker.

-iru in V-*te+iru* encodes simple aspectual meanings: an action in progress (imperfective) or an action completed (perfective) (see the following section). In (16) *-iru* functions as an imperfective aspectual marker.

(16) Kodomo-tachi-ga uta-o utat-te-iru
children-Pl-Nom song-Acc sing-TE-IRU
'The children are singing a song.'

-iku in V-*te+iku* also functions as an imperfective aspectual marker, but V-*te+iku* is semantically more complex than V-*te+iru*. Compare (17) with (16).

(17) Kodomo-tachi-ga (tsugi-tsugi-ni) uta-o utat-te-iku
children-Pl-Nom (one-after-another) song-Acc sing-TE-IKU
'The children are singing songs (one after another).'

(16) denotes an action in progress, while (17) denotes a sequence of actions which is in progress. As a result, (16) and (17) have different implication with respect to the number of songs: (16) is interpreted as 'The children are singing *one* song,' while (17) is interpreted as 'The children are singing *some* songs (one after another).' Another instance of imperfective aspectual CPreds, V-*te+kuru* is also semantically more complex than V-*te+iru*. Compare the following examples.

(18) a. Piano-no oto-ga kikoe-te-iru
piano-Gen sound-Nom hear-TE-IRU
'I hear someone play the piano.'
b. Piano-no oto-ga kikoe-te-kuru
piano-Gen sound-Nom hear-TE-KURU
'The sound of a piano is coming (from somewhere).'

(18b) has implication that the sound of a piano *is coming to the spearker*. In this sense, among imperfective aspectual markers, *-iru* is classified as a primary aspectual marker and *-iku* and *-kuru* are classified as secondary aspectual markers.

2.5 Unambiguous Primary Aspectual Markers: Interaction with Lexical Aspect

As we have seen in the previous sections, *-shimau* and *-iru* are classified as unambiguous primary aspectual markers. These two aspectual markers have peculiar properties, from a cross-linguistic point of view.

Olsen et al. (1998) point out that there is an interaction between grammatical aspect and lexical aspect. In terms of lexical aspectual properties, verbs are classified into four classes: Achievement, Accomplishment, Activity, and State (cf. Vendler (1957)). Olsen (1997) defines these aspectual classes in terms of semantic features: [+/0 telic], [+/0 dynamic], and [+/0 durative].[5] They are characterized as having the following feature specification:

[5] The [+/0 telic] feature specifies the presence/absence of an inherent bound of an event denoted by a verb.

(19)

Aspectual Class	Telic	Dynamic	Durative
State			+
Activity		+	+
Accomplishment	+	+	+
Achievement	+	+	

(Olsen et al. (1998: 795))

Based on this characterization, Olsen et al. (1998) point out that in some languages, such as English and Mandarin, the use of imperfective aspect is restricted to [+ dynamic] predicates,[6] while in other languages, such as Korean, the use of perfective aspect is restricted to [+ telic] predicates.

Japanese primary aspectual markers, *-shimau* and *-iru*, can be used with a verb of any lexical aspectual class. The perfective aspectual marker *-shimau* can take Activity and State verbs ([0 telic] predicates) as V1, as well as Accomplishment and Achievement verbs ([+ telic] predicates). *-iru* can be used either as a perfective aspectual marker or as an imperfective aspect marker, depending on the lexical aspectual class of V1 (cf. Li and Shirai (2000)). If V1 is an Activity or Accomplishment verb ([+ dynamic, + durative] predicate), V-*te*+*iru* denotes an action in progress, which is a type of imperfective aspect. As we have seen in (16), *utat-te-iru* with an Activity verb *utau* ('sing') as V1 expresses the continuation of singing. If V1 is an Achievement verb ([+ dynamic, 0 durative] predicate), on the other hand, it denotes a resultant state (or an iterative action-in-progress), which is a type of perfective aspect. To give an example, when *-iru* is combined with a verb *ochiru* ('fall'), the CPred *ochi-te-iru* denotes a situation where something has fallen and it is still in that place. This marker has another property of being combined with certain verbs which may be classified as State verbs ([0 dynamic] predicates). When *-iru* is attached to a verb *niru* ('resemble'), the CPred *ni-te-iru* ('resemble') expresses a situation where an entity bears a property denoted by the verb (cf. Kindaichi (1976)).

2.6 *Summary*

In this section, we have seen that Japanese CPreds are classified into several subtypes in terms of their syntactic and semantic properties. The classes introduced so far are summarized in (20).

[6] In English, imperfective aspect can be exceptionally used with [0 dynamic] predicates.

(20) V V form — aspectual (e.g. V+*dasu*)
— non-aspectual (e.g. V+*taosu*)
V-*te* V form — aspectual — unambiguous — primary (e.g. V-*te*+*iru*, V-*te*+*shimau*)
— secondary (e.g. V-*te*+*aru*)
— ambiguous — secondary (e.g. V-*te*+*iku*, V-*te*+*kuru*)
— non-aspectual (e.g. V-*te*+*morau*, V-*te*+*iku*, V-*te*+*kuru*)

Japanese primary aspectual markers show the following properties with respect to the interaction with lexical aspectual classes of V1.

(21)

	-iru	*-shimau*
State	OK	OK (perfective)
Activity	OK (imperfective)	OK (perfective)
Accomplishment	OK (perfective)	OK (perfective)
Achievement	OK (perfective)	OK (perfective)

Given (20) and (21) as backgrounds, let us examine Japanese-speaking children's utterances of CPreds.

3. Data

The data were taken from three sets of databases in the CHILDES: the RYO corpus, the AKI corpus, and the AND corpus (cf. MacWhinney (1995), Oshima-Takane and MacWhinney (1998), Miyata (1992, 1993, 1995), Hayashi (1993), Klausen et al. (1992)).[7] The age ranges of the children which we examined are as follows: 1;11.18-3;00.30 (RYO), 2;1.3-3;0.0 (AKI), and 1;8.11-2;5.28 (AND). The CLAN programs (FREQ and COMBO) were used to identify spontaneous utterances which included CPreds. We excluded utterances which were obvious imitations. The utterances are classified in terms of the type of V2 and the age as shown in the appendix. In Tables 1 to 3, V2 in (i) and (iii) is taken as an aspectual marker, and V2 in (ii) and (iv) is taken as a non-aspectual marker (cf. Teramura (1982)).

[7] AND is not a monolingual speaker of Japanese. He was brought up in a Japanese-Danish bilingual

4. Major Findings

*4.1 V-*te *V Comes First*

As shown in the data presented in the appendix, children begin to use the CPreds in V-*te* V form or in a contracted form of V-*te* V. In particular, as for V-*te+iru* and V-*te+shimau*, only their contracted forms, V-*teru* and V-*chau* respectively, are used. Children's use of V V CPreds is extremely rare. This form is observed only in the AKI corpus (cf. Table 2) and its first utterance (2;07.26) is later than the first utterance of V-*te* V CPreds (2;1.10).

4.2 Unambiguous Primary Aspectual Complex Predicates Come First

With respect to semantic types, children's initial use of CPreds is limited to aspectual ones. Among V-*te* V CPreds with V2 as an aspectual marker, the contracted form of V-*te+iru*, V-*teru*, is most frequently used. The second most frequent is the utterance of the contracted form of V-*te+shimau*, V-*chau*, followed by that of V-*te+aru*, V-*te+kuru*, or V-*te+iku*. The frequency of each type of V2 in children's utterances of CPreds is summarized as follows.

(22) Frequency of Each Type of V2 in Children's Utterances of CPreds[8]

		RYO	AKI	AND
(i)	*-te + iru*	62 (40.8%)	73 (42.7%)	13 (68..4%)
	-te + shimau	40 (26.3%)	46 (26.9%)	4 (21.1%)
	-te + aru	4 (2.6%)	7 (4.1%)	0 (0%)
	-te + iku	7 (4.6%)	9 (5.3%)	1 (5.3%)
	-te + kuru	13 (8.6%)	16 (9.4%)	0 (0%)
(ii)	*-te + miru*	5 (3.3%)	11 (6.4%)	0 (0%)
	-te + oku	2 (1.3%)	3 (1.8%)	0 (0%)
	-te + yaru	3 (2.0%)	4 (2.3%)	0 (0%)
	-te + ageru	2 (1.3%)	0 (0%)	0 (0%)
	-te + kureru	6 (3.9%)	0 (0%)	1 (5.3%)
	-te + morau	0 (0%)	0 (0%)	0 (0%)
	-te + choodai	1 (0.7%)	0 (0%)	0 (0%)
	-te + kudasai	7 (4.6%)	0 (0%)	0 (0%)
(iii)	*-dasu*	0 (0%)	1 (0.6%)	0 (0%)
(iv)	*-ageru*	0 (0%)	1 (0.6%)	0 (0%)

family. We included his data because the language he was exposed to most was Japanese.

[8] The same tendency is also observed in Okubo (1984).

Furthermore, from Table 2 in the appendix we have the following findings: an aspectual V V CPred, V+*dasu*, is uttered later than V-*te*+*iku* and V-*te*+*kuru*; a non-aspectual V V CPred, V+*ageru*, is uttered later than V+*dasu*. Though there is no utterance of aspectual or non-aspectual V V CPreds in the RYO and AND corpora (cf. Table 1 and Table 3), one instance of each type is observed in the AKI corpus: *tobi-dasu* (2;07.26) and *mochi-ageru* (2;11.0).[9]

Given these observations, the following questions arise: why do children first come to use the CPreds in which V2 serves as an aspectual marker and how do they extend their use of CPreds to other types? With respect to the first question, the following two possibilities come to our mind. The first possibility is that the order in which children use various types of CPreds and their frequency are governed by the order in which children learn the main verb use of V2. The second possibility is that the order and frequency are governed by some innate knowledge. In the following sections, focusing on the CPreds which are frequently used at relatively earlier stages (V-*te*+*iru*, V-*te*+*shimau*, V-*te*+*kuru*, V-*te*+*iku*, and V-*te*+*aru*), we will closely investigate children's use of these CPreds and argue that the second possibility is supported. Then, we will consider the second question and point out a mechanism that governs the acquisitional process of CPreds.

5. Discussion

5.1 Main Verbs vs. Complex Predicates

5.1.1 Secondary Aspectual Complex Predicates: V-*te*+*aru*

As shown in (23), in all of the three children, the first utterance of main verb use of *iru* and *aru* precedes the first utterance of main verb use of *shimau*, *kuru*, and *iku*.[10,11]

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[9] In *tobi-dasu*, *-dasu* can be taken as an aspectual marker, though it denotes not temporal aspect but spatial aspect.

[10] Though *iru* and *aru* are classified as verbs of existence, they differ in that *iru* typically expresses the existence of animate entities while *aru* expresses that of inanimate entities.

(i) a. Kooen-ni kodomo-ga san-nin iru
park-in children-Nom three-Cl be
'There are three children in the park.'

b. Kooen-ni buranko-ga aru
park-in swing-Nom be
'There is a swing in the park.'

[11] It is generally observed that the first use of these verbs as a main verb precedes that in the CPred, though there are a few exceptions. With respect to the verb *shimau*, the reverse order is observed in all of the three children. They come to use V-*te*+*shimau* before they use *shimau* as a main verb. There are individual differences for the use of the verb *kuru*. Though AKI and AND use it first as a

(23) Ages of the First Utterance of Main Verb Use of V2 and CPred Use

		RYO	AKI	AND
iru	*iru*	1;11.09	(2;1.10) 2;2.22	1;6.17
	V-*te*+*iru* (V-*teru*)	2;00.15	2;3.4	1;8.11
shimau	*shimau*	2;05.22	N/O	N/O
	V-*te*+*shimau* (V-*chau*)	1;11.18	2;3.4	2;4.14
kuru	*kuru*	2;00.28	2;2.0	1;10.18
	V-*te*+*kuru*	2;00.15	2;5.20	N/O
iku	*iku*	2;00.25	2;3.12	2;1.11
	V-*te*+*iku*	2;03.17	2;4.19	2;3.27
aru	*aru*	1;10.26	1;8.23	1;7.14
	V-*te*+*aru*	2;06.05	2;9.7	N/O

(N/O: not observed in the corpus)

Despite the fact that the children come to use the main verb *aru* at the earliest stages, their use of V-*te*+*aru* is observed much later. The children come to use the CPred, V-*te*+*aru*, much later than the CPreds, V-*te*+*iru*, V-*te*+*shimau*, V-*te*+*kuru*, and V-*te*+*iku*. Furthermore, even if the children come to use V-*te*+*aru*, some of their utterances are not adultlike. RYO and AKI attach -*te*+*aru* to V1 in a non-adultlike way: *at-te-aru* (RYO (2;08.29)), *koware-te-aru* (AKI (2;9.7)), *kake-te-aru* (AKI (2;11.6)), and *naot-te-aru* (AKI (3;0.0)). As we have shown in section 2.4, -*aru* does not take unaccusative verbs as V1, and these examples are not attested in adult utterances. These facts indicate that we cannot maintain the first possibility.

5.1.2 Ambiguous Complex Precicates: V-*te*+*iku* and V-*te*+*kuru*

As we have seen in section 2.3, V-*te*+*iku* and V-*te*+*kuru* are semantically ambiguous: -*iku* and -*kuru* are used as aspectual markers (e.g. (10)-(11)) and as non-aspectual markers (e.g. (12)-(13)). The non-aspectual use of these CPreds is further divided into two types: in one type, V1 modifies the event denoted by V2 (e.g. (12)); in the other type, both V1 and V2 are semantic heads and the CPred expresses a sequence of events (e.g. (13)) (cf. Teramura (1982)). If the utterance of CPreds is affected by the main verb use, children might first come to use -*iku* and -*kuru* as non-aspectual markers, once they have learned the main verb use of *iku* and *kuru*. In their non-aspectual use, -*iku* and -*kuru* retain the intrinsic lexical meaning of their main verb use and children would have no difficulty in using -*iku* and -*kuru* in CPreds in this meaning. Contrary to this expectation, the reverse order is observed in all of the three children. As shown in (24), though some or all of the types are observed in

main verb, RYO use it first in the CPred.

children's utterances, the aspectual use of these CPreds precedes to the non-aspectual use.[12]

(24) Ages of the First Utterance in the Subtypes of V-*te*+*iku* and V-*te*+*kuru*

	RYO	AKI	AND
V-*te*+*iku*			
aspectual	2;03.17	2;1.10	2;3.27
non-aspectual /single event	2;09.24	2;11.0	N/O
non-aspectual /sequence of events	2;03.27	2;9.29	N/O
V-*te*+*kuru*			
aspectual	2;00.15	2;5.20	N/O
non-aspectual /single event	N/O	2;10.7	N/O
non-aspectual / sequence of events	2;03.20	2;8.24	N/O

(N/O: not observed in the corpus)

This fact also indicates that we cannot maintain the first possibility.

5.2 An Acquisition Model Proposed by Olsen et al. (1998)

In the previous section, we have shown that the first possibility cannot be maintained. In this section, let us consider the second possibility.

Focusing on the interaction between grammatical aspect and lexical aspect, Olsen et al. (1998) propose the following acquisition model. Assuming that lexical and grammatical aspectual categories are part of the innate endowments, UG, they claim that if the use of grammatical aspect in one language is more restricted than that in other languages children's initial state is set in the more restricted way. In this model, it is predicted that English-speaking children's initial state is set as Mandarin-type with respect to imperfective aspect and as Korean-type with respect to perfective aspect. They extend the use of grammatical aspect to other lexical aspectual classes of verbs by obtaining positive evidence from adults. Olsen et al. (1998) provide supporting evidence for this prediction, observing that English-speaking children use the perfective marker *-ed* and the progressive marker *-ing* more restrictively than adults do; at a certain developmental stage, children's use of *-ed* is limited to [+ telic] predicates and their use of *-ing* is limited to [+ dynamic, + durative]

[12] As shown in (23), the first utterance of the main verb *iku*/*kuru* is observed earlier than that of the CPred, V-*te*+*iku*/V-*te*+*kuru*, though there is an exception. Ryo utters V-*te*+*kuru* slightly earlier than *kuru*. The interval is, however, quite short (thirteen days) and this is not serious counter evidence for our claim.

predicates.[13]

As mentioned in section 2.5, the primary aspectual markers *-iru* and *-shimau* have properties of being used with a verb of any lexical aspectual class. What predictions does the model make with respect to the acquisition of these aspectual markers? First, let us consider *-iru*. As Li and Shirai (2000) argue, if we assume that children's initial use of an aspectual marker has one-to-one correspondence with aspectual types encoded by the marker, the model predicts that all children initially use *-iru* either as an imperfective aspectual marker or as a perfective aspectual marker. If we do not assume such correspondence, the model predicts that children initially use *-iru* both as an imperfective aspectual marker and as a perfective aspectual marker. Whether we assume the one-to-one correspondence or not, children are expected to rarely use this marker with a State verb, since this property is specific to Japanese *-iru*.

The children use *-iru* either as an imperfective aspectual marker or as a perfective aspectual marker, but individual differences in their use are observed. At the earliest stages, RYO prefers perfective use of this marker, while AND and AKI prefer imperfective use. The children rarely use this marker with State verbs. Only three State verbs are observed in their utterances.[14]

(25) State verbs used in V-*te*+*iru*

mieru	('be visible')	AND	(2;3.27) & RYO (2;08.01)
togaru	('be sharp')	AKI	(2;7.19)
niru	('resemble')	AKI	(2;10.12)

These facts indicate that the claim is (at least to some extent) supported that children's initial use of aspectual markers is restricted with respect to lexical aspectual classes of verbs.

Now let us turn to V-*te*+*shimau*. If the claim in Olsen et al. (1998) is correct, it is predicted that Japanese-speaking children's initial state is set as Korean type: Japanese children at a certain stage attach *-shimau* only to Accomplishment and Achievement verbs ([+ telic] predicates). As shown in the data in the appendix, RYO uses thirty-nine [+ telic] predicates with *-shimau*, while he uses only one Activity verb ([0 telic] predicate) with it,

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[13] According to some researchers, this is because "children first use tense and viewpoint morphology to mark situation aspect" (Wagner 1997). However, the results of Wagner's (1997) experiments show at least that five-year old children properly understand the basic meanings of grammatical aspectual morphology.

[14] Further consideration is required with respect to perfective or imperfective use of *-iru*. Li and Shirai (2000) argue that the individual differences observed in perfective or imperfective use of *-iru* provide counter evidence to Olsen et al.'s (1998) claim. Olsen et al.'s (1998) claim, however, can be maintained even if individual differences are observed. We have another piece of evidence that may support their claim, the interaction of *-shimau* with lexical aspectual classes of V1 in child grammar.

from 1;11.18 to 3;00.30. AKI uses forty-five [+ telic] predicates and only one use of an Activity verb is observed, from 2:1.3 to 3;0.0. AND uses V-*te+shimau* four times and [+ telic] predicates are employed in all four utterances. None of them uses State verbs in V-*te+shimau*. All the examples of Activity verbs attested are listed below.

(26) Activity verbs used in V-*te+shimau*

naku	('cry')	AKI	(2;9.7)
okoru	('be angry')	RYO	(2;10.10)

These data show that Japanese-speaking children rarely employ [0 telic] predicates in V-*te+shimau*. This supports the claim that children's initial use of perfective aspect is limited to [+ telic] predicates.

To sum up, it is possible to say that the claim in Olsen et al. (1998) is supported, and it is shown that the reason why children first come to use unambiguous primary aspectual CPreds is attributable to UG. There are some semantic features that characterize the primary grammatical aspectual categories and these features are available to children at the earliest stages of language acquisition.

*5.3 Possible Developmental Process: From Aspectual Use of V-*te *V to Other Complex Predicates*

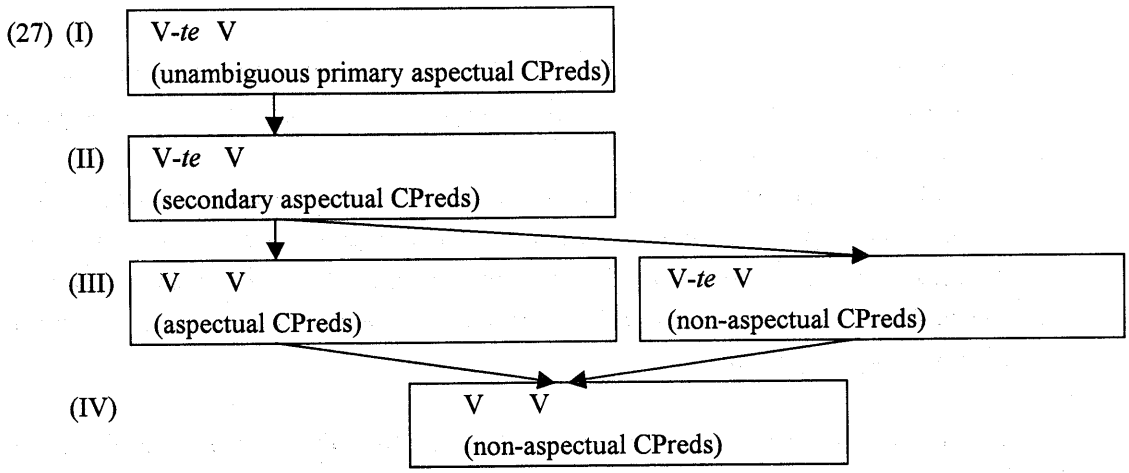
In this section, let us consider the second question, how children extend their use of CPreds into other types. Recall the major findings in section 4. Children's initial use of CPreds is limited to V-*te* V form in which V2 functions as an aspectual marker. Among the aspectual CPreds, the children initially and most frequently use unambiguous primary aspectual CPreds, the contracted forms of V-*te+iru* and V-*te+shimau*. Then they begin to use secondary aspectual CPreds, V-*te+aru*, V-*te+kuru*, and V-*te+iku*.[15] At the later stage, AKI also uses an aspectual CPred in V V form, V+*dasu*.[16] After that, he begins to use a non-aspectual CPred in V V form, V+*ageru*.

Given the second possibility to our first question, it is possible to hypothesize the following developmental process of CPreds. (I) Since children have the innate knowledge of the interaction between lexical and grammatical aspectual categories, they first acquire some morphemes unambiguously used as primary aspectual markers in their target language (-*iru*,

[15] AKI utters V-*te+iku* at the same age as V-*te+shimau* (2;1.10). Since his second utterance of V-*te+iku* is observed much later (2;4.9), this is not serious counter evidence for our claim.
[16] It should be noted that the age at which AKI utters this CPred is almost the same as the age at which he uses -*kuru*/-*iku* in non-aspectual senses.

-shimau).[17] (II) Based on (I), they learn the process of CPred formation in the form of V-*te* V and then they extend their use of CPred formation to secondary aspectual markers (*-iku*, *-kuru*, *-aru*). (III) Using aspect as a semantic cue, they come to learn the process of CPred formation in the form of V V. At the same time, they extend their use of V-*te* V form to non-aspectual uses. (IV) Finally, getting a syntactic cue from aspectual V V form and a semantic cue from non-aspectual V-*te* V form, they come to use the non-aspectual V V form. Through the process of (I)-(IV), children attain the full knowledge of CPred formation.

(27)



6. Concluding Remarks

In this paper, we have discussed children's use of CPreds in Japanese. We have provided the following answers to the questions raised in the introduction. First, the reason why children first come to use CPreds with V2 as an aspectual marker is attributed to the properties of UG. Second, with respect to how children extend their use of CPreds, we have pointed out a mechanism that governs the acquisitional process of CPreds. Because the data we examined are very limited in number, further investigation is needed for the confirmation of our claim.

Our analysis of the acquisition data of Japanese CPreds is based on the descriptive analysis of Japanese CPreds. Many theoretical analyses of Japanese CPreds have been presented. In future research, we would like to consider whether a specific theoretical analysis of Japanese CPreds can be supported from the viewpoint of language acquisition.

[17] Since these aspectual markers are uttered in contracted forms, they might not be decomposed into the gerundive form of a verb and the other verb at this stage. After learning the main verb *kuru* or *iku* and thorough the evidence of V-*te*+*iku* and V-*te*+*kuru*, children might come to know that certain predicates may consist of the gerundive form a verb, V-*te* and the other verb.

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Appendix: Data

Table 1 RYO (1;11.8-3;00.30)

		(1;11.18)	(1;11.28)	(2;00.08)	(2;00.15)	(2;00.25)	(2;00.28)	(2;01.04)	(2;01.11)
(i)	-te + iru				hairu(b)		neru(b) <tasukeru> yaru(a)	ochiru(b)	hairu(b) kiku(b) kowareru(b) miseru(b) yuu(b)
	-te + shimau	okkochiru○	deru○ ireru○	hairu○ kowareru○ ochiru○	hairu				
	-te + aru								
	-te + iku								
	-te + kuru				deru○				
(ii)	-te + miru								
	-te + oku								
	-te + yaru								
	-te + ageru								
	-te + kureru								
	-te + morau								
	-te + choodai								
	-te + kudasai								
(iii)	-dasu								
(iv)	-ageru								

(i) : aspectual CPreds in V-te+V form
(ii) : nonaspectual CPreds in V-te+V form
(iii) : aspectual CPreds in V V form
(iv) : non-aspectual CPreds in V V form
○ : a word children cannot pronounce in adult like way
< > : a word not attested in adult utterances
(a) : a word that denotes imperfective aspect
(b) : a word that denotes perfective aspect

		(2;01.18)	(2;01.25)	(2;02.09)	(2;02.16)	(2;02.29)	(2;03.06)	(2;03.17)	(2;03.20)
(i)	-te + iru		deru(b) yuu(a)		hairu(b) kaku(a) tsukuru(a)○		hairu(b) kowareru(b)	kowareru(b) ochiru(b) tsukuru(b) yaru(b)	hairu(b) kowareru(b) tatsu(a)
	-te + shimau	kowareru kowasu taberu toru	taberu○		kowareru taberu toreru	iku kowareru taberu wareru	kowasu iku		kowareru
	-te + aru								
	-te + iku							deru	
	-te + kuru						deru	deru	iku
(ii)	-te + miru								
	-te + oku								
	-te + yaru								
	-te + ageru								
	-te + kureru								
	-te + morau								
	-te + choodai								
	-te + kudasai								deru
(iii)	-dasu								
(iv)	-ageru								

		(2;03.27)	(2;04.04)	(2;04.11)	(2;04.22)	(2;04.25)	(2;05.01)	(2;05.08)	(2;05.15)
(i)	-te + iru		hairu(b) kowareru(b) noru(b) kowareru(b)(ten)	dekiru(b)	hairu(b) kuru(b) suru(b) tsukeru(b)		hairu(b) motsu(b) taberu(a)	hairu(b) matsu(a)[*] motsu(b) oboeru(b)○	hairu(b) kowareru(b) tsukau(a)
	-te + shimau	taberu				suru	hairu iku taberu	kobosu kowareru	iku
	-te + aru								
	-te + iku	oku							
	-te + kuru	kaeru	motsu	agaru kaeru			iku	kaeru deru	kaeru
(ii)	-te + miru						akeru		
	-te + oku	oku						oku	
	-te + yaru								
	-te + ageru								
	-te + kureru								
	-te + morau								
	-te + choodai								
	-te + kudasai								
(iii)	-dasu								
(iv)	-ageru								

		(2;05.22)	(2;05.29)	(2;06.05)	(2;06.12)	(2;06.20)	(2;06.23)	(2;07.04)	(2;07.11)
(i)	-te + iru		ageru(b)○ hairu(b) ireru(a) kowareru(b) miru(a) morau(b)	noru(b) motsu(b) ochiru(b)	hairu(b) hikkakaru(b)	hairu(b) miru(a) taberu(b) yaru(b)	iu(a) naru(b)	neru(a) suru(a) yuu(b)	kowareru(b) miru(a) nureru(b) noru(b) (ten)
	-te + shimau		hairu tsukeru	iku	kowasu	kaku	iku magatteiku ochiru		iku kowareru shinu toru
	-te + aru			haru					
	-te + iku						magaru		
	-te + kuru	motsu tobu		kaeru miru		iku kaeru	arau iku kaeru kau motsu		
(ii)	-te + miru								
	-te + oku								
	-te + yaru					okoru			
	-te + ageru								
	-te + kureru								
	-te + morau								
	-te + choodai								
	-te + kudasai				iku		yaru		
(iii)	-dasu								
(iv)	-ageru								

		(2;07.19)	(2;07.25)	(2;08.01)	(2;08.08)	(2;08.17)	(2;08.22)	(2;08.29)	(2;09.06)
(i)	-te + iru	noru(b) matsu(a)	motsu(b)	kowareru(b) mieru(c) nakunaru(b) neru(b) owaru(b) (ten)	hairu(b) iku(b) mieru(a) morau(b) naku(a) neru(b) nomu(a) noru(b) ochiru(b) okiru(a) suru(a) tsukeru(b) yuu(a)	hairu(b) hazureru(b)○ kowareru(b) noru(b) okiru(a) suru(b) yaru(a) yuu(b)	hairu(b) iru (iteru)(a) motsu(b) naku(a) naru(b) noru(b) suru(a) yaru(b) yuu(a)	fuku(a) kaeru(a) kowareru(b) motsu(b) neru(b) noru(b) (dakko)shitekureru(a) (akubi)suru(a) (renshuu)suru(a) wareru(b) yabureru(b)	kowareru(b) morau(b) naku(a) tsuku(b) yaru(a) yaru(a) (ten)
	-te + shimau	taberu		ochiru	neru	iku kakeru taberu	iku, kaeru kowareru○ taoreru tomeru	hairu naku taberu	hairu, haitteiku iku, kowareru motteiku wareru
	-te + aru					kaku○		<aru>	
	-te + iku								hairu, motsu
	-te + kuru	motsu	motsu		fuku, iku, kaeru, kau hairu, miru	hairu kaeru	iku, kaeru	kaeru motsu	
(ii)	-te + miru							miru	
	-te + oku							yameru	
	-te + yaru				kaku				
	-te + ageru								
	-te + kureru			naosu			kaeru	(dakko)suru	
	-te + morau								
	-te + choodai								
	-te + kudasai	matsu matteiru taberu							
(iii)	-dasu								
(iv)	-ageru								

		(2;09.13)	(2;09.24)	(2;09.27)	(2;10.07)	(2;10.10)	(2;10.17)	(2;10.24)	(2;11.01)
(i)	-te + iru	yaru(a) yuu(a)	kowareru(b) ochiru(b) shiru(b) (kakuremboo)suru(a) tsuku(b)	aw(b) kawaku(b) kowareru(b) okiru(b) yaru(a) iu(a) (ten)	motsu(b) naku(b) neru(b) nuideshimau(b) taberu(b) yuu(a) suwaru(b) (ten) yuu(a) (ten)	miru(a) motsu(b) naku(a) shiru(b) suru(b) (kega)suru(b) (ten) yaru(a) (ten) yuu(a) (ten)	aku(b) neru(b) suru(b)	tobu(a)	kakureru(a) kowareru(b) neru(b) sagasu(a) tsukau(a) yuu(a)
	-te + shimau	akeru yaburu	kowareru ochiru suru yaru	fumu iku kareru karetekuru neru shinu tobu tondeiku	nugu taberu	hiku kowareru naru okoru shinu toru	ireru kowareru	iku kowareru kuttsuku wareru	iku ireru korobu
	-te + aru	kaku		kaku				kaku	
	-te + iku		aruku	<iku>, tobu	motsu				
	-te + kuru			kareru okoru		iku	deru motsu	deru	
(ii)	-te + miru	kaburu					taberu		
	-te + oku								
	-te + yaru								
	-te + ageru	kau			kaesu				
	-te + kureru				kasu			yaru	
	-te + morau								
	-te + choodai								
	-te + kudasai				noru				
(iii)	-dasu								
(iv)	-ageru								

		(2;11.09)	(2;11.16)	(2;11.23)	(3;00.16)	(3;00.23)	(3;00.30)
(i)	-te + iru	iu(a) naku(a) neru(b) yaru(a)	fuku(a) hairu(b) iu(a) toreru(b) yaru(a) yaru (ten)	asobu(a) hairu(b) iku(b) tsukuru(b) yaru(b) asobu(a) (ten) yaru(a) (ten)	fukuramu(b)○ hairu(b) hikaru(a) kaeru(b) kuru(b) yaru(a) yuu(a)	naoru(b) <tasukeru>	kaku(b) ochiru(b)
	-te + shimau	kowareru shinu		hairu shinu		wareru	nomu
	-te + aru					shimeru	kaku
	-te + iku						
	-te + kuru	kaeru	deru miru	iku	iku kaeru		kau
(ii)	-te + miru	motsu					
	-te + oku						
	-te + yaru				miseru		
	-te + ageru						kau
	-te + kureru				kaesu		
	-te + morau						
	-te + choodai				kau		
	-te + kudasai						
(iii)	-dasu						
(iv)	-ageru						

Table 2 AKI (2;1.3-3;0.0)

		12 (2;1.3)	13 (2;1.10)	14 (2;1.17)	15 (2;1.24)	16 (2;2.0)	17 (2;2.11)	18 (2;2.14)	19 (2;2.22)
(i)	-te + iru			matsu(a)					
	-te + shimau		iku						iku
	-te + aru								
	-te + iku		deru						
	-te + kuru								
(ii)	-te + miru								
	-te + oku								
	-te + yaru								
	-te + ageru								
	-te + kureru								
	-te + morau								
	-te + choodai								
	-te + kudasai								
(iii)	-dasu								
(iv)	-ageru								

		20 (2;3.0)	21 (2;3.4)	22 (2;3.12)	23 (2;3.18)	24 (2;3.26)	25 (2;4.4)	26 (2;4.9)	27 (2;4.18)
(i)	-te + iru		matsu(a)	matsu(a) noru(a) suru(a)	matsu(a)	matsu(a)	deru(b) kaeru(b) matsu(a) naru(b) noru(b) yaru(b) hairu(ten)(b)○	utau(a)	noru(b) ochiru(b) osu(a)○ tooru(a)○
	-te + shimau		toreru		iku	magaru	iku		
	-te + aru								
	-te + iku							motsu○	
	-te + kuru								
(ii)	-te + miru								
	-te + oku								
	-te + yaru								
	-te + ageru								
	-te + kureru								
	-te + morau								
	-te + choodai								
	-te + kudasai								
(iii)	-dasu								
(iv)	-ageru								

		28 (2;4.29)	29 (2;5.6)	30 (2;5.13)	31 (2;5.20)	32 (2;6.15)	33 (2;6.22)	34 (2;6.30)	35 (2;7.5)
(i)	-te + iru	aku(b) hairu(b)	kaeru(b) kaku(a) matsu(a) naosu(a) neru(b)	asobu(a)○	korobu(b)	kamu(a)○ oyogu(a)○	hairu(b) kau(b) yaru(a)	hairu(b) matsu(a) naru(b) tsuku(b) uru(a) yaru(a)	hakobu(a) matsu(a) miru(a) noru(b) suru(a)
	-te + shimau		deru kieru kiru suru	hairu tsuku	iku	deru iku ochiru taberu toru tondeiku	iku	naru yaru	hairu iku○ koboreru○ kuru naru suberu○ (nenne)suru toreru
	-te + aru								
	-te + iku					tobu			
	-te + kuru				kaeru○	deru motsu			
(ii)	-te + miru								
	-te + oku								
	-te + yaru								
	-te + ageru								
	-te + kureru								
	-te + morau								
	-te + choodai								
	-te + kudasai								
(iii)	-dasu								
(iv)	-ageru								

		36 (2;7.12)	37 (2;7.19)	38 (2;7.26)	39 (2;8.3)	40 (2;8.11)	41 (2;8.17)	42 (2;8.24)	43 (2;9.0)
(i)	-te + iru	iku(c) matsu(a) miru(a) motsu(b) taberu(a) tsuku(b)○ tsukuru(a) yaru(a) uru(a)	hairu(b) matsu(a) (oryoori)suru(a) taberu(a)	asobu(a) hairu(b) kaku(a) miru(a) motsu(b) naku(a) (nani)suru(a) (nenne)suru(a) tsuku(b) tobidasu○(b)	asobu(a) hairu(b) kuru(a) naru(b) (taisoo)suru(a) tatsu(b) tsukuru(a) tsuku(b)	aku(b) deru(b) machigau(b) tsukuru(a) yaru(a)	abiru(a)○ arau(a) matsu(a) miru(a) naku(a) suru(a) tsuku(b)	kau(b) miru(a) suru(a) yattsukeru(a) yomu(a)	deru(b) kaku(a) miru(a) naku(a) naru(b) suru(a) tsuku(b) yaru(a)
	-te + shimau	iku kuru kuttsuku naru ochiru	fumu taberu[*]	dasu○[*] fumu hairu iku kakeru magaru wareru○	yaburu	deteiku noru taberu	deru suru	hairu iku kakaru kaku machigaeru magaru (hambunko)suru○ taberu toru	kakeru machigau[*] taberu
	-te + aru								
	-te + iku		deru			deru			toru
	-te + kuru	deru	deru		kaeru motsu	kaeru		kau motsu	deru
(ii)	-te + miru								
	-te + oku	oku○							
	-te + yaru								
	-te + ageru								
	-te + kureru								
	-te + morau								
	-te + choodai								
	-te + kudasai								
(iii)	-dasu			tobu○					
(iv)	-ageru								

		44 (2;9.7)	45 (2;9.14)	46 (2;9.24)	47 (2;9.29)	48 (2;10.7)	49 (2;10.12)	50 (2;10.20)
(i)	-te + iru	aku(b) deru(b) furu(a) hairu(b)○ kakaru(a) naku(a) (nenne)suru(a) yaburu(a) yaru(a)	aku(a) arau(a) deru(b) hairu(b) (kooji)suru(a) (nani)suru(a) tomaru(b) tsukuru(a) yuu(a)○	ageru(a) deru(b) hakobu(a) hiku(a) motsu(b) naku(a) neru(b) shiru(b) suru(a)	kowareru(b) motsu(b) niru(c) tooru(a) tsuku(b)	aku(b) hairu(b) kaku(a) kowasu(a) mawaru(a) naoru(b) taberu(a) yaru(a)	agaru(b) hairu(b)○ hoshigaru(a)○ kajiru(a) naru(b) niru(c) noru(b) ochiru(b) okoru(a) utsuru(b) yorokobu(a)	miru(a) noru(b) sumu(a) (akubi)suru(a) (dokoni)suru(a) (nani)suru(a) taberu(a) tobu(a) toru(b) yuu(a)
	-te + shimau	iku kowareru○[*] kowasu naku○[*] nigeru noru○, okiru toru, ochitekuru○	hashiru iku magaru ochiru okkochiru taberu toreru	hairu iku kowasu nigeru wasureru	hairu iku kowareru (ikenaku)naru tomaru toreru toru	deru hairu taberu toreru○	dasu katazukeru○[*] kowareru ochiru	hairu kowareru taberu yaru○ nigeteiku
	-te + aru	<kowareru>, yaru						
	-te + iku		noboru	motsu	oku			nigeru
	-te + kuru	ochiru	furu	deru	deru kakeru suteru	deru iku noru	agaru, deru iku <(koko)suru>	deru miru
(ii)	-te + miru	akeru, kakeru		kaku		kiku	osu○, sagasu	kazoeru
	-te + oku				haru○ oku	oku○	oku○	
	-te + yaru		(pon)suru			kesu		
	-te + ageru							
	-te + kureru							
	-te + morau							
	-te + choodai							
	-te + kudasai							
(iii)	-dasu							
(iv)	-ageru							

		51 (2;10.28)	52 (2;11.0)	53 (2;11.9)	54 (2;11.16)	55 (2;11.25)	56 (3;0.0)
(i)	-te + iru	miru(a) nokoru(b) shiru(b) sumu(a) (osuwari)suru(a) (tenken)suru(a) tsukeru(b) tsukuru(a) yaru(a)	kau(b) motsu(b) niru(c) noru(b) sagasu(a) (otetsudai)suru(a) taberu(a) tsuku(b) tsukuru(a) yabureru(a)	deru(b) hairu(b) matsu(a) miru(a) niru(c) (nani)suru(a) (narambokko)suru(a) shiru(b) tsukeru(a) tsuku(b)	aku(b) deru(b) haku(a), kiru(a) kuru(b), miru(a) moeru(a) motsu(b) nigeru(a) (nani)suru(a) (oyasumi)suru(a) taberu(a) tsukuru(a) utsuru(b)	hairu(b) kau(b) miru(a) niru(c) oboeru(b) (nani)suru(a) yattsukeru(a)	atsumeru(a) hairu(b) miru(a) motsu(b) naosu(a) okoru(a) (kooji)suru(a) (kyuukee)suru(a) tobu(a) tomaru(b) tsukuru(a) yuu(a)
	-te + shimau	nigeru	deru, iku machigaeru nageru okkochiru○[*] taberu, toreru wasureru	deru iku toru tondeiku	kireru taberu tondeiku	machigaeru yabureru	dasu○ deru iku toru
	-te + aru			tsukeru	<kaku○>, miru	tsukuru	<naoru>
	-te + iku		noboru tooru	tobu	tobu		(bakku)suru
	-te + kuru	motsu	deru, furu mawaru	deru, ireru mawaru		mieru	deru
(ii)	-te + miru				tsukeru		miru, noseru yaru
	-te + oku		oku		kiru		
	-te + yaru	kasu		miseru			
	-te + ageru						
	-te + kureru						
	-te + morau						
	-te + choodai						
	-te + kudasai						
(iii)	-dasu						
(iv)	-ageru		motsu				

Table 3 AND (1;8.11-2;5.28)

		11 (1;8.11)	12 (1;9.16)	13 (1;10.18)	14 (2;0.14)	15 (2;1.11)	16 (2;2.20)	17 (2;3.27)	18 (2;5.0)	19 (2;5.28)
(i)	-te + iru	toru(b)			miru(a) motsu(b)	yaru(a)	tsuku(b)	mieru(a) oboeru(b) yomu(a)	iku(c) kaku(a) motsu(b) (dou)suru(a) (nani)suru(a) utau(a) yaru(a)	miru(a) neru(b) (nani)suru(a) utau(a)
	-te + shimau				toru			ageru iku	kireru	
	-te + aru									
	-te + iku							motsu		
	-te + kuru									
(ii)	-te + miru									
	-te + oku									
	-te + yaru									
	-te + ageru									
	-te + kureru								suru	
	-te + morau									
	-te + choodai									
	-te + kudasai									
(iii)	-dasu									
(iv)	-ageru									