한국어의 형태-통사구조 습득:
과거시제와 양태소를 중심으로
Morpho-Syntax in Early Child Korean: Past Tense and Modality

조숙환†
Sook Whan Cho

요 약
본 논문은 국어의 과거시제와 양태어미 습득에 대해 두가지 제안을 하고자 한다. 먼저, 기능범주인 T(ens), M(modal), TP(phrase), MP 등이 만 2:0세 이전에 존재함을 제안한다. 이 가설은 아동이 이미 2:0세 이전에 T의 세의미, 즉 과거, 완성, 완성된 결과 등을 모두 습득하고 있으며, 또한 원형동사를 요하는 공시제종속절을 오류없이 조기에 발화하고 있다는 관찰을 토대로 한다. 한편, 연구결과, 기능범주와 밀접하게 상호작용하는 형태-통사적 원리는 늦게 습득함을 발견하였다. 본 논문은 이 원리의 습득이 SPEC(iever) (MP)-M 일치습득과 관련있으며 이 일치는 주어성 (subjecthood)의 습득이 완숙되기 전에는 불가능함을 제안한다.

주제어 형태-통사구조, 과거시제, 양태소, 습득

ABSTRACT
This paper makes two proposals with respect to the acquisition of past tense and modals in

† 서강대학교
서울시 마포구 신수동 1 서강대학교
e-mail: swcho@ccs.sogang.ac.kr
early child Korean. First, syntactic functional categories such as T(ense), M(odal), TP(hrase), and MP exist in the earliest phase in child grammar before 2;0. This assumption is based on the observation that the obligatorily null tense of controlled adjuncts and all three meanings associated with T, pastness, completion, and compleive resultative, develop before 2;0. Second, it is also proposed that while functional categories emerge early, morpho-syntactic principles such as subject-verbal suffix agreement develop much later. It is suggested that this relatively late development is probably because the agreement rule interacts with the development of subjectionhood. Subjectood is thought to involve SPEC-head agreement which may not be available until later in the development.

Keywords morpho-syntax, past tense, modality, acquisition

1. Introduction

Previous studies report that Korean-speaking children start to use verbal suffixes such as modals and tense morphemes in a highly productive way before age 2;0 (Choi 1991, Lee 1994, Zoh 1982). One child (YJ) in Lee's (1994) study, for example, was observed to produce various modals as in (1).

(1) a. An po-i-ney. (1;2.4) not see-Pass-Dec[declarative]
' (It's) not seen, to my surprise!'

b. I ttakk-a? (1;2)
tooth brush-Question
'(Is someone) brushing (his/her) teeth?'

c. Mwul tte o-kkey. (1;7.26)
water take come-Dec[promise]
'I'll bring water (lit. take water and come), I promise.'

d. Kwukmin hakkyo ka-lay. (1;11.18)
elementary school go-Future-Dec[volition]
'I will go to elementary school.'

e. Elumthong yekl iss-kwuna! (1;11.15)
ice box here exist-Dec
[exclamatory]
'Wow, here's an ice-box.'

(Choi 1994)

As we can see in (1) above, this child has produced all five different modals, in addition to some other types such as '-e' / '-a' ('-Dec'), '-la' ('-Imp'), and '-ni'
(‘-Que’), among others, as reported in Lee (1994), and these modals were observed to be used productively with a variety of verbs (See Choi 1991 and Lee 1994).

Past tense morpheme ‘-e(ss) [([a]l)] also occurs a few months before age 2;0. Younger children can also correctly produce tensed verbs in main clauses and obligatorily tenseless verbs in dependent subordinate clauses containing conjunctions like ‘-myense’ (‘while’), ‘-(e)se’ (‘because’), ‘-camaca’ (‘as soon as’), etc. in bi-clausal structures.”) *Observe (2)-(3) below.a

(2) a. Accl-ka han-cang cuu-ess-ci.

(A 1;10) man-Nom one-CL give-Past-Dec

‘The man gave one piece.’

b. Yemso-ka wul-e-ø -se.  (A 1;11) goat-Nom cry-Connect-ø - because

na-to wul-ess-e.

1) Other dependent clauses involving conjunctions such as ‘-telato’ (‘although’), ‘-nikka’ (‘because’), and ‘-killay’ (‘and so’), among others can be tensed and are not ‘controlled’ by their respective matrix T (‘controlled’ in the sense I am using in this paper).

2) I would like to thank Hyeonjin Lee for allowing me to use her data.

I also cry-Past-Dec

‘As the goal cries (lit., cried), I cried, too.’

Sentence (2a) and the main clause in (2b) each contain past tense suffix ‘-ess.’ Tense in the dependent clause in (2b) must remain null when the adjunct conjunction is ‘-se’ (‘because’). As we shall see later in Section 5, the content of null tense in these particular dependent clauses is controlled and thus determined by time reference of the matrix Tense category. For this reason, in this paper, I am going to refer to these tenseless dependent clauses as ‘controlled adjuncts.’

Not surprisingly, it is not always the case that children only produce correct forms. Common errors involve cases where tense suffixes and modals are missing or overextended, as given in (3).

(3) a. *Ta me-ø -ø.  (Cl 2;2) all eat-ø [past]-ø -[Declarative]

‘(I) ate all.’

b. *Ah, ippu-ø.  (Sek 1;11) Oh pretty-ø [Exclamatory]

‘Oh, (it) is pretty.’

c. *Olla-ka-ss-ta.  (T 1;9) climb-go-Past-Dec

[The child meant to say]:

‘(It is) climbing.’

Sentences in (3) are incorrect because
(3a) contains no past tense suffix, nor a declarative modal, and (3b) misses the exclamatory modal. The error in (3c) involves an overextension; that is, the past tense morpheme erroneously replaced the present progressive tense.

Interestingly, on the other hand, children do not make errors with respect to null-tensed controlled adjuncts, such as the hypothetical example given in (4).

(4) *Yemso-ka wul-ess-se,
goat Nom cry-Past-because
na-to wul-ess-e.
I-also-cry-Past-Dec

That is, children would not erroneously produce tensed verbs in controlled adjuncts.

The early production data above raise many questions. Why is it that certain errors (e.g., (3)) are made, but not others (e.g., (4))? What does the very early occurrence of verbal suffixes indicate? Does the data in (1)-(2) demonstrate the early emergence of syntactic lexical categories such as T(ense) and M(odal)? Or, is it rather pragmatic and semantic functions of the suffixes that are developing at the initial phase? These questions are explored in this paper.

For these research purposes, this paper first focuses on the acquisition of past tenses in early child Korean. I use the term 'tense' as a cover term to refer to either a syntactic category or semantic content of temporal relation or aspect. 'Aspect' here is defined as the 'temporal distribution of an event.' I would like to begin this paper by discussing briefly theaspectual nature of the past tense form in Korean in Section 2. In Section 3, I will discuss the Defective Tense Hypothesis (DTH) and argue that the DTH is not supported by Korean data from younger children. Section 4 discusses the morphosyntactic constraints on tense and mood morphemes in Korean in an attempt to account for the way in which tenses are acquired.

2. Past Tense in Korean

By 'past tense' in Korean, I mean temporal reference marked by '-(e)ss', irrespective of its semantic interpretations. As Lee (1993: 332) recently noted, the suffix expresses various semantic

3) Terms such as 'pastness,' 'completive activity,' and 'completive resultative' were borrowed from Fantuzzi (1993: 138). Lee (1993: 332) uses other terms such as 'past experience' and 'current relevance.'
content associated with simple past event, completive event, and completive resultative event, among others. 

This is illustrated in (5).

   Swuni-Nom earlier leave-Past-Dec
   'Swuni left earlier.'

b. Swuni-ka 20 Km-lul ta ttwi-ess-ta.
   Swuni-Nom 20 Km-Acc run-Past-Dec
   'Swuni ran (the entire distance of) 20 Km.'

c. (Scene: a telephone conversation)
   A: Hansang-i ilena-ss-ni?
      Hansang-Nom get up-Past-Q
      'Did Hansang get up?'
   B: Naka-ss-nunte-yo.
      go out-Past-Modal-Dec
      '(He) went out.'
   (Lee 1993: 340) 4)

The past tense suffix in (5a) refers to pastness as is compatible with the adverb 'akka' ('earlier'). Sentence (5b) is about a situation in which the activity of 'running 20 Km' has been completed. The tense morpheme in (5c) is used to describe a current state of affairs which has been created as a result of a previous event. That is, the speaker A in (5c) is not really asking whether or not Hansang got up; rather, he is mainly concerned with whether Hansang is available (i.e., whether Hansang can take the phone call) 'as the end result of the completion of the activity of his harving gotten up' (cf. Lee 1993: 340-341). I am going to refer to each instances in (5a)-(5c) as 'past event,' 'completive event,' and 'completive resultative,' respectively.

3. Against Defective Tense Hypothesis

Several different views have been brought forth in the literature in an attempt to account for the early development of temporal reference. A Cognitive View (CV) was proposed that at the earliest stage of development children are cognitively incapable of disassociating from the here-and-now and of expressing temporal relations. From this perspective, younger children

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4) Example (5c) above comes from Lee (1993: 340). I followed Yale Romanization in transcribing Korean and slightly modified a few gloss items in Lee.
are assumed to use tense marker in expressing perfective aspect (i.e., end result) rather than deictic past tense (i.e., pastness). One of the earliest papers on the issue have, in fact, supported the CV, reporting that first past tense marking occurs on resultative verbs (e.g., ‘drop,’ ‘break,’ ‘spill’) as in (6).

(6) It fell in the briefcase. [doll had fallen out of box in briefcase] (Eve 1;10) (Antinucci & Miller 1976: 181)

Early sensitivity to resultativity is also predicted by a Semantic View (SV) which comes from Slobin (1985), in which early grammatical encoding is assumed to be triggered by semantic principles rather than cognitive maturation. Like the CV, the SV makes a prediction that early tense marking encodes resultativity, regardless of target semantics, as quoted in (7) below.

(7) whenever there is an acoustically salient past-tense or perfect marking on the verb, its first use by the child seems to be to comment on an immediately completed event that results in a visible change of state of some object. (Slobin 1985: 1181)

Briefly put, the prediction made by the CV and SV together is the ‘defective tense’ hypothesis (DTH) (Weist et al. 1984).

The DTH, however, has been disconfirmed. Weist et al. (1984), for example, found that Polish children used contrastive tense and aspect marking as early as 1;7. Behrens (1993: 73) also reports that German children ‘use past tenses not only to encode aspectual properties, but also to encode genuine temporal reference’ instead of relying on resultativity as a semantic basis for past tense usage. These studies demonstrate that younger children use formal tense and aspect markers correctly to represent temporality rather than a restricted usage of early tense markers for resultativity. These results are thought to support the Continuity Hypothesis which predicts that the child’s and adult’s grammar ‘are fundamentally similar’ (Fantuzzi 1993: 125).

The DTH is also rejected by Korean data from early Korean children, as in (8)-(10).

(8) Past
Enni eti ka-ss-e? (A 1;11)
elder sister where go-Past-Dec
‘Where did my elder sister go?’

(9) Completion
child T did not actually see the toy Mickey coming to the toy house; in fact, Mickey was already in the house. It was, in fact, T himself who went to the house, and as soon as he reached the toy house, he produced the utterance in (10). Considering this context, it is obvious that T meant to say, "Mickey is here (as a result of having come)".

The children's utterances in (8)-(10) demonstrate that children are able to deliver all three interpretations of past tense in Korean, not just the here-and-now resultative or completive events, but also relatively more abstract meaning involving past time activities. I am going to take this evidence to demonstrate that the Defective Tense Hypothesis cannot be supported. The evidence, on the other hand, seems to support the strong continuity hypothesis (Poeppel & Wexler 1993). On this account, functional categories such as MP and TP are available in their entirety in the early grammar, and in the acquisition of Korean tense and modality, for example, the adult full morpho-syntactic structure as in (12) is thought to underlie the early grammar. This is further discussed in detail in Section 4.

(12) Morpho-Syntax of Verbal
Suffixes in Early Korean:

\[
\begin{array}{c}
\text{MP} \\
/ \quad \backslash \\
\text{M} \\
/ \quad \backslash \\
\text{TP} \quad \text{M} \\
/ \quad \backslash \\
\text{T} \\
/ \quad \backslash \\
\text{VP} \quad \text{T}
\end{array}
\]

4. Morpho-Syntax of Past Tense and Modality in Early Child Korean

4.1. T(ense) and M(odal)

The existence of T in early grammar is further supported by the observation that children hardly make errors involving obligatorily null-tensed dependent clauses, namely 'controlled adjuncts,' as briefly mentioned in Section 1. At the very early phase of development, children do indeed produce correct null tenses in a variety of controlled adjuncts, as seen in (13).

(13) a. Naka-l-kkey, paci-ip-\(\emptyset\)-ko \(\text{(A 1;10)}\) go out-Future-Dec pants-put on-\(\emptyset\)-after
'After (I) put on my pants, (I) will go out.'

b. Nay-ka oppa yangmal sin-ess -e, yaya ke \(\text{(A 1;11)}\) I-Nom brother socks put on-Dec baby thing eps-\(\emptyset\)-ese.
not exist-\(\emptyset\)-because
'I put on my brother's socks because there was no baby's.'

c. Chayk po-\(\emptyset\)-ko anc-a-\(\emptyset\)-se \(\text{(A 2;0)}\)
book read-\(\emptyset\)-Conj sit-Connective-\(\emptyset\)-while mek-u-l-lay.
eat-Connective-Future-Dec [volition]
'(I) will eat while reading and sitting.'

d. Acessi ca-\(\emptyset\)-ko o-n-tay. \(\text{(Y 2;5)}\)
man sleep-\(\emptyset\)-after come-Pres-Dec [reportive]
'It is reported (or someone said) that the man is coming back after he sleeps.'

e. Swuken kay-\(\emptyset\)-ko cwu-kkey. \(\text{(Sek 2;6)}\)
towel fold-\(\emptyset\)-after give-Dec [volition]
'(I) will give (it) (to you), after (I) fold it.'

Note that the controlled adjuncts in (13) all are correctly tenseless. In fact, in
each set of data from A (1;8-2;1), Sek (1;1-3;10) and Y (1;9-2;6), I found 19, 19, 16 cases of controlled adjuncts, and I detected no tense errors in these adjuncts. 5

The absence of tense errors with respect to controlled adjuncts is correctly predicted under two assumptions. First, early child Korean employs T and TP as given in (12) above; second, the predicate of controlled adjuncts occurs in the SPEC of VP, the head being the matrix verb, as seen in (14).

(14) MP
     / \ M
     / \ T
    / \ M
   / \ VP
  / \ T

ADJP V

Note in (14) that the controlled ADJP is in the SPEC of VP, and its tense is controlled by the head T, the matrix verb also being part of its complement, VP.6

6) Structure (14) is also independently motivated by the fact that controlled adjuncts do not behave like other non-controlled adjuncts containing 'nikka' ('because') and 'telato' ('although'), among others. Observe the contrast in (a) and (b) in (l).

(a) Ka-myense Yengi-ka nolay-ha-ci-nun
    anh-asse-ta.
    go-while Yengi-Nom song-do-Neg-Delimit
    not-Past-Dec
    'It is not the case that Yengi sang while
    (i.e., Yengi was doing something else when
    going.)
    'Yengi did not sing while she was going.'
    (i.e., Yengi did something else while she
    was going.)

(b) Ka-nikka Yengi-ka nolay-ha-ci-nun anh-
    ass-ta.
    go-because Yengi-Nom song-do-Neg-
    Delimit Not-Past-Dec
    'Because (she) was leaving, Yengi did not
    sing.'

Notice that (ia) is ambiguous while (ib) is not. The
negative 'anh' affects both the controlled adjunct
verb 'ka' ('go') and the matrix verb 'nolay-ha'
('sing') in (ia) while the negative takes a higher
scope over the matrix verb only. This contrast can
be accounted for under the assumption that the
non-controlled adjuncts are in the SPEC of MP
while the controlled clauses are in the SPEC of VP
as already mentioned in this section. I tentatively
assume that NegP comes under the SPEC of T.

5) Children made other types of mistakes involving
adjunct complementizers (adverbial conjunctions).
For example, children would fail to correctly
combine adjunct clauses with main clauses. They
would simply produce two simple clauses, or they
would only produce the first part of adjunct
complementizers without being able to complete
the whole forms.
The tense of the controlled phrase will remain null since head movement allows only the matrix V to move to T and then to M when head movement occurs for affixation.\(^7\)

4.2. Development

4.2.1. Proposal

In Section 3, I proposed that the strong continuity hypothesis is supported, and that children have the functional categories, T, M, TP, and MP in their early grammar. This follows from the X-bar principle, which states that the internal structures of phrases is identical, namely, that there are always a head (zero projection, Xo) and the same number of projections in all phrases (X\(^{1}\), X\(^{2}\)), this schema applying cross-linguistically.

Despite the early existence of these syntactic categories, on the other hand, younger children do make errors in their speech. We saw in (3), for example, that modals and past tense marker are overextended or missing. The lack of verbal suffixes in early speech is probably due to the child's limited memory which causes incomplete utterances, or the child's strong cognitive tendency to pay attention to the first part of the predicate, i.e., the root part. Overextension, on the other hand, seems to reflect the child’s linguistic knowledge. We saw one type of overextension earlier in (3) in which the verbs are incorrectly suffixed.

Now, the question is what triggers the overextension of verbal suffixes. I would like to make a proposal with respect to the way in which tense and modal suffixes develop, as in (15).

(15) Development of Korean Verbal Suffixes:

a. Early Stage: Verb root, and tense and modal suffixes are incorrectly regarded as an unanalyzed chunk.

b. Later Stage: Tense and modal suffixes are correctly treated as two separate lexical categories, and syntactic constraints such as subject-modal agreement gradually develop.\(^8\)

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7) Head movement is the movement of a lexical category (V, N, etc.). For more discussion on this, see Chomsky (1995: 46-47).

8) To my knowledge, there is yet no evidence demonstrating exactly when the morpho-syntactic constraints of honorification are acquired. As noted
4.2.2. Verbal Suffixes as an Unanalyzed Chunk

Early Korean data indicates that verbal suffixes are initially produced as an unanalyzed chunky form. This is supported by the observation that younger children tend to only use a limited number of modals with certain kinds of verbs. For example, at 1;9 T produced the total 21 cases of predicates containing a tense and a modal in each. The 15 instances out of the total (15/21 = 71%) involve the use of the declarative modal ‘-ta’ which did not have to, but always co-occurred only with four verbs, namely, ‘ko ca(-ta)’ (‘sleep’), ‘chass(-ta)’ (‘find’), ‘o(-ta)’ (‘come’), ‘olla-ka(-ta)’ (‘climb’).\textsuperscript{9} These four verbs ended with the declarative ‘-ta’ every time they were produced. The child T used the declarative ‘-ta’ appropriately in talking about a present time activity and a resultative activity. ‘-Ta,’ however, is not the only form available for these purposes. There is another common declarative ‘-e.’ T used this form with other verbs and for interrogatives and imperatives, but not at all, when he produced the four verbs as above.

The possibility that early predicates are an unanalyzed chunk is strengthened by early ill-formed predicates where verbs are doubly suffixed with certain modals, as illustrated in (16).

(16) a. *Ipwul-ika eps-ese, wu-n-ta-
A 2;0.5
blanket-Nom not-exist-because
cry-Pres-Dec [declarative]-
yo. Dec [declarative/Honorific]
‘Because there is no blanket,
(someone) is crying.’

CK 2;2.21
that eat-want-Dec [declarative]-
Dec [volitional]
‘I will/want to eat that.’

It seems that the errors in (16) demonstrate that the predicates ‘wu-n-ta’ and ‘siph-e-’ are each taken as an unanalyzed whole like a verb root and are additionally suffixed with another
modal.\textsuperscript{10} I propose that when unanalyzed in children's grammar, the verbs and their suffixes come under one category, VP, as given in (17).

(17) \[
\begin{array}{c}
\text{MP} \\
\text{T} \\
\text{TP} \\
\text{VP}
\end{array}
\]

4.2.3. Morpho-Syntax: Subject-Modality Agreement

In Korean, certain modals must agree with the person of the subject NP which they occur with, as exemplified in Table 1.

<table>
<thead>
<tr>
<th>Meaning</th>
<th>Modal</th>
<th>Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>command</td>
<td>-la</td>
<td>2nd</td>
</tr>
<tr>
<td>suggestion</td>
<td>-keyna</td>
<td>2nd</td>
</tr>
<tr>
<td>proposition</td>
<td>-ca</td>
<td>1st</td>
</tr>
<tr>
<td></td>
<td>-kka</td>
<td>1st/2nd</td>
</tr>
<tr>
<td>wish</td>
<td>-lay</td>
<td>1st</td>
</tr>
<tr>
<td>intention</td>
<td>-kkey</td>
<td>1st</td>
</tr>
<tr>
<td></td>
<td>-keyss</td>
<td>1st</td>
</tr>
<tr>
<td>report</td>
<td>-tay</td>
<td>2nd/3rd</td>
</tr>
<tr>
<td></td>
<td>-lay</td>
<td>3rd</td>
</tr>
<tr>
<td></td>
<td>-cay</td>
<td>2nd</td>
</tr>
<tr>
<td>retrospection</td>
<td>-tela</td>
<td>2nd/3rd</td>
</tr>
</tbody>
</table>

As shown in (18), the violation of subject-modal agreement results in ungrammaticality as often found in children's data. Observe (18).

(18) a. *An ha-l-kkey.

(SK 2;0.5)
not do-Future-Intention (1st P)
(lit.) (I) will not do (something).
(The child meant to say, 'You don't do (something).')


(SK 2;1.26)
stuffed-Dec tomorrow again
give-Intention (1st P)
(lit.) (I'm) stuffed.
(I) will give again tomorrow.

\textsuperscript{10}It is assumed here that despite the errors noted previously, modals are uttered relatively productively as observed in Lee (1994). This is why 'yo' and 'lay' are not thought to be part of the chunk.
motivated modals emerge at a later stage of development. I am going to assume that subject-modal agreement is motivated by the SPEC (of MP)-Head (M) agreement. The question of why subject-modal agreement is acquired later can be explored by assuming that the agreement rule is triggered by the development of subjecthood. An independent piece of evidence supporting this subject-modal agreement hypothesis comes from Lee (1990), which reports that honorific suffix ‘-yo’ is first produced before 2;0, yet its morpho-syntactic constraint involving subject-honorifics agreement (where ‘-si’ must occur with the honorific subject in the same clause) is not developed until much later. If my assumption is reasonable, it may well be that subject-verbal suffix agreement in general will not develop until after the syntactic nature and role of subject does.

5. Summary and Conclusions

Based on the data examined in this paper, I would like to conclude two things. First, syntactic lexical categories T and M exist in earliest grammar before 2;0. As we saw earlier, by positing T and
M in the child’s early grammar, we can explain why the null tense of controlled adjuncts develops at the earliest phase of development. The early emergence of T and M challenges the Defective Tense Hypothesis and further Radford’s (1990) hypothesis of late emergence of functional categories.

Secondly, it is concluded that while lexical categories T and M are in early grammar, morpho-syntactic principles such as subject-verbal suffix agreement require time in being fully developed. If this is reasonable to assume, it may well be the case that the agreement rule, in particular, interacts with the development of subjectionhood. This further implies that SPEC-head agreement is not available until it is triggered by subjectionhood. This hypothesis, of course, needs to be tested against a variety of child language data in future.

References


(10)Radford, Andrew. 1990. Syntactic

