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Acquisition of Topic and Subject Markers in Korean

Chungmin Lee clee@snu.ac.kr
Seoul Nat'l University/UCLA

0. Introduction

This paper will explore aspects of acquisition of TOP(ic) marker -*nun* vs. Subj(ect) or NOM(inative) marker -*ka* in Korean.[1] Some investigations touch on this topic such as Insook Lee (1999), Ho Han (1997), Gyeonghee N. Chung (1994), P. Clancy (1996, 1994), Youngjoo Kim (1998), Sook Whan Cho (1997), and Meesook Kim and C. Phillips (1998). Most of these works are, however, concerned with the relations between the subject and the functional categories believed to be associated with it. This paper will largely attempt to show how pragmatic factors governing Top-Foc(us) information structure affects the semantic and syntactic structures of child utterances. It will also discuss Topic and subject/object involved in relative clause formation in Korean-speaking children, drawing data and some analyses from Sookeun Cho (1999).

1. How Contrastive Topic and Focus Subject Markers Emerge

1.1. Drops, Bare Nominals, and Markers. The present investigation hypothesizes the developmental stages of maximal ellipses and minimal utterances with full interpretation in child language. Naturally, we become curious about whether the developmental order null Top/null Subj, bare nominal (with no Top/Subj marker), and Top/Subj marked full NP indeed shows up. It turns out to be the case in various acquisition data such as {SK, C(K)}, {HS}, {H}, and {N, Y, Z}. In particular, it will be shown that because null Top and 'no-marker' strategies are available for default

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instances if the markers begin to be employed at all they are particular or focal ones initially. Thus, Contrastive Topic as opposed to typical, default, thematic or global Top is first acquired, since Contrastive Topic is both topical and narrowly focal. Both Contrastive Topic and Topic are marked by the same Topic marker in Korean and Japanese. As for the structural Subject or nominative marker, Subject with Narrow Foc as opposed to typical neutral Subj/Nom case is first acquired. Children are more sensitive to these focal elements that draw special attention than to default ones for which they already have alternative easier elliptical, no-marking ones. Children, then, gradually acquire fuller forms.

1.2. Initial Data. Consider the following data (I – III) in the order of Drop, :Null Marker, and Marker:

I. Null Top/Subject
  (1) aph-e 'hurts' H(yensek) 1;4(8) (Experiencer)-Top
  (2) iss-ta 'exists' HS   1: 5(8)   (stage-level pred)-Subj
  (3) ep-ta 'not exists' HS   1:5(14)   (stage-level pred)-Subj
  (4) yo   ppung (h)ae –tt   -e (stage-level pred)-Subj
      here pang   do –PAST-DEC
      'Here (I) did pang.' C(hoon-Kyu) 1:6(23) [23 days]
II. Bare nominal ('no-marker') Top/Subj
  (4) a. eme ipp -e   (individual-level pred)-Top
       aunt pretty -DEC
       'Aunt pretty' HS   1; 5(18)
    b. pul itt -e   pul   itt -e (stage-level pred)
       light is –DEC light is –DEC
       'There is a light. There is a light.' C 1:5(7)
       (Pointing to the window side where the sun is shining)
    c. inne   wuette (stage-level pred)
       Unjeng   cried
       'Unjeng cried.'   C 1;7(4)
  (5) i ke   caemi iss-nun ke (individual-level pred)-Top
      this thing interesting   thing
      'This thing is an interesting thing.' S(uh-Kyung) 2; 4
III. A. Contr(astive) Top
  (6) a. na -nun na -nun
          I -CT   I -CT
          'I , I' (when Mom and Aunt were eating bread) H   1; 9(13)
         aki an mek-e
         baby not eat –DEC
         'Baby (I) don't eat.' (when Mom tried to give him

      bread, turning away)
    b. na –nun molla   (turning around)
      I   CT   don't know
      'I don't know.' (when Dad asked, 'Hyensek who's son?')
               H 1; 11(06)
    c. emma i ke   -n   chamoe –i-ya?
      Mom   this thing –CT melon –be-Q
      'Mom, is this a melon?' (pointing to a melon in a picture book
      and saying, *i   ke   -n* (CT)   *uyca–i-ya* 'This[CT] is a chair.')
               C 2;0(10)

 B. Narrow Foc
(7) emma -ka ssis -ca
    Mom-NOM wash let's
  'Mom wash me' (after saying to Aunt, coming to Mom again)
        HS 1;9(30)
(8) a. appa -ka   sa -cc-e
     Dad -NOM buy-PAST-DEC
     'Dad bought (it)' (at Sister's question)
    b. *i ke nu-ka   cu-ess-e*
     this thing who-Nom give-Past-Dec
     'Who bought this for you?'   HS 1;10(3)

We can notice that null Top/Subject utterances occur first very early, as in (1)-(3). It is not the case that 'discourse-oriented' languages like Korean drop subjects/Topics at a lower rate than 'rich agreement' languages, contrary to Hyams and Wexler's (1993) prediction, as indicated by Y. Kim (1997). American children produce subjects almost 70% of the time (up to 2;2). Portuguese-speaking children drop subjects more often than this but less often than Korean-speaking children. Korean drops subject/Topics most often, in other words, and more often than even Chinese (Thomas Lee 1997), another discourse-oriented language, and than Japanese (M. Nakayama 1996), still another.

   Then, a bare nominal Top occurs, as in (4), with a Top-Comment structure. In the midst of frequent occurrences of bare nominal Top/Subj, the markers of Top and Subj emerge, as in (5)-(7). In (6), *na* 'I' is contrasted with Mom and Aunt, constituting a Contrastive Topic (CT), whereas in (7) *emma* 'Mom' is highlighted, as opposed to Aunt. The earliest occurrences of *–nun* are all CT markers and Y. Kim also supports this phenomenon by reporting that all her five children in her data acquired a CT marker earlier than a neutral Top marker. In (8a) *appa* 'Dad' is focused (information focus) because it is a response to a *wh-*

question (8b). Clancy (1994) also indicated that an overt Subj/Topic is discourse-prominent.

1.3. Top First or Subj First? In HS's acquisition and Y's acquisition, the Top marker happens to occur a little earlier than the Subject marker, although quite a few other acquisition studies such as Zoh (1982) and Y. Kim (1997) observe that the Subj marker is about one month earlier than the Top marker, between 1;8 and 2;0. On the contrary, S. Y. Kim (1990) reports that her subject acquired the Top marker one month earlier than the Subj marker. Actually, the Subj marker is more frequent than the Top marker at this early stage as soon as it begins to be used. The Accusative (Acc) marker is acquired a month later than these two markers, between 1;11 and 2;8. C shows the Goal marker –*ey* 'to' at 1:10 (*pang-ey pang-ey* 'To the room, to the room!,' telling Dad to go to the room). HS shows a Dative use around this time. At about the stage where children acquire the Topic marker, they tend to acquire focus markers such as –*to* 'too' and –*man* 'only.' In Y's acquisition, –*to* 'too' is earliest at 1;6 (without any finite verbal ending) and –*nun* as a CT marker is as early as at 1;7 before NOM, acquired at 1;9, as in (9), (10) and (11):

(9) cho   -ppul,   ikes –to   cho ppul
      candle-light   this –too candle-light
      'Canle-light, this, too, candle-light.' Y 1;6 (23)
(10) a. appa hoesa   emma –nun hakkyo
         daddy company mommy-CT school
      b. appa hoesa   emma –nun yeki iss-ney[2]
         daddy company mommy-CT here is -Surprise Y 1;7(20)
         'Daddy (is in) company, mommy-CT is here [to my surprise]'
(11) nae-ka hakkey [catching Mom, who is cleaning the room]
        I –NOM will do
      '**I** will do it.'   Y 1;9(4)

Children are sensitive to focal elements. When markers begin to be employed, they are contrastive or focal ones initially; Contrastive Topic before a thematic or global Top is acquired, as shown in (6a,b) and (10), since Contrastive Topic is both topical and narrowly focal. As for the nominative marker, Subject with Narrow Foc before typical neutral

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2 Y's first –*nun* appears even 15 days earlier than this in a memorized line from a pop:
      al   su –nun epsci-man sarang-un irehke talkhom -ha-n kes
      know way-CT no   but love –CT this much sweet   thing
      'There is no way to know but love is such a sweet thing'

Subj/Nom case is acquired. Children are more sensitive to these particular functions of the markers that draw their special attention. Not only developmentally but also historically, the contrastive use of the Topic marker must have been earlier. Early in the eleventh century in Japanese, the only use of *wa* was its Contrastive Topic use (Hanamoto 1959, Akatsuka p.c.).

Children can manipulate Contrastive Topic adequately in the flow of conversation, as shown in CK's series of questions:

(12) i   ke   mue ye-yo?
      this thing what be-Polite
      'What is this thing?'

(13) (after Dad's answer 'It is an elephant')
      yoke   -nun –yo?
      this very thing   -CT -Polite
      '(What is) this one?' (pointing at another animal)

The NP of the first question started out as a bare marker Topic but turning to the second question CK accommodates a super Topic that incorporates the first NP denotation. That is how the second NP becomes adjusted to Contrastive Topic quite appropriately. We must note that the utterance is a very popular Contrastive Topic fragment question that commonly occurs in Korean. The previous question already has a *wh*-word predicate part *mue ye-yo* 'is what?' and that part is unexpressed and understood. Naturally it occurs mostly in CT situations. It occurs even after 'That is an elephant' without any previous full question. In other words, a child who can ask a fragment question like (13) has a perfect command of the information structure [Topic/CT - Comment/Focus] and illocutionary forces of statement and question. A Topic fragment question often occurs even as a school test question form in the Topic sense. It functions as a *wh*-question without having any overt *wh*-word (see Chung 2000). A *wh*-question has a falling intonation but this fragment question has a rising intonation at the end. It is interesting to see the rising intonation here, although normal *wh*-questions have a falling intonation in Korean. A Korean child shows some over-generalized use of NOM initially, as in (14):

(14) appa –ka   papo –y-a
     Dad -NOM fool –be-DEC
     'Dad is a fool.'   SK 1;11(10)

Here NOM (which is not for contrastive focus) appears instead of TOP in an individual-level predicate sentence. A grown-up uses a TOP or null marker instead of Nom in a situation for (14). For adults, the subject of (14) is interpreted as a contrastively focused one because of the individual-level predicate. Therefore, if (14) was not used in a contrastive focus situation, which seems to be the case, then it is either the child's error or the use of the predicate was different for the child, possibly, as a stage-level predicate. The latter can hardly be the case. However, Korean and Japanese children in general do not show much difficulty acquiring Top and Subj markers, using them appropriately according to contexts, without confusing them often or for a long time. Clancy (1986) states, 'Japanese children acquire case particles early and without much apparent difficulty. --- Errors are not usually reported.' This generalization sounds a bit gross when we consider various Korean data. The general course is from failure to use those markers to gradual production. In fact, Korean-American heritage students (who acquired Korean before they went to nursery school) and non-heritage American students show a remarkable difference in making errors about the Top and Subj markers; the former rarely show any errors, whereas the latter show frequent errors. This means pragmatic competence is acquired quite early enough. The following table from S. Sohn (2000) shows this trend, although it is not so clear how contextual appropriateness has been taken into account in the investigation. Observe:

Markers		Heritage (35)	Non-Heritage (35)
(Subj/Top)	-ka vs –nun	0	29(12%)
(Subj/Obj)	-ka vs. –rul	3(1%)	8(3%)

(35: number of student subjects. Other numbers: number of errors.)

TABLE 1

Note the different rates of errors between heritage and non-heritage students. Heritage students do not confuse –*ka* and –*nun*, whereas non-heritage students confuse them to a surprising extent.

1. 4. Object NOM Errors. Just before the ACC marker is fully acquired, children experience a stage at which they make an error of attaching the Subject marker in place of the ACC marker (Chung 1994). For example, for Mom's question 'What did (you) throw way?' the child's answer is:

(15) ccicci-ka   peli-ess-e
      dirt   -NOM   throw-PAST-DEC

'(I) threw away dirt.' (H 1;9)

Instead of ACC –*rul*, NOM –*ka* has been used. Other examples are: *appa-ka pihaenggi*[airplane]-*ka mantul-ess-e* 'Dad made an airplane,' (H) or *Suh-Kyungi os*[clothes]-*i manhi ip-ess-ketun* 'Suh-Kyung put on a lot of clothes' (SK) have NOM(inative)-marked objects, constituting an erroneous double NOM construction. The widely known Nom 'default' hypothesis does not account for this situation. The Nom-marked object and the perfective aspect/tense of the verb constitute an unaccusative construction, which is rather default (resultative aspect being salient) for children and the object gets NOM-marked (Chungmin Lee 1997). The agentive-causative subject is also Nom-marked. There are some non-perfective verbs used by children with object Nom case but they still seem to be used like passive. Animate objects also take Nom, as in *appa-ka emma-ka ttaeri-ess-e* 'Dad hit Mom' (MJ 2;2). Dative (-hanthey) is also replaced by Nom in children's use, as in *Hyeki-ka cu-l-kka* 'Give (it) to Hyek' (H 1;10) for his Mom's question 'Hyek, won't you eat your meal? (Shall I) give (it to) doggie?' Even in the case of Dative, the resultative aspect is someone being given and naturally Nom appears for Dative or rather a new Subject. Comitative (-*hako*) is also replaced by Acc in acquisition. Comitative assumes the same thematic role as the Agent Subject, as in *appa kaeguri-ka hyenga kaeguri-ka*[hako] no-nun ke-ya 'Daddy frog is playing with the (little) brother frog.' In general, among focused case markers, the focused Nom marker is most salient, and because children begin to use the focused Nom marker, they tend to use the same marker for ACC, Dative Comitative and comparative. Children are more sensitive to focused cases and they tend to focus all the possible nominals. In English, ACC seems to be more focused and that's why children use ACC instead of NOM. The default NOM hypothesis does not explain this kind of discrepancy.

A (Narrow) Focus bare nominal does not occur in adults; it accompanies a case marker necessarily (C. Lee 1999). However, it occurs in children and can be regarded as an error, as in (16) and (17) show:

(16) emma mek-ye-cukkey
　　　Mom eat-CAUS-MOD
　　　'You MOMMY feed me.' (asking Mom to feed her seven-up,
　　　when Dad tried to feed her) S(uh-Kyung) 2;4
(17) emma haci-ma.　　sekyengi hakkey
　　　Mom　do -don't　Suh-Kyung do-will(MOD)
　　　'You Mommy don't do it; I will do it.'　　S 2;4

A non-Focus Subject marker also shows up at this stage:

(18) phari –ya   eti   ka -ss -e?
        fly -VOC where go -PAST-Q
     phari –ya –ka   ka -perie –ss –ne
       fly –Voc-NOM go away-PAST-SURPRISE
                'Fly! Where are you? Fly-ya has gone away.'

The vocative marker in the NP *phari –ya –ka* becomes part of the noun stem in the baby talk and a case marker is attached to it.

1.5. Topic Familiarity. Insook Lee (1999) supports C. Lee's (1999) claim that Topics are presupposed and familiar and focused expressions are obligatorily case-marked. 100% (65/65) of the *nun*-marked expressions produced by her subjects N, Y, and Z (age range between1;7 and 2;4) and 100% (330/330) of their mothers' –*nun*-marked expressions turned out to be demonstratives, personal pronouns and other familiar expressions, whereas most of the focal interrogative subjects of the mothers and the children are nominative-marked. In Korean, both children and adults use abundant null Top/Subj; 2,549 clauses produced by the children had null Top/Subj and 3,817 clauses produced by the mothers had null Top/Subj. They are zero pronouns, referring to referents in the discourse or in context. Children in general use far more bare nominals than NOM-/TOP-marked NPs and use twice many NOM-marked NPs than TOP-marked expressions on one hand and their use of bare nominals is far more frequent than their mothers' on the other. CTs are also familiar, although they bear some narrow kind of focal element in the choice of alternatives. Observe:

	children	mothers
bare	73% (521/707)	41% (762/1876)
NOM-marked	18% (130/707)	42% (784/1876)
TOP-marked	9% (65/707)	18% (330/1876)

TABLE 2

Children still rely on bare nominals for all the functions Nom and Topic markers show.

1.6. Postposing. Topic typically takes the S initial position. Contrastive Topic from subject also takes the S initial position, although it can take a mid-sentential position. However, familiar or topical NPs can occur at the end of an utterance. Right-dislocated elements are also topical (e.g., *She is*

an angel, your sister), in other words. Korean is a head- or verb-final language, but elements can occur even after a verb often in child and adult speech. A Topic phrase itself is often postposed, as in (19):

(19) ttalki   mek-ul kkeya   na-nun
      strawberry eat-be-going-to I-TOP
      'I am going to eat strawberries.'   SK 2;4
(20) kabang-i   mukew-e,   i ke   C 2;3
       bag   -NOM heavy -DEC this thing
       'The bag is heavy, this thing.'
(21) emma aph-e   mok -i C 2;1
       Mom   hurts   the neck
       'Mom, hurts, the neck.'
(22) chaek-i   edi-iss-e   chunkyu –kke   C 2;3
       book-NOM   where-is-Q Choonkyu-'s
       'Where is the book, Choonkyu's?'
(23) appa pappa cal mek-ney   kimchi-haku C 2;2
       Dad   meal   well eat SURPRISE kimchi-with
       'Dad eats meal well, with kimchi.'
(24) chunkyu honca yangchi -cil ha-l –kke-ya kho –ca-myen   C 2;4
       Choonkyu alone brush –ing do will   sleep-if
       'I (Choonkyu) will brush my teeth, when (if) I go to bed.'

In (20) the right-dislocated stuff is given and co-referential with the subject. In (21) the null Topic Experiencer's body part, which gives more specific information about the Experiencer, is postposed. In (22) the possessor of the subject is post-posed. In (23) an adjunct is postposed, whereas in (24) a conditional subordinate clause is post-posed to the end. These are all possible in adult Korean, not being errors. These discourse-oriented patterns are naturally acquired rather early. Those post-posed phrases are mostly final part of the entire clausal intonation unit. In Cho's (1981) study, the following orders and their rates are witnessed:

[1] V-final order [SV=34%, OV, SOV, OSV, SCV]
[2] S-final order [VS=6.7%, OVS, CVS](C=Complement)
          [1] vs.[2] = 80.9 vs. 11.2
    Subj-final order: more than 10% in children of 2;2, 2;7 and
          2;10.
                 TABLE 3

In Japanese, a similar phenomenon about postposing in adults has been reported by K. Matsumoto (1996). According to her, in a typical type of

NP postposing (final part of clausal intonation unit) in Japanese, given : accessible : new = 299 : 22 : 0. In the second type of independent information unit postposing, given : accessible : new = 114 : 21 : 114. So, the total given plus accessible in NP postposing is 456, whereas new is 114. Observe some examples of given information NP postposing:

(25) yomiyasui   -yo   mainichi -wa
    to read-easy -DISC   Mainichi-TOP (DISC=Discourse Particle)
    '(is) easy to read, the Mainichi.'

(26) zettai   ika-nai   atasi
    absolutely go –not   I
    '(Will) never go, I.'

1.7. CP or MP? It has long been observed in Korean that the non-Contrastive Topic is checked by MP (Mood Phrase) or CP, whereas the nominative case is checked by tense in INFL rather than mood (Whitman 1989). Observe (27). The nominalized subject clause in it has the past tense but not mood, and its neutral subject appeared. Also, in a non-MP embedded clause such as a relative clause, only a Contrastive Topic is licensed, not a Topic, as in (28) and (29):

(27) ney cucang-i   olh-ass-um –i   punmyeng-ha-ta
    your claim –NOM right-PAST-Nomnlzr-NOM clear-DEC
    'Your claim's being right is clear.'

(28) Mary-nun cal puru-nun   norae (REL SUBJ)
        -CT well sing REL(Pres) song
    'a song that Mary-[CT] sings well'

(29) khong –un mek –un   ai   (REL OBJ)
    beans -CT eat-REL(PAST) child
    'a child who ate beans-CT'

In (28) the CT comes from subject, whereas in (29) it comes from object. In (28) 'Mary' is subject and is supposed to take Nom by default. In (28) and (29) if the CTs are interpreted as Topics they are ill-formed. Tense is in the Rel Complementizer and can license Nom or CT in the relative clause but Mood is not available in the relative clause and cannot license Topic in (28) and (29). For embedded clauses, therefore, tense and Mood may have to be clause-internal, whereas Comp must be clause-external in surface, when Mood is inside to license Topic (e.g., *hae-**nun** tong ccok-eyse ttu-n-ta*[DEC] *–nun sasil* 'the fact that the Sun-TOP rises in the East'). In the case of relative clause, the head noun takes the empty Topic position clause-internally, licensed by C and moved from an argument

position. It is a sort of null pronominal. In Japanese a null C must license this null Topic position.

2. Topic and Grammatical Relations in Relative Clauses

2.1. Relative Clause C? Assuming that a Top phrase occurs in the Spec of CP (or rather MoodP), its head C occurs for relative and other embedded clauses. In this connection, early occurrence of *ke(s)* before the relative head noun, e.g., *appa-ka sa-n ke yangmal* 'socks which Dad bought' has been interpreted by Whitman et al (1991) as a C and emergence of CP before age two, although Y. Kim (1997) and H. Han (1997) object to it. In this erroneous construction by children, *ke(s)* is closer to a functional category. I would call this 'hedge functional category' in the sense that it reinforces the bridge function between the relative clause and the head noun even though there is a pre-nominal modifying form –*nun/-n* already. At this stage, the role of Comp functional category is assumed by *ke(s)* and the role of tense is assumed by –*nun/-n* and then the Comp role is merged to –*nun/-n* and the new Comp bears the dual role of C and tense. This is a natural explanation for why C disappears in development, whereas it comes to appear in most languages. The same children's C *ke(s)* also appears in the position of adults' possessive (-*uy*) before the head noun, as in *Chunkyu ke chaek* 'Choon-Kyu's book.' But in (17) *Chunkyu ke* has been postposed. What this implies is that it has been postposed because *ke* is a C or because it is a noun as in adults' use of it. Adults' possessive *Chunkyu –uy*, however, cannot be separated from the DP to be postposed. Children use it so often and it is hard to believe that it is a case of noun separated from the appositive construction. Then, it should be interpreted as an afterthought fragment. In Japanese, the overgeneration of *no* in relative clauses (Murasugi 1991) is also attributed to C. Such a position is in line with the strong continuity hypothesis. The relative clause content, however, is not so assertive and rather given compared to the content of a DEC Mood-marked clause. Harada (1980) gave such examples of overgenerated *no* in relative clauses as (30):

(30) [[gohan tabeteru] *no butasan] (Nagisa, 3;2) (cited by Whitman
        food   eating-is   NO piggy   1997)
        'the piggy that is eating food'

Whitman reports that 11 out of Murasugi's 42 subjects used this erroneously inserted *no*, similarly to K.-O. Lee's (1990) 22% of her subjects in using *ke*. The Japanese form *no* is easier to view as a COMP,

since the relative clause in Japanese does not end in a prenominal form like the Korean –*n* or –*nun*.

2.2. Hierarchy. Topic comes most frequently from subject, next from object and dative, in accordance with NP accessibility hierarchy. The phenomenon of drop must be based on some topicality in the sense that the dropped element is assumed to be familiar to the interlocutors and is recoverable in principle. Therefore, it is not surprising at all that S. W. Cho (1995) found a tendency for subjects to be dropped most often, followed by object and dative drop in that order. Then, we may be tempted to say that all drops are Topic drops of various kinds. That is true with adults, who can use case marking at their disposal but in the case of children who have not acquired case marking, even a focal case drops, as we already noticed in (16) and (17) above and as witnessed in (31):

  (31) emma   pul   khi-ess-e   (looking up the light that has just
        Mom   light   turned on   been turned on by someone) CK
        'MOM turned on the light.' 'It is Mom who turned on the light.'

The finite mood and tense markers are at the end of the sentence, and the predicate is stage-level. The Nom case is assigned to the subject of the sentence and, furthermore, the speaker intends to convey an NP meaning with a narrow contrastive focus *emma* 'MOM,' which is impossible without the Nom marker in adult grammar.

    In experiments on relativization by Sookeun Cho (1999), relativization of subject, object, dative, and oblique is found to be easier in that order both in comprehension and in production in general in children of 4 to 7. A relativized subject/object/dative/oblique is realized as a subject/object/--- gap in its relative clause.

2.3. Internally Headed Relative Clauses. Independently of this research, however, there is an interesting limit to the positions or grammatical relations that can be relativized in head-internal relative clauses; only subject and object can be relativized (32-33) but we can say the general tendency of accessibility hierarchy is still preserved even in this case. Observe:

  (32) **kong-i**   yeki iss-ten   kes –i   epseci-ess-ta
        ball -NOM here is -REL(PAST) COMP-NOM disappeared
        'The ball which was here disappeared.'
  (33) sonye-ka **kong-ul**   tenci-n   kes-i   melli naka-ss-ta.

girl-NOM ball-ACC throw-REL COMP-NOM far went away
'The ball that the girl threw went far away.'
(34) a. *kom-i **so-hanthey** kong-ul cwu -n kes-i ssureci-ess-ta   .
bear-NOM cow-DAT ball-ACC give-REL COMP-NOM fell
'The cow to which a bear gave a ball fell.'
Cf. b. kom **-i** kong-ul cwu –n so-ka ssureci-ess-ta
(Dative gap)(external)
(35) a. *ai-ka   **pang-eyse** kongpwuha-nun kes-i   nelp-ta
child-NOM room-LOC study-REL-COMP-NOM   wide-DEC
'The room where the child studies is large.'
Cf. b. ai-ka   kongpwuha-nun pang-i nelp-ta (Oblique-Loc)

Because of the fact that subject or object can be relativized internally there
arises an ambiguity between two readings, as in (36) (Jhang 1994):

(36) John-i [**koyangi-ka cwi-lul** ccoch-ko-iss-nun] kes-ul cap-ass-ta.
John-NOM cat-NOM mouse-ACC chase-PR-REL C-ACC caught
a. 'John caught the cat that was chasing the rat.'
b. 'John caught the rat that the cat was chasing.'

The head can be either the subject *koyangi-ka* 'cat' or the object *cwi-lul* 'rat'. But if the object *cwi-lul* 'mouse' is fronted, as in (37), the only reading left is the object head reading.[3] Observe:

(37) John-i [**cwi-lul** koyangi-ka ccoch-ko-iss-nun] kes-ul cap-ass-ta
-NOM rat-ACC cat-NOM chasing   -REL COMP caught
'John caught the rat that the cat was chasing.'

Even in the relative clause a fronted constituent becomes prominent or more topical so that it may be subject to relativization or becoming the internal head NP of the relative clause. This fact supports my claim that a constituent in the relative clause must become a Topic first to be relativized. However, the Topic and a new relative head from it cannot co-exist. The Topic must be deleted under identity with the head. That is why the following string with the TOP-marked version from the fronted object cannot have the same object head reading as the above (37) or does not constitute an internally headed relative clause at all:

(38) *John-i [**cwi-nun** koyangi-ka ccoch-ko-iss-nun] kes-ul cap-ass-ta

---

[3] Similar phenomena are reported in Yuman languages (Basilico 1996).

If the TOP-marked object remains in the original object position, then, the subject, but not the TOP-marked object *in situ*, in the relative clause can function as the head, though with difficulty. The same fact cannot be explained by O'Grady's (1997) claim that in externally headed relative clauses a subject gap is easier to interpret than an object gap because the former is structurally less distant from its head than the latter[4]. There is no S-external head in internally headed relative clauses. Linearly, the subject is closer to the external head in English but the opposite is the case in Korean; the subject gap is the farthest from the head in externally headed relative clauses. Likewise, the fronted object in the internally headed relative clause (37) becomes closer to the Topic position (or may take the Topic position) than the subject NP in the clause. What really counts may not be the structural distance between the subject/object gap and the external head but the structural distance between the gap and its clause internal Topic position, SPEC of CP, presumably. The subject is structurally closer to the Topic position than the object both in external and internal relative clauses and both in pre-nominal and post-nominal relative clause languages. This is a simpler and more general explanation. Topical prominence matters, but structural case markers are required to remain for the NPs to become internal heads. Even bare NPs without case markers, which cannot show grammatical relations, cannot be heads in internally headed relative clauses. An internal constituent must get topical prominence by movement to become identical with an external head and be deleted. This difference in topical prominence, but not the difference in structural distance between the gap and the head is responsible for the contrast in the relative difficulty of subject and object relative clauses in acquisition.

2.4. Development of Relative Clauses. In child Korean data, we can notice the following bare nominal internal head with no case marker (K. Lee 1991):

  (39) [piano ttangttang ha-nun] ke   sa cwuya keyssta.
       piano dingdong do-Rel Comp buy give
       '(I) have to buy for (her) the one that (you) do ding-dong piano.'

---

[4] Comparable proposals made by Collins (1994) and Ackema & Neeleman (1998) are also based on English only and do not quite explain the relevant phenomena. In different relative clause types, the children correctly identified subject gaps in 91% of the SS patterns and 75% of the OS patterns, while they did poorly on the object gaps, with scores of 63% and 45% for the OO and SO types, respectively (O'Grady 1997).

The bare nominal *piano* can be interpreted as the object in the gapless head internal relative clause, gaining topical prominence. Sookeun Cho's (1999) data shows that children frequently make errors in the production of relative clauses: even 7-year olds produced correct common noun external head relative clauses only three-quarters of the time (74.2%). However, from 6 children's use of external head relative clauses sharply increases and use of head internal clauses sharply decreases. In the case of Instrumental, its NP can be relativized in externally headed relative clauses, as in (40), but it cannot be relativized in Topic, as in (41). Observe:

(40) sonye-ka   sakwa-lul   kkakk-un   khal
     girl-NOM apple-ACC   peel-REL knife
     'the knife with which the girl peeled an apple'
(41) *ku khal-un sonye-ka   sakwa-lul   kkakk-ass-ta
     that knife-NOM girl-NOM apple-ACC peeled
     (Lit.) 'That knife, the girl peeled an apple'

Apparently, the above discrepancy poses a problem to my hypothesis that a relative clause head NP comes through a Topic NP clause-internally (C. Lee 1973). Except this exception, however, the hypothesis seems still valid in the sense that a typical Topic cannot be within a relative clause and the NP accessibility hierarchy that applies to Relativization equally applies to the Topic formation operation. Korean-speaking children begin to produce relative clauses around their second birthday. Y. Kim (1987) reports a stage in the process of relative clause acquisition in Korean where no head noun and no relative clause ending appear. Simple juxtaposition of two clauses appears, as in (42):

(42) *[Imo-ka   sa-cwu-e]   [eps-ta]
     aunt-NOM   buy-give-COMP not.exist-DEC
     'Aunt bought for me, isn't here.'

English-speaking children also begin with headless relative clauses (Hambuger 1980, Flynn and Lust 1980). Hamburger (1980) found that early relative clauses are headless, as in (43).

(43) a. Let's see ... [she is doing]. (age 2;6)
      b. Look-a [what I made]. (age 2;4)
      c. This is [my did it]. (age 2;0)

Example (43a) looks like an internally headed relative clause or a juxtaposition, whereas (43b) is a free relative clause, which resembles a relative clause headed by *kes* with no gap in Korean children's data. The earliest relative clauses with a lexical head in English appear in the speech of children between 2;6 and 3 years of age (Hamburger and Crain 1982). We can notice parallel developmental stages of relative clauses between Korean and English. Japanese may show similar stages. Observe the relevant stages:

(44) a. Juxtaposition
   b. Internally headed relative clauses with the *kes* complement
   c. Relative clauses with a gap and the *kes* head/complement
   d. Relative clauses with a gap and the *kes* complement plus a nominal head
   e. Relative clauses with a gap and a nominal head (external head relative clauses)

An internal head can be said to be a topically prominent constituent with structural case. An internally headed relative clause that appears early in acquisition survives in adult Korean and Japanese. It is a relative clause, although it describes an on-going or resultative event and thus gives the flavor of a complement clause in adult Korean and Japanese. The following is an example showing that it is still a relative clause:

(45) na-nun totwuk-i   nao-nun   kes-ul tari-lul cap –ass –ta
      I –NOM thief-NOM come out-Rel N-ACC leg-ACC caught
      'I caught the thief coming out by his leg.'

In (45) *tari* (leg)'s possessor is *totwuk* 'thief' in the embedded clause, but *kes-ul tari-lul* is a double ACC construction and forces *kes-ul* to assume the role of the possessor. Then, *kes* must be coreferential with *totwuk*, getting a (pro)nominal feature. However, *totwuk* cannot antecede *kes*, not c-commanding it. The nominal feature of topical *totwuk* percolates up to the phrasal category and *kes* gets it. The next question to ask, then, is 'When does this construction occur?' Is it exactly the same as a regular externally headed relative clause? No, at least in adult Korean (and Japanese), this construction is compatible with stage-level predicate events. Arguments associated with stage-level predicates cannot easily become a typical Topic and tend to retain their NOM (and ACC) markers as neutral Subject and Object. Observe an example that shows a result state stage-level (46), as opposed to an individual-level situation (47):

(46) Yumi-nun aki-ka   nemeci-e iss –nun kes –ul irukhi-ess-ta
         -TOP baby-NOM fall –Conn be-Rel N –ACC helped-stand
       'Yumi helped the baby who fell stand up.'
(47) *Yumi-nun haksaeng-i chonmyengha-n kes –ul manna –ass-ta
         -TOP student-NOM intelligent-Rel N-ACC met
       'Yumi met a student who is intelligent.'

The status of *kes* is interesting in the sense that it starts out as a complement and then gets a nominal feature to stand for the internal head. That is why the construction involving it has a dual nature between a complement clause and a relative clause. It is a relative clause that has an internal head with topical prominence and retains some sense of complement clause involving a stage-level predicate event to make the description more vivid.

3. TOP Markers and Subj Markers in Korean and Japanese

The uses of TOP markers *-nun* (K) and *-wa* (J) on one hand and those of Subj markers *-ka* (K) and *-ga* (J) on the other are strikingly similar informationally but there are significant differences. Consider the typical or thematic Topic. It is expressed by a nominal category. The generic Topic use is common to *-nun* and *-wa* but the anaphoric Topic use of them shows a significant difference. The epithet *ku ay-***ka** in (49aB) is old information and refers back to *Yumi-***ka** in (49aA) but the Subject marker *-***ka** is used in Korean, whereas *-***wa** is used in Japanese in the same context (49bB). Another difference lies in that the Subject that stands for a given referent in an interrogative sentence usually takes the NOM marker *-ka* in Korean whereas it takes the TOP marker *-wa* in Japanese. Observe:

(48) a. ney   irum –**i**   mwe -i-nya?
      your name-NOM   what -be-Q
       'What is your name?'
    b. omae no namae-**wa**   nan-da?
(49) a. A: Yumi-**ka**   ettehkhey toe-ess-ni?
          -NOM how   become-PAST-Q
      'What happened to Yumi?'
   B: ku   ay-**ka**   sako-rul nae-ess-e
      that child-NOM trouble-ACC make-PAST-DEC
      'That child made a trouble.'
   b. A: Yumi-**wa/***ga doo natta?
    B: ano ko-**wa/***ga jiko-o okoshita

The Subj NOM marker in the above contexts in Korean is not for Exclusive Focus or new information. It is a neutral Subj in an embedded Declarative-like proposition in questions. And it is an anaphoric Subj in an utterance given in a presentational (stage-level) mode, although the nominal represents given information and its predicate may come from an individual-level predicate like a habitual and identification. Therefore, if *-nun* is used in these contexts, it tends to be contrastive at least weakly. However, a Topic fragment question such as *Ney irum –**un***? 'Your name?' (with a rising intonation) must take a TOP marker but not a NOM marker. The Q marker is correlated with the SPEC or TOP of the CP and because the Q morpheme is absent the TOP must show up for the fragment to become a question. If it is NOM-marked as in *Ney irum –**i***?, then, it becomes an echo question, occurring in an embedded sentence underlyingly like [*Ney irum –**i** mwues-i-ra*]-*ko malhae-ss-ci*? 'What did you say [your name was ___]?'

   Still another point, which may be a matter of speech style, is that in negation *-wa* is more frequently used (as in *dewa/jia nai*) than *-nun*. Originally it is from a Contrastive Topic use but it sometimes shows subtle emotive nuances including reservation.

   Yoko Fujii and Myung-Hee Kim's (1999) comparative study by experiments (involving pictures of Mary's blind date with John ending in a disaster) shows the following statistics of NPs:

   Korean: *-nun* 398 (28.7%) *-ka* 301 (21.7%) zero anaphors 690 (49.7%)
   Japanese: *-wa* 377 (34.2%) *-ga* 133 (12.1%) zero anaphors 592 (53.7%)
                    TABLE 4 (numbers are tokens)

The table shows that more cases of *–wa* are used than *–nun*s and far more *–ka*s are used than *–ga*s. Continuous themes typically appear as zero anaphors, referring to **previous** referents. They indicate that there is a strong tendency that *–nun* makes reference to the global theme of the story, whereas the global theme does not, but the local theme does, motivate for either *–wa-* or *-ga*-marking on subjects in Japanese. Previous themes tend to become zero anaphors in both languages.

   The generic use of *–nun* or *–wa* is a far late development, compared with other uses, just as the generic use of articles in Western languages is very late. Comparative developmental studies of TOP and Subj markers between Korean and Japanese will shed more light on how the structure of Topic and Focus is intertwined with the grammatical and semantic structures of human language.

4. Concluding Remarks

We have attempted to show that children acquire TOP marker in the sense of Contrastive Topic first towards 20 months after the stages of Null Topic/Subject (1;4) and bare nominal Topic/Subject in Korean. Contrastive Topic is a part of a potential Topic in discourse, contrasted with other part(s) (C. Lee 1999). By default, mid-sentential –*nun/-wa*-marked constituents including Contrastive Predicate Topic (C. Lee forthcoming) and non-nominal –*nun/-wa*-marked categories are Contrastive Topics. Further we tried to show that relative clause formation has to do with topical prominence of a clause internal argument. Thereby, we have hopefully shown that pragmatic factors of topicality and focus in the information structure component of language provide motivations for syntactic and semantic structures in Korean and other languages.

We need further investigations into the developmental stages of Null Topic/Subject, bare nominal Topic/Subject, and TOP/NOM-marked Topic/Subject language-internally and from the comparative perspectives. We also need to examine how prosody is acquired in connection with information structure. Topicality and focus are correlated with prosody, particularly when a language like English lacks such devices as a TOP marker and relies solely on the intonation pattern like L+H*LH% for the effect of Contrastive Topic.

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