A Family of Topic Constructions in Korean:
A Construction-based Analysis

Jong-Bok Kim * †
KyungHee University

Jong-Bok Kim. 2016. A Family of Topic Constructions in Korean: A Construction-based Analysis. *Language and Information 20.1, 1-24.* Korean is well-known for its topic-prominent properties. In this paper, we look into several subtypes of topic constructions whose grammatical complexities have received much attention in generative grammar. From a semantic/pragmatic view, topics in Korean can be classified into three different types: aboutness, contrastive, and scene-setting. Meanwhile, syntax can classify topic constructions into two types, depending on whether or not the comment clause following topic has a syntactic gap linked to the topic. In this paper, we review some key properties of these topic constructions in Korean, and suggest that each type is licensed by tight interactions between syntactic and semantic constraints. In particular, the paper tries to offer a Construction Grammar analysis where each grammatical component is interacting in non-modular ways and in which the multiple inheritance network of constructions plays an important role in capturing cross-cutting generalizations of the topic constructions. (**KyungHee University**)

Key words: aboutness, contrastive, scene-setting, filler-gap dependency, hanging, multiple inheritance, construction-based

1. Some basic properties

Topic constructions represent what the sentence is about, typically marked by the sentential initial expression with the *-(n)un* marker in Korean. The following are some canonical examples (see, among others, Kang 1986, Sohn 1990, 1999, Choe 1995, Chang 1996, and Kim 2004, 2016):

(1) a. Mimi-nun   hangsang ku chayk-ul   ilk-nun-ta
       Mimi-TOP   always   the book-ACC   read-PRES-DECL
       'As for Mimi, she always reads the book.'
    b. ku chayk-un   Mimi-ka   hangsang ilk-nun-ta
       the book-TOP   Mimi-NOM always   read-PRES-DECL
       'As for the book, Mimi always reads it.'

Both sentences, consisting of a topic in the initial position and a comment clause (the remainder of the topic), identically describe the truth conditional meaning such that Mimi always reads the book, but they package the information in different ways. The sentence (1a) talks about the topic expression *Mimi* while the one in (1b) is about *the book*. Each of these topic expressions describes old and definite information, stating that the individual it refers to is familiar in discourse.

   Note that for a speaker to say something about an individual or entity, he or she needs to assume that the hearer can identify the entity too. This explains why topic needs to be 'old' information which is already mentioned in the discourse. Consider the following:

(2) a. han haksayng-i/#un   cip-ey   ka-ss-ta
       one student-NOM/TOP   home-to   go-PST-DECL
       'One student went home.'
    b. thayyang-un/#i pam-ey-to   pichna-n-ta
       sun-TOP/NOM   night-at-also shine-PRES-DECL
       'The sun shines at night too.'

In (2a), the indefinite NP *han haksayng* 'one student' refers to an individual whose information is not shared by the interlocutors. This is why the topic marker on the indefinite NP makes the sentence infelicitous in such a context. Topic also represents some shared knowledge. Since both the speaker and the hearer have knowledge about the sun, it is more natural to have the topic marker rather than the subject marker in (2b). It is unnatural to have the subject marker *-i/ka* here, since the indefinite subject is typically associated with new or unshared knowledge.

   These basic properties of topic then raise questions of how topic is realized and licensed in languages like Korean. The grammatical complexities of topic constructions have received much attention in generative grammar. In this paper, we review some key properties of topic constructions in Korean, discussing the syntactic, semantic classification of topic constructions in Korean. Departing from traditional analyses, this paper presents a Construction-based analysis of Korean topic constructions in which syntax and semantics are closely tied up each other.

2. Types of Topic Constructions

2.1 Semantic and pragmatic distinctions

Literature has identified three different types of topic constructions: aboutness, contrastive, and scene-setting (Reinhart 1981, Gundel 1988). As we have seen in the previous section, the aboutness topic, most typical type, represents what the sentence is about. It also represents familiar and identifiable information, as illustrated by the following dialogue:

(3) A: (How is Mimi doing?)
     B: Mimi-nun   chinkwu-tul-kwa cwumal-mata cacenke-lul tha-n-ta
          Mimi-TOP   friend-PL-with   weekend-every bike-ACC   ride-PRES-DECL
          'As for Mimi, she is biking with friends every weekend.'

The expression *Mimi-nun* 'Mimi-TOP' in the sentence initial position represents what this sentence is about. The topic refers to the individual familiar to both interlocutors, which we can conjecture from the dialogue.

The contrastive topic, different from the aboutness topic, describes a contrast between the topic constituent and a previously mentioned referent:

(4) a. **sakwa-nun** ai-tul-i   mek-ciman, **pay-nun** mek-ci   anh-nun-ta
         apple-TOP   child-PL-NOM eat-but   pear-TOP eat-CONN   not-PRES-DECL
         'Children eat apples, but do not eat pears.'
     b. nay-ka **i   chayk-tul-un** ilk-ess-ciman, **ce   chayk-tul-un** ilk-ci
         I-NOM this book-PL-TOP   read-PST-but   that book-PL-TOP   read-CONN
         mos-ha-yess-ta
         not.do-PST-DECL
         'I read these books, but did not read those books.'

The *(n)un*-marked object expression occurs in the initial position as in (4a), while the one in (4b) is in the non-initial position. In these sentences, the *(n)un*-marked expressions *sakwa-nun* 'apple-TOP' and *i chayktul-un* 'this book-PL-TOP' represent contrastive information. For example, the former 'apples' contrasts with 'pears' while the latter 'these books' contrasts with 'those books'. Note that even in the initial position with no scrambling, an expression may carry contrastive information (Lee 2006):

(5) Mimi-nun   ku   chayk-ul   ilk-ess-ta.   (kulena Yumi-nun   ilk-ci
     Mimi-TOP   the book-ACC   read-PST-DECL   but   Yumi-TOP   read-CONN
     anh-ass-ta.)
     not-PST-DECL

'Mimi read the book. (But Yumi didn't read it.)'

Unlike the aboutness topic, the topic here carries an additional implicature that the *-(n)un* marked constituent is in opposition to a set of alternatives, say, other people like 'Yumi'. This meaning implicature in a sense allows even an indefinite NP to function as a contrastive topic as illustrated in the following:[1]

(6) a. manhun namca-tul-un ku moim-ey ka-ss-ta.
       many   male-PL-TOP the meeting-at go-PST-DECL
       'Many men attended the meeting.'
    b. manhun namca-tul-un ku moim-ey ka-ss-ciman, yeca-tul-un
       many   male-PL-TOP the meeting-at go-PST-but female-PL-TOP
       an ka-ss-ta.
       not go-PST-DECL
       'Many men attended the meeting, but women didn't.'

In (6a), the indefinite NP *manhun namca* 'many men', with no proper context, cannot be a topic because of its newness. However, the same indefinite NP can function as a contrastive topic with a proper context as in (6b) even if it does not refer to the familiar information. This is possible since the contrastive topic requires an alternative set.

   Different from these two types of topic constructions, scene-setting topic provides a spatial, temporal or individual framework within which the main predication holds (Chafe 1976, Kuno 1973). Different from the aboutness topic, the scene-setting topic need not be discourse-familiar or old since it just offers a scene for the comment clause:

(7) a. onul-un   nay-ka   nayl chalyey-i-ta.
       today-TOP I-NOM   pay turn-COP-DECL
       'As for today, it is my turn to treat.'
    b. yelum-un   maykcwu-ka masiss-ta.
       summer-TOP   beer-NOM   tasty-DECL
       'As for summer, beer tastes good.'

As given in these examples, scene-setting topics, locating in the clausal-initial position, are expressed typically by an adverbial phrase and set up a scene for the proposition of the main clause.

2.2 Syntactic distinctions

---

[1] The contrastive topic can thus occur in any place as long as the topic is phonologically prominent and semantically proper. This means that there is no syntactic constraint in licensing a contrastive topic.

Topics can also be distinguished according to their syntactic properties such as how they are integrated into the following comment clause. That is, topic constructions differ with respect to whether or not there is a gap in the comment clause linked to the sentence topic. Consider the first type in which topic has a structural dependence with a gap (including a resumptive pronoun) in the following comment clause:

(8)   a. ku   haksayng-un   amwulen towum epsi   __   motun il-ul
         the student-TOP   any   help   without   all   work-ACC
         cheliha-yess-ta
         deal.with-PST-DECL
         'As for the student, he did all the work without anyone's help.'
      b. ku   haksayng-un   amwulen towum epsi   **(casin-i)**   motun
         the student-TOP   any   help   without   self-NOM   all
         il-ul   chelihayessta-ko   incengha-n-ta
         work-ACC   deal.with-DECL-COMP   admit-PRES-DECL
         'As for the student, he admits that he did all the work without anyone's help.'

The topic in (8a) is linked to the putative gap in the comment clause, as evidenced from the fact that filling the gap in the comment clause with an overt expression yields an ungrammatical sentence:

(9)   *ku haksayng-un   amwulen towum epsi   [haksayng-i]   motun
       the student-TOP   any   help   without student-NOM   all
       il-ul   cheliha-yess-ta
       work-ACC   deal.with-PST-DECL
       '(int.) As for the student, he did all the work with no one's help.'

Meanwhile, the topic in (8b) is coreferential with the resumptive reflexive *casin-i* 'self-NOM' in the comment clause. The topic phrase here is interpreted as bearing the grammatical relation which corresponds to this optional resumptive pronoun.

   The syntactic dependency of a topic with its putative gap can be long-distance, as illustrated in the following (Chang 1996, Kim 2004, 2016):

(10) a. ku   chayk-un   [Mimi-ka   [Yumi-to   ilk-ess-ta-ko]
         the book-TOP   Mimi-NOM   Yumi-also   read-PST-DECL-COMP
         mit-ess-ta]
         believe-PST-DECL
         'As for the book, Mimi believed Yumi also read it.'
      b. *ku chayk-un   [Mimi-ka   [Yumi-to   ku chayk-ul   ilk-ess-ta-ko]
         the book-TOP   Mimi-NOM   Yumi-also   the book-ACC   read-PST-DECL-COMP

mit-ess-ta]
believe-PST-DECL
'(int.) As for the book, Mimi believed Yumi also read it.'

In (10a), the topic expression *ku chayk-un* 'the book-TOP' is in a dependency relation with the object gap in the embedded clause. When there is no such a dependency relation as in (10b), the sentence turns out to be ungrammatical.

Note that not only an argument but also an adverbial expression can be topicalized (Chang 1996, Kim 2001, 2004, 2016):

(11) a. onul-un   nalssi-ka   cham   coh-ta
        today-TOP   weather-NOM   very   good-DECL
        'As for today, the weather is really good.'
     b. i   tosi-ey-nun ankay-ka manhi kki-n-ta
        the   city-at-TOP   fog-NOM   much   rise-PRES-DECL
        'As for the city, the fog rises a lot.'

In these examples, the temporal expression *onul* 'today' and the locative one *i tosi* 'this city' function as topic of the sentences headed by the intransitive verbs *coh-ta* 'good' and *kki-n-ta* 'rises'. One may suggest, as we discuss in the next section, that topic here has no syntactic dependency with the following comment clause, but modifies the comment clause, while denoting a temporal point or location of the situation that the comment clause denotes.

One intriguing property of the topicalization in Korean (similar to Chinese) is that a topic expression can be an expression which is neither an argument nor an adjunct of the comment clause in question (Chang 1996, Sohn 1999, Kim 2004).

(12) a. kkoch-un   [$_S$ cangmi-ka   alumtap-ta]
        flowers-TOP   rose-NOM   pretty-DECL
        'As for flowers, roses are pretty.'
     b. sayngsen-un   [$_S$ kotunge-ka   masiss-ta]
        fish-TOP   mackerel-NOM   tasteful-DECL
        'As for fish, mackerel is tasteful.'

In these examples, *kkoch* 'flower' and *sayngsen* 'fish' are neither an argument of the matrix verb nor a modifier itself. The matrix sentence headed by the pure intransitive verb in each case is a fully saturated one, even without the topic expression. The grammatical function of the nominal topic expression here is thus 'adverbial', interpreted as 'as for talking about flowers' or 'as for talking about fish'. Such topics are often called 'dangling topics'.

One key property of dangling topic is that it cannot serve as the head of the relative clause:

(13) a. Mimi-ka   ilk-un   ku chayk
        Mimi-NOM   read-MOD   the book
        'the book that Mimi read'
    b. nalssi-ka   cham coh-un   onul
        weather-NOM   very   good-MOD   today
        'today whose weather is so good'
    c. *cangmi-ka alumtaw-un kkoch
        rose-NOM   pretty-MOD flowers
        '(such) the flowers whose roses are pretty.'

The head of the relative clause in (13a) can be the object of the clause while that of the one in (13b) can function as an adverbial expression of the relative clause. However, the ungrammatical one in (13c) has the head which can serve as the dangling (hanging) topic in the putative source sentence.

   As briefly reviewed so far, Korean employs several different types of topic constructions which any analysis needs to account for. In what follows, we offer an analysis in which constructional constraints play a key role.

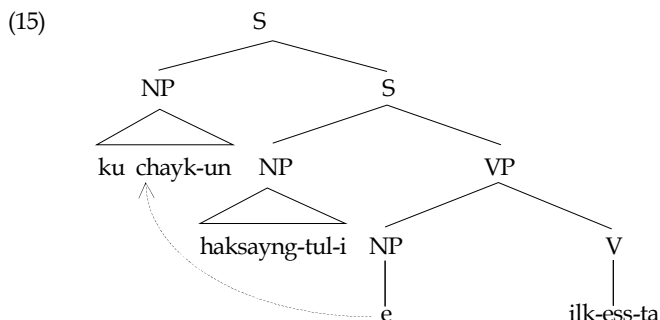## 3. A Construction-based Approach

3.1 Movement vs. Base-generation

   Let us consider some simple topic constructions in which an argument is topicalized:[2]

(14) a. haksayng-tul-un [s __ ku chayk-ul   ilk-ess-ta].
        student-PL-TOP   __ the book-ACC   read-PST-DECL
        'As for the students, they read the book.'
    b. ku chayk-un [s haksayng-tul-i   __   ilk-ess-ta].
        the book-TOP   student-PL-NOM   __   read-PST-DECL
        'As for the book, the students read it.'

In these examples, the subject and object of the sentences are topicalized, respectively. This means that there is a syntactic dependency between topic and a putative gap in the comment clause. To account for such sentences, the traditional, derivational view introduces a trace together with movement operations. For example, (14b) would have a structure like the following (Kang 1986):
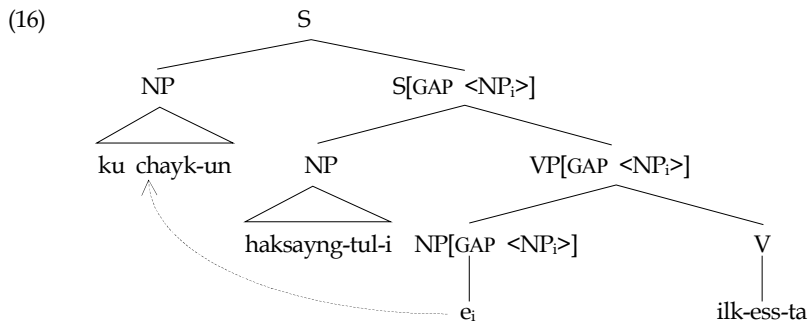
---

[2] Key ideas sketched in this section follow from Kim (2004, 2016).

(15)

```
                        S
              ┌─────────┴─────────┐
             NP                    S
          ┌──△──┐          ┌───────┴───────┐
      ku chayk-un  NP              VP
                ┌──△──┐      ┌──────┴──────┐
          haksayng-tul-i NP          V
                        │            │
                        e         ilk-ess-ta
```

As illustrated here, the object is moved to the sentence initial position, leaving its trace behind. The movement operations and empty element are thus key points in the derivational and movement view.

Unlike this, we can also adopt a non-derivational view that posits neither empty expression 'e' nor movement operations. For example, the empty expression in the object position introduces the feature GAP which is passed up to the higher node until it is discharged, as illustrated in the following (Park 1981):

(16)

```
                          S
              ┌───────────┴───────────┐
             NP                 S[GAP <NP_i>]
          ┌──△──┐          ┌─────────┴─────────┐
      ku chayk-un     NP            VP[GAP <NP_i>]
                   ┌──△──┐      ┌────────┴────────┐
           haksayng-tul-i NP[GAP <NP_i>]          V
                             │                    │
                            e_i               ilk-ess-ta
```
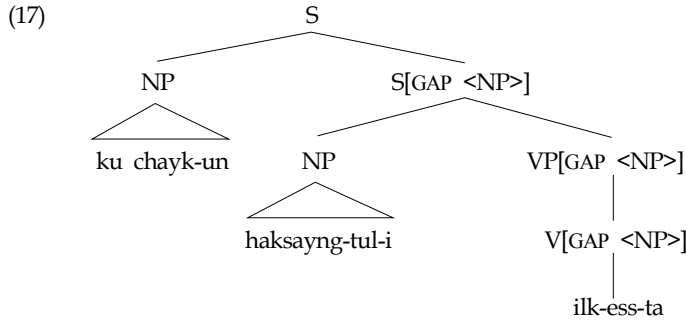
Note that both of the movement and non-derivational analyses sketched here introduce an abstract entity 'e' in the grammar. However, it raises empirical issues of whether it is psychologically plausible to postulate invisible or inaudible entities in the grammar (see Sag and Fodor 1994 for arguments against the supposition of empty expressions). Needless to say, it would be empirically and theoretically more plausible if we could account for topic constructions without introducing such an invisible, abstract entity. In what follows, we sketch a non-derivational, traceless analysis with no empty elements even for the gapped topic constructions.

3.2 Capturing the unbounded dependency relationship

The starting point for a traceless analysis is to encode the GAP information in the verb, head of the sentence, as represented in the following (see Kim 2004 and 2016 for details):

(17)

```
                         S
          ┌──────────────┴──────────────┐
         NP                        S[GAP <NP>]
       ┌──┴──┐              ┌──────────┴──────────┐
   ku  chayk-un            NP                VP[GAP <NP>]
                        ┌──┴──┐                   │
                   haksayng-tul-i            V[GAP <NP>]
                                                  │
                                              ilk-ess-ta
```

The gist of this traceless analysis is that the verb *ilk-ess-ta* 'read-PST-DECL', different from canonical cases where it combines with the object in the local domain, has the GAP information linked to the object. This implies that its object need not occur in the local domain but can occur in a long-distance nonlocal domain. The GAP value here is introduced not by a syntactic mechanism, but by the lexical instantiation, Argument Realization Constraint, given in (18) (see Kim 2004 and Kim 2016, Kim et al. 2007):

(18)   Argument Realization Constraint (ARC):

$$
word \rightarrow \begin{bmatrix} \text{SYN} \Big| \text{VAL} \begin{bmatrix} \text{SUBJ} \;\; \boxed{A} \\ \text{COMPS} \;\; \boxed{B} \end{bmatrix} \\ \text{GAP} \quad \boxed{C} \\ \text{ARG-ST} \;\; \boxed{A} \oplus \boxed{B} \oplus \boxed{C} \end{bmatrix}
$$

Each element in the ARG-ST is typically realized as SUBJ or COMPS elements, but the defined ARC allows it to be realized as a GAP, the expression that can be out of the same local domain as the verb. For example, the verb *ilk-ess-ta* 'read-PST-DECL' can be realized either as (19a) or (19b):[3]

---

[3] The syntactic-semantic expression can be classified into two subtypes: *canon(ical)-synsem* and *gap-synsem*. Only the latter includes a GAP value.

(19) a.
$$\begin{bmatrix} canon-synsem \\ \text{FORM} \ \langle \text{ilk-ess-ta} \rangle \\ \text{SYN} \begin{bmatrix} \text{HEAD } verb \\ \text{VAL} \begin{bmatrix} \text{SUBJ} \ \langle \boxed{1}\text{NP} \rangle \\ \text{COMPS} \ \langle \boxed{2}\text{NP} \rangle \end{bmatrix} \end{bmatrix} \\ \text{ARG-ST} \ \langle \boxed{1}\text{NP}, \boxed{2}\text{NP} \rangle \end{bmatrix}$$

b.
$$\begin{bmatrix} gap-synsem \\ \text{FORM} \ \langle \text{ilk-ess-ta} \rangle \\ \text{SYN} \begin{bmatrix} \text{HEAD } verb \\ \text{VAL} \begin{bmatrix} \text{SUBJ} \ \langle \boxed{1}\text{NP} \rangle \\ \text{COMPS} \ \langle \ \rangle \end{bmatrix} \\ \text{GAP} \ \langle \boxed{2}\text{NP} \rangle \end{bmatrix} \\ \text{ARG-ST} \ \langle \boxed{1}\text{NP}, \boxed{2}\text{NP} \rangle \end{bmatrix}$$

Normal declarative sentences like (20) are projected from (19a) in which the two arguments of the verb are realized as SUBJ and COMPS in the same sentence level:

(20) Mimi-ka   ku chayk-ul   ilk-ess-ta
      Mimi-NOM   the book-ACC   read-PST-DECL
      'Mimi read the book.'

However, in (19b), the second argument is not realized as the COMPS value but is mapped onto the GAP value. This in turn means that the second argument is not in the same local domain as the verb and subject but in a nonlocal domain. This is the situation we observe in topicalized sentences like the following:

(21) ku   chayk-un   [sensayngnim-i [haksayng-tul-i __ ilk-ess-ta-ko]
      the book-TOP   teacher-NOM   student-PL-NOM   __ read-PST-DECL-COMP
      mit-ess-ta].
      believe-PST-DECL
      'As for the book, the teacher believed that students read it.'

In this example, the object of *ilk-ess-ta-ko* is not in the same clause, but is located at the nonlocal domain as a topic expression. That is, the complement of the verb is realized as a gap and discharged later at a nonlocal domain.

The GAP value introduced in accordance with the ARC is inherited to its mother node in

accordance with the GAP Inheritance Principle (see Sag et al. 2003, Kim et al. 2007):

(22)   GAP Inheritance Principle (GIP):

$$phrase \rightarrow \begin{bmatrix} \text{GAP } \boxed{A} \oplus \boxed{B} \\ \text{HEAD-DTR} \mid \text{GAP } \boxed{A} \\ \text{NON-HEAD-DTR} \mid \text{GAP } \boxed{B} \end{bmatrix}$$

The GIP ensures that a phrase inherits the GAP value of all its daughters unless it is discharged by another grammatical constraint. In the topic constructions, this value is discharged by the Head-Filler Construction:[4]

(23)   Head-Filler Construction:

$$\text{S}\begin{bmatrix} \text{GAP } \langle \ \rangle \end{bmatrix} \rightarrow \boxed{1}, \ \textbf{S}\begin{bmatrix} \text{GAP } \langle \boxed{1} \rangle \end{bmatrix}$$
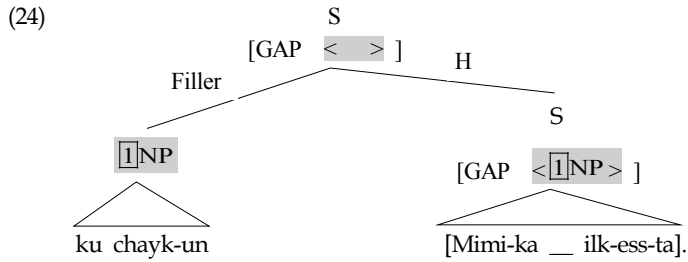
This construction rule means that the sentence with a GAP value combines with its filler, yielding a wellformed, complete S with no GAP value. This is illustrated in the following:

---

[4] Topicalization and relativization constructions are both unbounded dependency constructions, but differ in how the GAP value is discharged:

(i) a. Mimi-eykey-nun   sensayngnim-i   senmwul-ul   cwu-ess-ta
       Mimi-DAT-TOP   teacher-NOM   present-ACC give-PST-DECL
       'As for Mimi, the teacher gave a present to her.'

   b. sensayngnim-i __   senmwul-ul   cwu-n   Mimi-ka   wul-ess-ta
      teacher-NOM   __   present-ACC give-MOD   Mimi-NOM   cry-PST-DECL
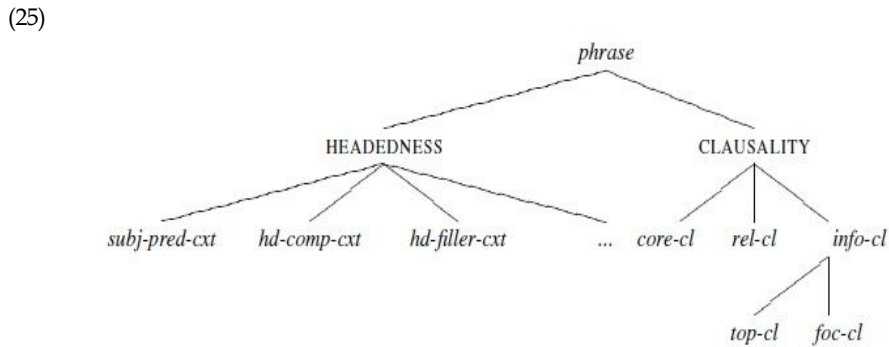   'Mimi, who the teacher gave a present to, cried.'

As illustrated here, in the relative clause, the head NP *Mimi-ka* carries a different case marking value from the GAP in the relative clause (Han and Kim 2004). However, the gap and filler in the topicalization need to have the same case value. This contrast implies that the gap and filler in the relativization share semantic value while those in the topicalization share syntactic as well as semantic information.

(24)

```
                          S
                  [GAP  <    > ]
          Filler                    H
                                           S
         1 NP
                          [GAP   < 1 NP > ]

        ku  chayk-un        [Mimi-ka __ ilk-ess-ta].
```

The matrix sentence includes a GAP value which structure-shares with the topicalized expression *ku chayk-un*. This combination thus forms a well-formed head-filler construction.

3.3 Constructional properties of topic construction

The question that follows is then where topic information comes from? The topic marker cannot encode this information since, as we have discussed earlier, not all topic-marked expressions function as topic: the one in the non-initial position just represents contrastive information. This means that it is the constructional property that evokes topic information. To reflect this idea, we classify phrases in Korean in accordance with the CLAUSALITY and HEADEDNESS properties (see Sag et al. 2003, Kim 2004):

(25)

```
                                phrase

              HEADEDNESS                      CLAUSALITY

   subj-pred-cxt  hd-comp-cxt  hd-filler-cxt  ...  core-cl  rel-cl  info-cl

                                                        top-cl  foc-cl
```

As shown in the hierarchy here, each type of phrase is defined in terms of CLAUSALITY and HEADEDNESS properties. The constraints on the subtypes of the HEADEDNESS will license well-formed phrases in the language, whose main constructional constraints can be represented in the following:

(26) a. $\mathrm{XP}\left[\textit{subj-pred-cxt}\right] \rightarrow \boxed{1}, \mathbf{H}\left[\mathrm{SUBJ}\ \left\langle\boxed{1}\right\rangle\right]$

   b. $\mathrm{XP}\left[\textit{hd-mod-cxt}\right] \rightarrow \left[\mathrm{MOD}\ \left\langle\boxed{1}\right\rangle\right], \boxed{1}\mathbf{H}$

   c. $\mathrm{XP}\left[\textit{hd-comp-cxt}\right] \rightarrow \boxed{1}\mathrm{XP}, \mathbf{H}\left[\mathrm{COMP}\ \left\langle\boxed{1}\right\rangle\right]$

These constraints on well-formed phrases, playing the same role as the structure licensed by X′-theory in transformational approaches, allow the combination of a head and its specifier, a head and its modifier, and a head and its complement, respectively.

   The subtypes of CLAUSALITY include *core-cl*, *rel(ative)-cl*, and *info-cl*. The *core-cl* type includes canonical clauses like declarative and imperative. The constraints on info-cl are the locus of the treatment of the multiple nominative constructions (MNC) (Kim 2001, 2004, Han and Kim 2004). The type *info-cl* has at least two subtypes: *top-cl* and *foc-cl*, which have either a positive TOPIC or FOCUS value. Each has its own constraints that will be inherited to its subtypes. For example, top-cl is declared to have the following constraints which will be inherited to its subtypes:

(27)   Head-Topic Construction

$$
\begin{bmatrix}
\textit{top-cl} \\[4pt]
\text{C-CONT}\ |\ \text{RELS}\ \left\langle \begin{bmatrix} \text{PRED}\ \textit{about-rel} \\ \text{ARG1}\ i \\ \text{ARG2}\ s \end{bmatrix} \right\rangle
\end{bmatrix}
\rightarrow
\begin{bmatrix} \text{IND}\ i \\ \text{TOPIC}\ + \end{bmatrix},\ \mathbf{S}\ \begin{bmatrix} \text{MOOD}\ \textit{decl} \\ \text{IND}\ s \\ \text{IC}\ + \\ \text{SUBJ}\ \langle\ \rangle \\ \text{COMPS}\ \langle\ \rangle \end{bmatrix}
$$

The Head-Topic Construction (*top-cl*) thus consists of a topic expression and a sentential expression which is a fully saturated independent (IC) declarative (*decl*) sentence. Note that the topic clause (*top-cl*) has as its constructional content (C-CONT) an about-relation: the topic phrase tells us what the main clause is about. We can see that the ARG values of about include two arguments: the index value of the topic phrase and that of the head S, linking the two expressions. This constructional constraint first will then prevent the following *(n)un* marked expression from being interpreted as aboutness-topic:

(28) a. Mimi-nun   ku   chayk-ul   ilk-ess-ni?
     Mimi-TOP   the book-ACC   read-PST-QUE
     'Did Mimi read the book?'
   b. Sumi-ka   [Mimi-nun ku   chayk-ul   ilk-ess-ta-ko]
     Sumi-NOM   Mimi-TOP   the book-ACC   read-PST-DECL-COMP
     sayngkakha-n-ta
     think-PRES-DECL
     'Sumi thinks that Mimi read the book.'

In (28a), the *nun*-marked expression is not in a declarative sentence but an interrogative MOOD sentence. In (28b), the *nun*-marked expression is within the dependent clause. The constraint also tells us that sentences like the following are not topic constructions.

(29) ku   chayk-ul   Mimi-nun [Sumi-eykey   __   cwu-ess-ta]
     the book-ACC   Mimi-TOP Sumi-DAT   __   give-PST-DECL
     'Mimi gave the book to Sumi.'

Even though *Mimi* here is marked with the topic marker *nun*, it cannot serve as an 'aboutness' topic since it combines with an incomplete VP.[5] This in turn means that the sentence with a topic expression bears he properties of Head-Filler Construction as well as Head-Topic Construction. To reflect this, we assume hat there is an independent construction *hd-filler-top-cxt*. But when the topic is not an argument but an adverbial expression, the grammar allows the expression to be a *hd-mod-top-cxt* since it has the properties of both Head-Modifier and Head-Topic Construction. This is represented by the following:

(30)
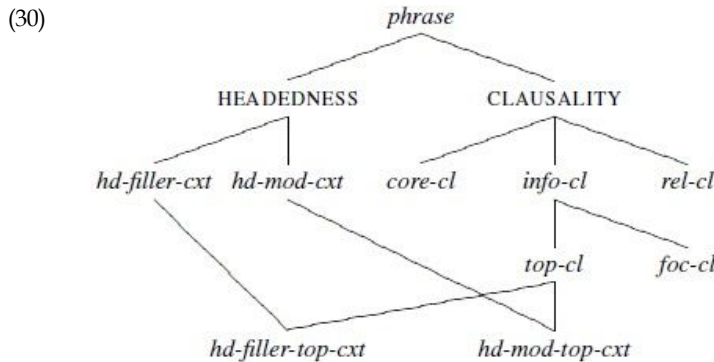
Notice that within this inheritance network system, the top-cl has two subtypes: *hd-filler-top-cxt* and *hd-mod-top-cxt*. The existence of two types thus projects gapped aboutness topic as well as ungapped adverbial aboutness (or scene-setting) topic sentences like the following, respectively:

(31) a. ku   chayk-un   [Mimi-ka   ilk-ess-ta]   *(hd-filler-top-cxt)*
        the book-TOP   Mimi-NOM   read-PST-DECL
        'As for the book, Mimi read it.'

---

5 As noted earlier, *Mimi* here can, however, function as contrastive topic.

b. [ecey-nun   [nalssi-ka   chwuw-ess-ta]] *(hd-mod-top-cxt)*
  yesterday-TOP weather-NOM   cold-PST-DECL
  'As for yesterday, it was cold.'

In (31a), the topic phrase *ku chayk-un* is an argument of the main predicate *ilk-ess-ta* and enters into a head-filler relation, whereas in (31b), the topic *ecey-nun* is just an adjunct. The properties of these two can be illustrated from the structure of (31a) in which the object argument is topicalized:

(32)
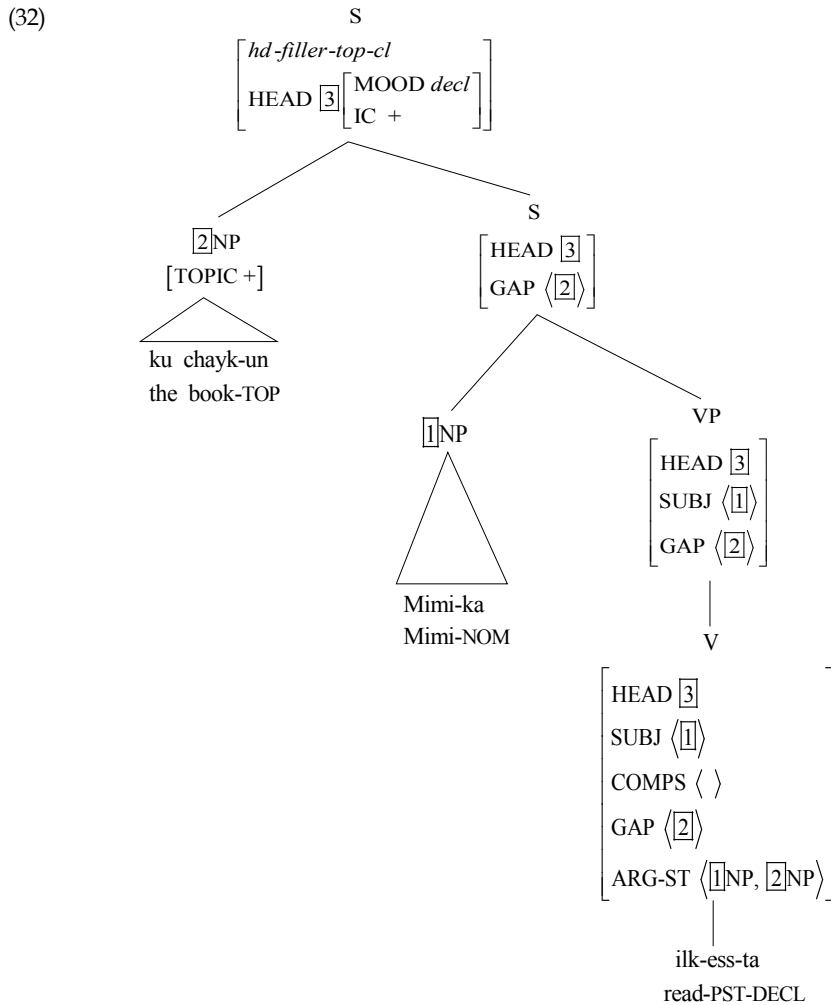
As shown in the structure, the main predicate *ilk-ess-ta* 'read-PST-DECL' selects two arguments whose second argument is realized as a GAP value. This GAP value is passed up to the lower S and discharged by the filler-construction topic the book: the combination of the topic and the lower S will then form a well-formed *hd-filler-top-cxt* (and the features IC and MOOD mark an independent declarative clause).

Meanwhile, in the example (31b), the topic expression *yesterday* is not an argument but an adjunct. There is no GAP value here; the topic expression simply modifies the following sentence, as part of a *hd-mod-top-cxt*. This implies that examples with an adverbial topicalization can be taken to be a head-modifier topic construction as represented in the following:

(33)
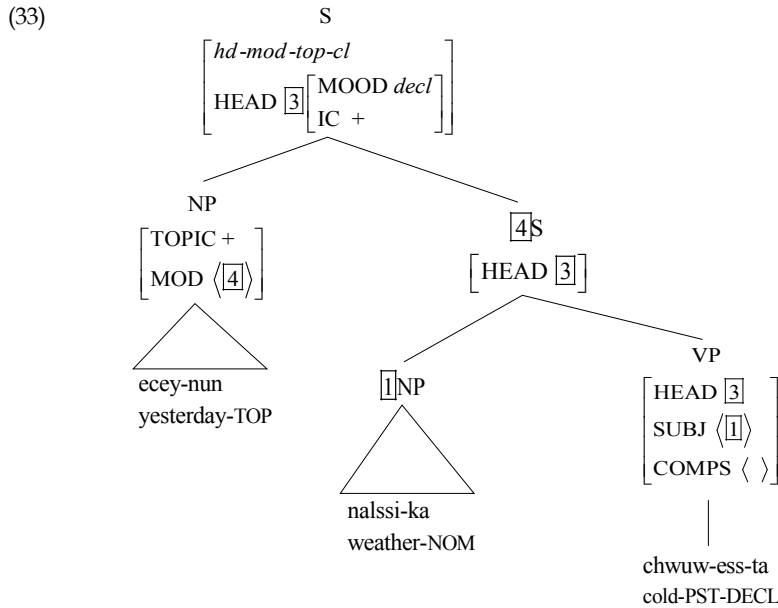
The topicalized adverbial expression *ecey* 'yesterday' is not moved but base-generated. It just modifies the sentence that follows, forming a Head-Modifier Construction. At the same time, the adverbial also functions as topic of the sentence, being in the sentence initial position.

We have seen that an argument topic can have a long distance dependency with a putative gap in the embedded clause. Consider another example in which the topic is linked to the subject of the embedded clause.

(34) ku chayk-un   Mimi-ka   [__ salacy-ess-ta-ko]   sayngkakha-yess-ta
     the book-TOP Mimi-NOM   disappear-PST-DECL-COMP   think-PST-DECL
     'As for the book, Mimi thought that it disappeared.'

The present system would then generate a structure like the following:

(35)
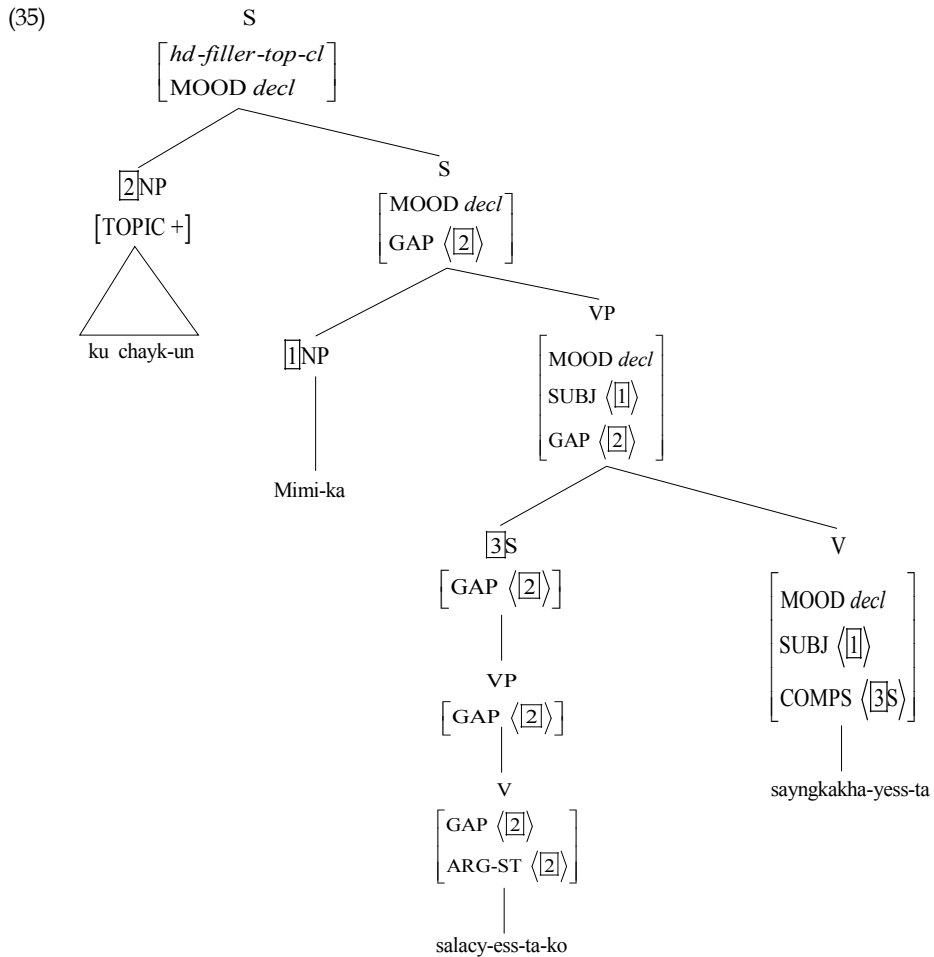
As illustrated here, the verb *salacy-ess-ta-ko* selects one argument which is supposed to be the subject but is realized as a GAP expression. This GAP value is inherited to the topmost S where it is discharged by the topic phrase, forming a well-formed *head-filler-top-cxt*.

A similar anlaysis can be given for a long-distance dependency between an adverbial

topic and a putative gap in the embedded clause. As we have seen earlier, we can treat examples like (36a) as having no long distance dependency but as a head-modifier construction. However, those like (36b) are ambiguous:

(36) a. onul-un   nalssi-ka   cham   coh-ta
        today-TOP   weather-NOM   very   good-DECL
        'As for today, the weather is really good.'
     b. onul-un   [salamtul-i   [nalssi-ka   cham   coh-ta]-ko
        today-TOP   people-NOM   weather-NOM   very   good-DECL-COMP
        malha-yess-ta]
        say-PST-DECL
        'As for today, people say the weather is really good.'

The adverbial can be linked to either the matrix clause or the embedded clause. As for the former, we could take *onul-un* 'today-TOP' as modifying the following comment clause, yielding a head-mod-topic-construction. But for the latter, the interpretation turns it into a head-filler-topic-construction. The only mechanism we need for this is to extend the argument structure of *coh-ta* 'good-DECL' so that it can include an adverbial expression (e.g., *onul* 'today') as an additional argument. Given this argument extension, we are then able to capture the fact that the topic *onul-un* is linked to the embedded clause.[6]
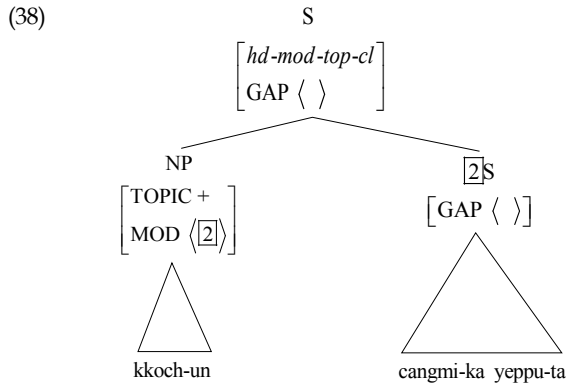
The third type of topicalization, which we have called dangling (or hanging) topic, involves examples where we topicalize a nominal expression, whose example we repeat here.

(37) kkoch-un   [s cangmi-ka   yeppu-ta]
     flowers-TOP   rose-NOM   pretty-DECL
     'As for flowers, roses are pretty.'

The expression *kkoch* 'flower' here is a nominal expression but not linked to the matrix sentence, implying that the topicalized nominal is an adverbial expression. The present system would assign a structure like the following to this:

---

[6] As a reviewer points out, this analysis would then yield two possible structures for examples like (36): one as a head-modifier and the other as a head-filler construction. The former would be typical cases while the latter requires a further processing load.

(38)

$$\begin{bmatrix} \textit{hd-mod-top-cl} \\ \text{GAP} \langle \ \rangle \end{bmatrix}$$ S

NP $\begin{bmatrix} \text{TOPIC} + \\ \text{MOD} \langle \boxed{2} \rangle \end{bmatrix}$

$\boxed{2}$ S $\begin{bmatrix} \text{GAP} \langle \ \rangle \end{bmatrix}$

kkoch-un

cangmi-ka yeppu-ta

There is no GAP value in the matrix sentence, but the sentence is modified by the nominal topic. Note that even though the topic expression here is a nominal, it functions as an adverbial. The present base-generation system can license such a construction as long as there is an *about-relation* between the topic and the head S. For example, sentences like (39) would not be possible since there cannot be any *about-relation* between the topic and the following sentence:

(39) *catongcha-nun   [cangmi-ka yeppu-ta]
      car-TOP   rose-NOM   pretty-DECL
      '*As for cars, roses are pretty.'

Another intriguing instance involves the topicalization of a possessor, which we have not mentioned yet:

(40) a. khokkili-nun   kho-ka   kil-ta
        elephant-TOP   nose-NOM   long-DECL
        'As for the elephant, its nose is long.'
     b. ku ai-nun   nwun-i   yeppu-ta
        the child-TOP   eyes-NOM   pretty-DECL
        'As for the child, his eyes are pretty.

The topic phrase here is in a possessor relation with the following nominative. Note that even the possessor of the object can be topicalized (see Shi 2000 for Chinese counterparts):

(41) a. Mimi-ka   ku ai-uy   nwun-ul swuswulha-yess-ta
        Mimi-NOM   the child-GEN   eyes   operate-PST-DECL
        'Mimi had an operation on the child's eyes.'

    b. ku ai-uy   nwun-un   Mimi-ka   swuswulha-yess-ta
       the child-GEN eyes-TOP   Mimi-NOM   operate-PST-DECL
       'As for the child's eyes, Mimi had an operation on them.'
    c. ?ku ai-nun   Mimi-ka   nwun-ul swuswulha-yess-ta
       the child-TOP   Mimi-NOM   eye-ACC operate-PST-DECL
       'As for the child, Mimi had an operation on his eyes.'

(42) a. Mimi-ka   ku ai-uy   nwun-ey anyak-ul   neh-ess-ta
        Mimi-NOM   he child-GEN   eyes-at   drops-ACC   put-PST-DECL
        'Mimi put drops on the child's eyes.'
     b. ku ai-uy   nwun-ey-nun Mimi-ka   anyak-ul   neh-ess-ta
        the child-GEN eyes-at-TOP   Mimi-NOM   drops-ACC   put-PST-DECL
        'As for the child's eyes, Mimi put drops on them.'
     c. ?ku ai-nun   Mimi-ka   nwun-ey anyak-ul   neh-ess-ta
        the child-TOP   Mimi-NOM   eyes-at drops-ACC   put-PST-DECL
        'As for the child, Mimi put drops on his eyes.'

What we first need to consider is examples like the following in which the specifier of the subject functions as a focus expression:

(43) a. [Kim-i   [son-i   khu-ta]]
        Kim-NOM   hand-NOM   big-DECL
        'It is Kim whose hand is big.'
     b. [Kim-i   [atul-i   mikwuk-ey ka-ss-ta]]
        Kim-NOM   son-NOM   America-to go-PST-DECL
   'It is Kim whose son went to America.'

The first NOM phrase here is introduced as a specifier with a possessive relation with the second NOM.[7] We can notice that the two consecutive NOM phrases need to be in a certain semantic relation (e.g., the subordinate relation) in the Possessive-MNC, as can be seen from the evidence in (44):

(44) a. pyeng-uy/-*i   akhwa-ka   i   kyelkwa-lul cholayha-yess-ta
        illness-GEN/NOM   worsening-NOM   this result-ACC cause-PST-DECL
        'The worsening of the illness caused this condition.'
     b. Kim-uy/*-i   iphak-i   wuli-lul nolla-key   ha-yess-ta
        Kim-GEN/NOM   admission-NOM   we-ACC   surprise-CONN   do-PST-DECL

---

[7] There have been debates over the grammatical status of the first and second NOM. As Yoon (2007) suggests, we could take the first one as major subject while the second as grammatical subject.
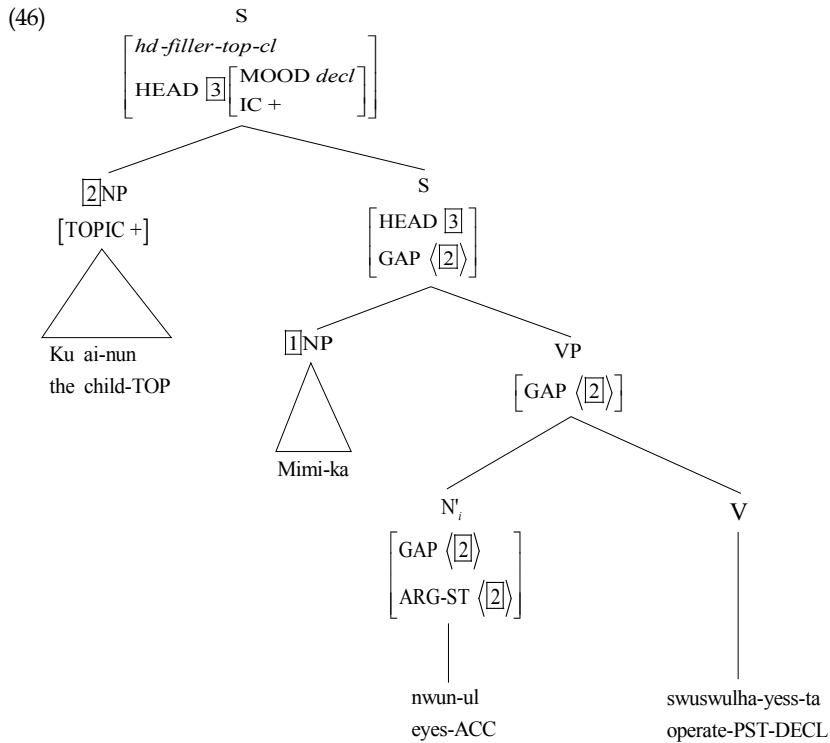
'Kim's admission surprised us.'

Within the present system, the topicalization of the specifier is licensed by allowing the specifier to be introduced as a gap expression:

(45)
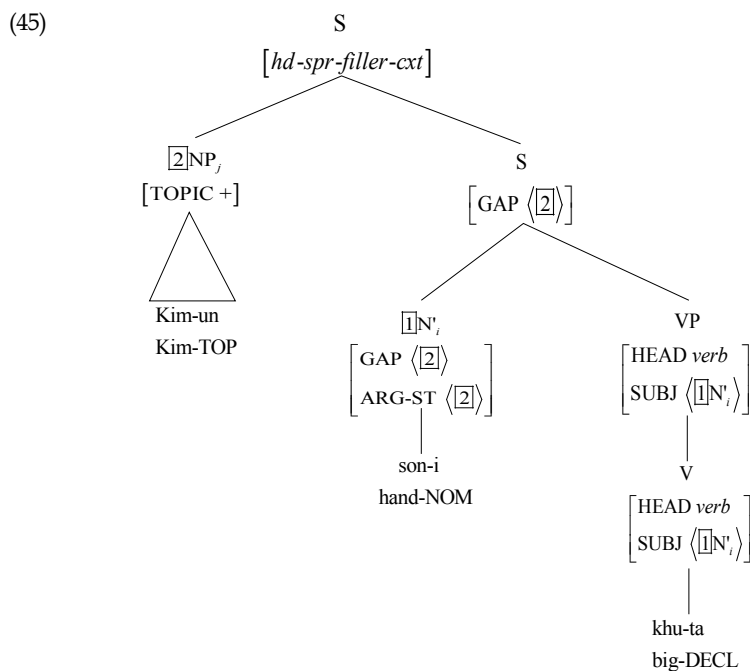
The verb *khu-ta* 'big-DECL' is an intransitive stative verb requiring a subject. Note that this subject, functioning as the external argument (XARG), is rather unsaturated with its specifier value, which in fact is realized as a GAP value. This GAP, as an unbounded dependency value, is linked to the topic of the sentence. Note that this kind dependency relation can be found between the specifier of an object and the sentential topic:[8]

---

[8] In introducing a specifier as a gap expression, it needs to be a 'subordination' relation with the nominal head, as Na and Huck (1993) and Han and Kim (2004). X is thematically subordinate to an entity Y iff Y's having the properties that it does entails that X has the properties that it does. Na and Huck (1993) classify these thematic subordination relations into five types: *part-whole* (cover vs. book, voice vs. man, tail vs. dog), *quality-to-entity* (use vs. tool, color vs. eyes, taste vs. food), *conventional* (hat vs. boy, nest vs. bird), *hierarchical* (parent vs. child, doctor vs. patient), and *taxonomic* (apple vs. fruit, chair vs. furniture, shirt vs. clothes, soccer vs. game). See also Kim et al. (2007), Kim (2004), and

(46)

```
                                    S
                   ⎡ hd-filler-top-cl              ⎤
                   ⎢                ⎡ MOOD decl ⎤   ⎥
                   ⎢ HEAD ③         ⎢ IC +       ⎥  ⎥
                   ⎣                ⎣            ⎦   ⎦
                    /                              \
          ②NP                                      S
          ⎡ TOPIC + ⎤                       ⎡ HEAD ③       ⎤
                                            ⎣ GAP ⟨②⟩       ⎦
            △                                /            \
      Ku  ai-nun                      ①NP                   VP
      the child-TOP                                  ⎡ GAP ⟨②⟩ ⎤
                                       △              /        \
                                    Mimi-ka         Nʹᵢ          V
                                             ⎡ GAP  ⟨②⟩ ⎤
                                             ⎣ ARG-ST ⟨②⟩ ⎦
                                                  |            |
                                              nwun-ul     swuswulha-yess-ta
                                              eyes-ACC    operate-PST-DECL
```

In this example, the specifier of the object is realized as the gap value which is discharged by the topic expression.

As we have seen so far, the constructional constraints, multiple inheritance hierarchy, lexical information linked with the argument realization constraint, allow us to account for the main properties of each topic construction while capturing cross-cutting generalizations among related constructions.

4. Conclusion

We have seen that topic constructions in Korean are realized in three main different types. It terms of the semantic relation of a topic with the following comment clause, it can function as an aboutness, contrastive, or scene-setting topic. The syntactic property of topics also distinguish themselves, depending on whether they are linked to a putative gap in the comment clause or not. We have seen that these mixed properties yield much complexities of the topic constructions in Korean. This paper suggests that each type of topic is licensed

---

Kim (2016).

by the interaction of syntactic and semantic constraints. The syntactic licensing of topic has closely to do with the existing phrasal constructions: head-filler, head-modifier, and head-specifier constructions. Meanwhile, the semantic licensing has to do with the aboutness condition. This paper has shown that a grammar allowing interactions of declarative constraints on the constructions can provide a robust and efficient way of accounting for different subconstructions of topic in Korean.

\<References\>

Na, Younghee and Geoffrey Huck. 1993. On the State of Certain Island Violations in Korean. *Linguistics and Philosophy* 16: 181-229.

Chafe, Wallace. 1976. Giveness, contrastiveness, definiteness, subjects, topics, and point of view. In Charles Li (ed.), *Subject and Topic*, 25–55. New York: Academic Press.

Chang, Suk-Jin. 1996. *Korean*. John Benjamins Publishing.

Choe, Hyon Sook. 1995. Focus and topic movement in Korean and licensing. In K.E. Kiss (ed.), *Discourse Configurational Languages*, 269–334. New York: Oxford University Press.

Gundel, Jeanette. 1988. Universals of topic-comment structure. In Michael Hammond et al. (eds.), *Studies in syntactic typology*, 209–239, Amsterdam: John Benjamins.

Han, Chyung-Hey and Jong-Bok Kim. 2004. Are There "Double Relative Clauses" in Korean? *Linguistic Inquiry* 35.2: 315–337.

Kang, Young-Se. 1986. *Korean Syntax and Universal Grammar*. Doctoral Dissertation. Harvard University.

Kim, Jong-Bok. 2001. A Constraint-based and Head-driven Analysis of Multiple Nominative Constructions. In Dan Flickinger & Andreas Kathol (eds.), *Proceedings of the 7th International Conference on Head-Driven Phrase Structure Grammar*, 166–181. Stanford: CSLI Publications.

Kim, Jong-Bok. 2004. *Korean Phrase Structure Grammar (In Korean)*. Seoul: Hankuk Munhwasa.

Kim, Jong-Bok. 2016. *The Syntactic Structures of Korean: A Construction-based Perspective*. In Press. Cambridge University Press.

Kim, Jong-Bok, Peter Sells and Jaehyung Yang. 2007. Parsing Two Types of Multiple Nominative Construction: A Constructional Approach. *Language and Information* 11: 25–37.

Kuno, Susumu. 1973. *The Structure of Japanese*. Cambridge: MIT Press.

Lee, Chungmin. 2006. Contrastive topic/focus and polarity in discourse. In K. von Heusinger and K. Turner (eds.), *Where Semantics Meets Pragmatics*, 381-420. CRiSPI 16, Elsevier.

Park, Byung-Soo. 1981. Double Subject Constructions Revisited. *Linguistics in the Morning Calm*, 645‒658. Seoul: Hanshin.

Reinhart, Tanya. 1981. Pragmatics and Linguistics: An Analysis of Sentence Topics. *Philosophica* 27: 53‒94.

Sag, Ivan A. and Janet Fodor. 1994. Extraction Without Traces. In Raul Aranovich, William Byrne, Susanne Preuss, and Martha Senturia (eds.), *Proceedings of the West Coast Conference on Formal Linguistics* 13: 365‒384. Stanford: Stanford Linguistic Association.

Sag, Ivan, Tom Wasow, and Emily Bender. 2003. *Syntactic Theory: A Formal Approach*. Standford: CSLI Publications.

Shi, Dingxu. 2000. Topic and topic-comment constructions in Mandarin Chinese. *Language* 76.2: 383‒408.

Sohn, Ho-Min. 1990. *Korean*. London: Routlege.

Sohn, Ho-Min. 1999. *The Korean Language*. Cambridge University Press.

Yoon, James. 2007. The Distribution o f Subject Properties in Multiple Subject Constructions. In Y. Takubo, T. Kinuhata, S. Grzelak & K. Nagai (eds.), *Japanese/Korean Linguistics* 16: 64‒83. Stanford.