

An Analysis of the Korean [*manyak ... V-telato*] Construction: An Indexed Phrase Structure Grammar Approach

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Abstract

Concord adverbial constructions in Korean show unbounded dependency relationships between two non-empty entities. There are two different types of unboundedness involved: one between a concord adverbial and a verbal ending and the other between the adverbial as a modifier and a predicate. In addition, these unboundedness relationships exhibit properties of “downward movement” phenomena. In this paper, we examine the Indexed Phrase Structure Grammar analysis of the constructions presented in Chae (2003, 2004), and propose to introduce a new feature to solve its conceptual problem. Then, we provide an analysis of conditional-concessive constructions, which is a subtype of concord adverbial constructions. These constructions are special in the sense that they contain a seemingly incompatible combination of a conditional adverbial and a concessive verbal ending. We argue that they are basically conditional constructions despite their concessive meaning.

1 Introduction

In Korean there is a group of adverbials which show a correspondence to some specified element in the sentence. These adverbials, which are called “concord adverbials (CAs),” are comprised of such “modality adverbials” as those indicating ‘condition’ and ‘concession.’ They constitute “Concord Adverbial Constructions (CACs)” together with the corresponding elements. These corresponding elements are typically verbs which have some specified verbal endings (VEs).

- (1) a. pilok yengca-ka ttena-ess-telato/eto, (ke peulo-nun po-l manha-e.)
{CA} Youngja-Nom leave-Past-{VE ‘although’}, that program-Top see-Fut be worth-Decl
‘Although Youngja doesn’t appear, (that program is worth watching.)’
b. *pilok yengca-ka ttena-ess-tamyen
{CA} {VE ‘if’}

Here the CA *pilok* requires that the clause-final verb have an ending of a concessive meaning, i.e. *-telato* or *-eto*. It does not allow a conditional ending like *-tamyen*. These constructions show some special properties which cannot be easily accounted for. One such property in (1) is that the CA and (the verb with) the VE are not always adjacent. Furthermore, as we will see in section 2, they exhibit two different types of unbounded relationships.

The purpose of this paper is two-fold. Firstly, after examining the analysis of Korean CACs in Chae (2003, 2004), we will propose a new feature of LICENSEE for a better analysis of them. The former analysis employs the LICENSOR feature under the “Indexed Phrase Structure Grammar (IPSG)” framework, which is introduced in Chae (1992) following the spirit of Gazdar (1988). While the LICENSOR approach does not have any problems from a syntactic point of view, it is not very satisfactory from a semantic point of view. We will show that the new LICENSEE approach does not have any syntactic or semantic problems. Secondly, under this revised IPSG framework, we will provide an analysis of a subtype of CACs:

- (2) manyak chulswu-lul manna-telato (ke kes-ul mal haysenun antoyn-ta.)
 {CA ‘if’} -Acc meet- {VE ‘although’} that thing-Acc must not say-Decl
 ‘Even if you meet Chulsoo, (you should not say about that thing.)’

This type of CACs contains a CA and a VE which do not seem to be compatible semantically: the former is a conditional adverb while the latter is a concessive ending. Despite this apparent incompatibility, the sentence is grammatical. We will call this type of CACs [*manyak* ... V-*telato*] constructions or “Conditional-Concessive Constructions (CCCs).” Unlike these constructions, expressions containing a concessive adverb and a conditional ending, e.g. [*pilok* ‘although’ ... V-*myen* ‘if’], are ungrammatical. In this paper, we will show that the CCC is basically a conditional construction despite its concessive meaning.

2 Propertis of Concord Adverbial Constructions (CACs)

With reference to sentence (1), we have seen that the CA and the VE do not occur contiguously in CACs even though they are related closely. That is, they show discontinuous dependencies within a clause. Furthermore, the CA can be separated from the VE across clause boundaries:

- (3) salam-tul-i [[yengca-ka pilok ttena-se] caemi-ka telhata-ko] ha-telato, ...
 people-PI-Nom Youngja-Nom {CA} leave-as interest-Nom be less-Comp do- {VE ‘although’}
 ‘Although people say that it is less interesting because Youngja left, ...’

The CA *pilok* occurs two clauses down from the clause containing the VE *-telato*, which indicates that CACs have characteristics of unbounded discontinuities.

In addition to the unboundedness of the CA-VE relationship, we can see another type of unboundedness when the CA functions as (a part) a modifier phrase. The CA can modify a predicate in an upper clause, which shows that the CA and what is modified by it can also be separated from each other unboundedly

- (4) chelswu-nun [[cikwu-ka amuli yelsimhi phenphenhata-ko] wuki-taka]
 Chulsoo-Top earth-Nom {CA ‘however’} laboriously be flat-Comp argue-Comp
 kkwucilam-ul tut-eto, ...
 be scolded- {VE ‘although’}
 ‘Even though Chulsoo has been scolded by arguing very tenaciously that the earth is flat, ...’

In this sentence the CA *amuli*, which is in the lowest clause, modifies the predicate in the intermediate clause, together with the manner adverb *yelsimhi*. Notice that *amuli yelsimhi* is not compatible with the lowest or the highest predicates (*phenphenha-* or *kkwucilam-ul tut-*). If they are compatible, the sentence would be ambiguous.

We have seen that there are two different types of unbounded relationships involved in the CACs. One is the relation between the CA and the VE. The other is the relation between the CA as a modifier and the predicate which is modified by it. These unbounded relationships, which is exemplified in such sentences as (3-4), can be represented schematically as follows: s[s[s[{CA} ... Pred3] ... Pred2] ... Pred1- {VE}]. The CA which occurs in the clause of Pred3 or Pred2 can license the VE in the highest clause of Pred1. In addition, the CA can modify not only Pred 3 but also Pred2 or Pred1, depending on their compatibility.

These CA-VE and modifier-modified relationships are not ordinary ones because they exhibit “downward movement” phenomena rather than “upward movement” phenomena (Chae 2003: sec. 2). Firstly, the CA can only be on the same clause as or on a lower clause than the one containing the VE. For example, in (3), the CA sits on the lowest clause while the VE is on the highest clause. It can also occur in a higher clause as far as it does not stay outside of the clause containing the VE:

- (5) a. salam-tul-i [[yengca-ka ttena-se] pilok caemi-ka telhata-ko] ha-telato, ...
 b. salam-tul-i [pilok [yengca-ka ttena-se] caemi-ka telhata-ko] ha-telato, ...
 c. salam-tul-i pilok [[yengca-ka ttena-se] caemi-ka telhata-ko] ha-telato, ...
 d. pilok salam-tul-i [[yengca-ka ttena-se] caemi-ka telhata-ko] ha-telato, ...

The CA can occur in the middle clause as in (a-b) or in the highest clause as in (c-d)¹. Although all of these sentences including (3) are just fine, sentence (c) or (d), where the CA occurs in the clause containing the VE, is an “unmarked” one intuitively. Most of the CAC sentences we encounter are of this type. Hence, from a “deep structure” point of view, the CA should be on the same clause as the VE. On the surface, however, it can stay on a lower clause doing its own function of, at least, indicating focus.

Secondly, the CA in a lower clause can modify not only its clause-mate predicate but also a predicate in a higher clause. When it modifies an upper clause predicate, it is interpreted as being in that clause even though it is sitting in the lower clause. The unmarked “default” version of sentence (4) would have to be the following, as the CA *amuli* and the adverbial *yelsimhi* modifies the predicate *wuki-* in the middle clause:

- (6) chelswu-nun [[cikwu-ka phenphenhata-ko] amuli yelsimhi wuki-taka] kkwucilam-ul tut-eto, ...

Advocates of movement approaches would have to posit that sentence (4) is derived from this sentence, which has the modifier phrase in the middle clause.

These downward movement phenomena may or may not be problematic to mono-stratal approaches, depending on the specific mechanisms employed. However, they pose a serious problem to multi-stratal approaches with the movement operation, including Minimalist Programs². Note that almost all the frameworks of movement approaches following the Transformational Grammar tradition are constructed under the assumption that there are only upward movement constructions in natural languages. Even if one can manage to get over this problem, he will face a conflicting situation in accounting for CACs. From the viewpoint of the CA-VE relationship, the underlying structure has to be the sentence where the CA occurs on the same clause as the VE (cf. (3) and (5)). However, from the viewpoint of the modifier-modified relationship, e.g. in such cases involving (4) and (6), the underlying structure have to be a sentence where the CA occurs in a lower clause. There is no way of deciding the underlying structure in this conflicting situation.

3 An IPSG Analysis of CACs

We have seen that there are two different types of unbounded relationships involved in Korean CACs and that these relationships show “downward movement” phenomena. Taking these facts into consideration, Chae (2003, 2004) provides an Indexed Phrase Structure Grammar (IPSG) analysis of the constructions. In this section, we will first examine Chae’s analysis, which employs the LICENSOR feature. Then, we will propose a new feature LICENSEE for a better analysis of them. We will see that this new LICENSEE approach can overcome the semantic problems of the LICENSOR approach.

3.1 Chae’s (2003, 2004) Analysis

Before we provide an analysis of the CACs, it is necessary to consider the nature of their unbounded relationships: whether the two elements concerned, i.e. the CA and the VE, have only a semantic relation or they have a syntactic relation as well. In addition, we need to figure out which of the two

¹ The words in (b) and (c) occur in the same linear order, but the two sentences have different structures. They seem to have different focus structures as well.

² Chung (2003) provides a Minimalist analysis of CACs in Korean. He does not assume that the CA moves downward, but assumes that all the elements left of the CA move upward. However, as is demonstrated in Chae (2004, sec. 5), this long-distance scrambling approach is not very satisfactory.

elements licenses the other. Chae (2003: sec. 3) argues that there is a syntactic relationship between them and that the CA licenses the VE.

If there is only a semantic relationship between them, we have to assume that the VE licenses the CA. Even though the CA can be assumed to be under the semantic scope of the VE, the VE cannot be under the semantic scope of the CA in all cases. Remember that the CA can only be placed on the same clause as or on a lower clause than the VE clause. The CA on a lower clause cannot have the VE in its semantic scope.

Then, there remain three possibilities on the relationship between the CA and the VE. Firstly, we can assume that there is only a semantic relationship between them and the VE licenses the CA. Secondly, there may be a syntactic relationship between them and the VE licenses the CA. Thirdly, we can assume that there is a syntactic relationship and the CA licenses the VE. Let us consider which hypothesis is the most appropriate of all these alternatives. We have to keep in mind that, except some special cases, if two elements are related syntactically they are related semantically as well.

The semantic hypothesis is to assume that the CA is licensed by the VE semantically. We can say that the CA is licensed by the VE in case it is under the semantic scope of the VE. Such a semantic approach could account for the CA-VE unboundedness because the CA can be analyzed as being under the VE's scope however deep it may be located. As the information represented by the VE is realized as a verbal ending and the whole clause carries that information, the VE can be treated as a HEAD feature. For example, in sentence (1a), the meaning/function of the VE *-telato/eto*, i.e. 'concession,' can be represented as a HEAD feature [CONCESSION +].

- (1a) *pilok yengca-ka ttena-ess-telato/eto*, (ke peulo-nun po-l manha-e.)
 {CA} Youngja-Nom leave-Past-{VE 'although'}, that program-Top see-Fut be worth-Decl
 'Although Youngja doesn't appear, (that program is worth watching.)'

As a HEAD feature the feature will pass up to the whole clause through the head projection line. Then, the CA would be under the semantic scope of the VE wherever it may be located.

It seems to be true that the VE licenses the CA semantically: the CA cannot stand alone although the VE can, and the CA is always under the semantic scope of the VE. However, semantics-only approaches would fail to handle multiple dependency constructions like the following:

- (7) a. [*ney-ka pilok ton ttaymun-ey manyak kwun-ey ka-key toy-myen*]
 you-Nom {CA₁} money because of {CA₂} military-at go-Comp become- {VE₂}
yengja-ka ttena-lcilato
 Youngja-Nom leave- {VE₁}
 'Even though Youngja may leave you, if you join the armed service because of money, ...'
 b. *[*ney-ka manyak ton ttaymun-ey pilok kwun-ey ka-key toy-myen*] *yengja-ka ttena-lcilato*

As both of the two CAs are under the semantic scope of the two VEs, sentence (7b) is also expected to be grammatical. The sentence would have to be grammatical in whatever order the CAs are, as far as they are under the scope of their VEs. However, the grammaticality is sensitive to the relative order of the CAs in relation to their VEs, which is unusual from a semantic point of view. On the other hand, from a syntactic point of view, it is well-established that only nested dependencies are allowed in multiple-dependency constructions (*manyak* triggers *-myen* 'if' and *pilok* triggers *-lcilato* 'although') These examples imply that there is a syntactic connection between the CA and the VE, because crossed dependencies are also allowed when the dependencies are only semantic. If at least one of the two relations involved is purely semantic, crossed dependencies are allowed:

- (8) a. *manyak amuto hakkyo-ey o-ci ahn-ulyeko ha-myen*
 {CA} nobody school-at/to come-Compl not-Intention do- {VE 'if'}
 'If nobody intends to come to school, ...'
 b. *amuto manyak hakkyo-ey o-ci ahn-ulyeko ha-myen*

There is no syntactic relationship between the negative polarity item *amoto* and the negation auxiliary verb (*-ci*) *ahn-* (Chae 2002). In this case, both the nested and crossed dependency sentences are grammatical.

The unboundedness of the modifier-modified relationship is more difficult to account for under a semantic approach. There would be no easy way of accounting for the fact that *amuli yelsimhi* in a lower clause modifies *wuki-* in an upper clause in (4).

- (4) *chelswu-nun* [[*cikwu-ka amuli yelsimhi phenphenhata-ko*] *wuki-taka*]
 Chulsoo-Top earth-Nom {CA ‘however’} laboriously be flat-Comp argue-Comp
kkwucilam-ul tut-eto, ...
 be scolded- {VE ‘although’}
 ‘Even though Chulsoo has been scolded by arguing very tenaciously that the earth is flat, ...’

The fact that a lower element can modify a higher element cannot be attributable to the semantic relationship between the CA and the VE. All the special properties of CACs seem to arise from a strong “attracting force” between them. We cannot account for this force by simply assuming that the CA is under the semantic scope of the VE. There must be some formal mechanisms to connect them.

As we have shown that the two elements are related syntactically, we have two hypotheses remaining to be tested. First of all, we can assume that the CA licenses the VE. Under this assumption, we can account for the problems posed by a semantic approach. As for the multiple dependency constructions in (7), we do not need to provide any special explanation because crossed dependencies are not allowed syntactically. The modifier-modified relationship can also be handled more easily once we have a syntactic mechanism connecting the two elements.

The other option is to assume that the VE licenses the CA. However, this option is not tenable. Empirically, this approach would be problematic in accounting for the ungrammaticality of such sentences as (9a):

- (9) a. **pilok yengca-ka ttena-ess-tamyen* (cf. (1))
 {CA} Youngja-Nom leave-Past- {VE ‘if’}
 b. *yengca-ka ttena-ess-tamyen*
 Youngja-Nom leave-Past- {VE ‘if’} ‘If Youngja left, ...’
 c. *manyak yengca-ka ttena-ess-tamyen*
 {CA} Youngja-Nom leave-Past- {VE ‘if’} ‘If Youngja left, ...’

Expression (9a) has a wrong VE: *pilok* goes with *-telato/eto/lcilate* rather than *-tamyen*. As we can see in (9b), it becomes grammatical when the adverb *pilok* is not present. This means that the VE doesn’t have to license any CA, i.e. it would be an optional licenser. Therefore, we need some special mechanisms to account for the ungrammaticality of (9a). As the VE does not have to license a CA, the only possible way of ruling out (9a) is to rely on semantics or pragmatics. One might assume that the CA *pilok* cannot combine with the rest of the sentence, which has a conditional meaning, because there is a mismatch between them³ Then, however, we will be in an awkward situation because we have to say that *pilok* in (9a) is not allowed due to a semantic or pragmatic problem while the CA *manyak* in (9c) is licensed by a syntactic mechanism. In other words, all ungrammatical sentences would have a semantic/pragmatic problem while all grammatical sentences would be licensed syntactically. Remember that we are now testing a hypothesis which says that the VE syntactically license the CA.

A more serious problem arises when the CA in a lower clause is not compatible with the VE in an upper clause (cf. (3)):

- (10) **salam-tul-i* [[*yengca-ka pilok ttena-se*] *caemi-ka telhata-ko*] *ha-n-tamyen*, ...
 person-PI-Nom Youngja-Nom {CA} leave-as be less interesting-Comp do-Pres- {VE ‘if’}

³ It is not clear whether the CA *pilok* has any truth-conditional meaning at all.

Under the present hypothesis, this sentence is ungrammatical because the meaning of the CA *pilok* cannot combine with that of the VE *-tamyen*. However, we need to concoct a special mechanism to make the meaning of *pilok* available at the clause where the VE is. In general, the meaning of an adverb in an (non-head) embedded clause cannot be transported to an upper clause.

We are now left with the last hypothesis that the CA licenses the VE syntactically. We have seen above that we can handle all the difficulties with the semantics-only hypothesis under this hypothesis. We do not face any of the problems of the second hypothesis, either. As the CA licenses the VE obligatorily, all the data in (9) can be treated naturally. Sentence (a) is ungrammatical because the VE *-tamyen* is not what is required by the CA *pilok*. The CA has to license a VE which is required by it, i.e. *-telato/eto*. Sentence (b) has nothing to do with the CA. The VE *-tamyen* itself has the meaning of condition. In sentence (c), the CA *manyak* licenses what is required by it, i.e. the VE *-tamyen*.

Thus far, we have considered the nature of the unbounded relationships in CACs. Although we have focused on the nature of the CA-VE relationship, the modifier-modified relationship seems to have the same properties. We have found out that there is a syntactic relation between the CA and the VE, and that the CA licenses the VE. Now we can say that the CA triggers the existence of the VE and characterizes the whole CAC construction. In this respect, we will call the CA the “trigger,” and what is triggered by it, i.e. the VE, the “target.”

Under the assumption that the CA licenses the VE syntactically, Chae (2003, 2004) provides an Indexed Phrase Structure Grammar (IPSG) analysis of the Koeran CACs. The IPSG framework, which is introduced in Chae (1992), is an outgrowth of two grammar formalisms: Generalized Phrase Structure Grammar (GPSG) (Gazdar, et al. 1985) and Indexed Grammar (Aho 1968). It incorporates the mechanism of “stacked indices,” which is the characterizing feature of Indexed Grammar, into a GPSG-style framework.

Chae (1992) develops an IPSG framework to provide a unified account of “lexically triggered unbounded discontinuities” in English:

(11) Type A Constructions

- a. This paper was tough for me to try to finish *e* in a week.
- b. The game was a breeze for Tom to convince her to win *e*.
- c. John is too nasty to ask Mary to make friends with *e*.
- d. Tom is tall enough to imagine my little son could have seen *e*.
- e. Kevin is a tough man to convince Mary to talk to *e*.

(12) Type B Constructions

- a. Jane is more beautiful *than* I thought she would be.
- b. I told her that so many people attended last year's concert *that* I made Mary nervous.

“Type A” constructions comprise *tough*- and similar constructions, and “Type B” comparative constructions and result clause constructions. These constructions contain particular lexical items (i.e. the underlined words) which characterize them, and trigger the existence of other parts in them: a gapped VP in (11) and a *than/that*-clause in (12). The trigger and the target can be separated from each other by other elements (hence, they are discontinuous). In addition, the trigger and (a part of) the target might not be elements of the same clause (hence, they are unbounded).

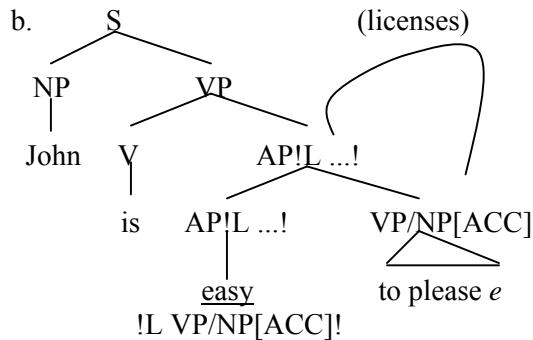
The main point of the framework is that each lexical item which induces a particular construction has a “LICENSOR feature” in the stack (hence, an Indexed Grammar) as a part of its syntactic information in the lexicon. The value of this feature is what is licensed by the trigger, i.e. the target. For example, *so* in (12b) has [LICENSOR S[COMP *that*]] in the stack as a part of its lexical representation. The feature propagates through the tree as a FOOT feature, which is subject to such principles as the

FOOT Feature Principle in Gazdar, et al. (1985)⁴. Popping out of the stack, it licenses the target according to the following principle:

(13) The Principle of LICENSOR Discharge:

[LICENSOR XP] in the stack of a node (pops out of the stack and) licenses one of this node's daughters when the specification of the LICENSOR's value (i.e. XP) is the same as that of this daughter node.

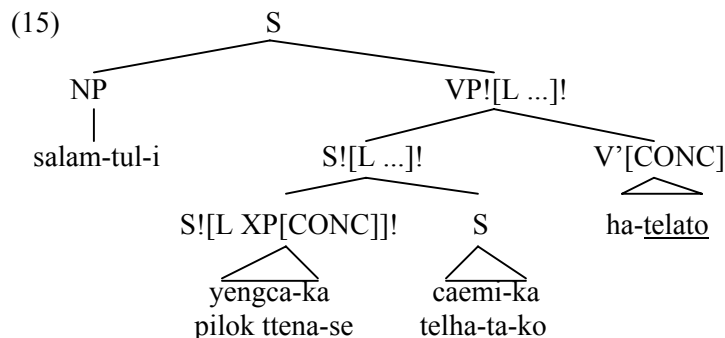
(14) a. John is easy to please.



The lexical item *easy* has a stacked LICENSOR feature whose value is a VP with an accusative gap, i.e. !L(LICENSOR) VP/NP[ACC]! (the stack is represented as a set of exclamation marks, !...!). This feature propagates through the tree. When it is instantiated on the upper AP node, it pops out of the stack to license the VP/NP[ACC] daughter, according to the discharge principle (13). Notice that the specification of the licensed node is the same as that of the feature's value.

Under the present IPSG framework, we can account for the properties of CACs in Korean without employing any additional mechanisms. We just need to assume that the CA in Korean has a LICENSOR feature with an appropriate value. For example, the adverbial *pilok* in (1a/3) has [L XP[CONC(essive)]] in the stack⁵. The licensing mechanisms involved are exactly the same as those for the constructions in (11) and (12). We can analyze sentence (3) as in (15):

(3) *salam-tul-i* [[*yengca-ka pilok ttena-se*] *caemi-ka telhata-ko*] *ha-telato*, ...
 people-Pl-Nom Youngja-Nom {CA} leave-as interest-Nom be less-Comp do- {VE 'although'}
 'Although people say that it is less interesting because Youngja left, ...'



⁴ According to Sells (1985: 108), "FOOT features will pass up from any daughter in a tree (not just the head), with the upper and lower limits of this propagation determined by prior specification either in a rule or in a lexical item."

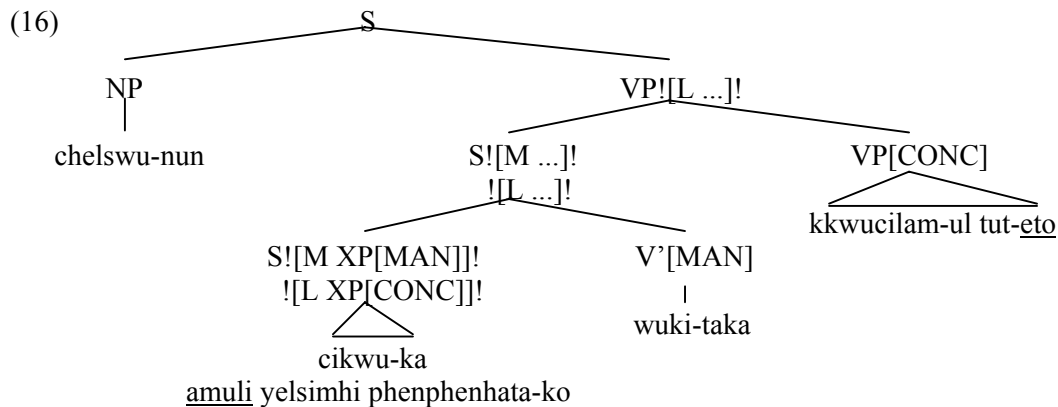
⁵ The category XP represents a verbal category of any bar-level.

The stacked [L XP[CONC]] (i.e. ![L XP[CONC]]!), which originates from *pilok*, propagates through the tree “until it reaches” the VP node which has V'[CONC] as one of its daughters. The propagation stops at this node because the LICENSOR pops out of the stack to license the target. Remember that the LICENSOR feature propagates through the tree only when it is in the stack.

To account for the modifier-modified relationship, we need to assume that the CA has two features in the stack: a LICENSOR and a MODIFIER feature. Note that only those CAs exhibit this relationship which indicate ‘degree’ as well as ‘concession’: *amuli* and *amman* (Chae 2002)⁶. The MODIFIER feature is on the top of the stack because there is no case where the target of the MODIFIER comes later than that of the LICENSOR. The LICENSOR feature will be discharged at the same node as or at a higher node than that of the MODIFIER feature, depending on the position of the XP[CONC] node.

Let us consider how the modifier-modified relationship in sentence (4) can be accounted for under this extended framework:

- (4) chelswu-nun [[cikwu-ka amuli yelsimhi phenphenhata-ko] wuki-taka] wuki-taka
 Chulsoo-Top earth-Nom {CA ‘however’} laboriously be flat-Comp argue-Comp
 kkwucilam-ul tut-eto, ...
 be scolded- {VE ‘although’}
 ‘Even though Chulsoo has been scolded by arguing very tenaciously that the earth is flat, ...’



The trigger *amuli* has [M(ODIFIER) XP[MAN(ner)]] and [L XP[CONC]] in the stack⁷. The former feature will be discharged on the S node dominating the V'[MAN] node. The latter feature, which takes the top-most position in the stack after the MODIFIER is discharged, will be discharged on the upper VP node which has VP[CONC] as its daughter. As we can see here, our system can effectively account for the two types of unbounded discontinuities: the fact that the CA *amuli* in the lowest clause corresponds with the V-*eto* in the highest clause and the fact that it modifies (together with the manner adverbial *yelsimhi*) the predicate in the middle clause. The CA can modify only the middle clause predicate because neither the lowest predicate nor the highest predicate has the MAN feature.

3.2 A Conceptual Problem and a Simple Fix

At the beginning of the previous section, we examined the nature of the CA-VE relationship and concluded that the CA licenses the VE syntactically. The LICENSOR approach of Chae (2003, 2004) is based on this observation. It does not have any problems from a syntactic point of view, but it is not very satisfactory from a semantic point of view because we have to assume that there is a mismatch between syntactic and semantic licensing. In this section, we will introduce a new feature LICENSEE to fix this problem.

⁶ The two CAs *amuli* and *amman* have almost the same meaning, but the latter is more colloquial than the former.

⁷ The value of the MODIFIER feature can be an element either with the MAN feature or with a degree feature, depending on the nature of the adverb following the CA. Please refer to Chae (2004: 208-9) for the details.

Although the LICENSOR approach deals with the syntactic phenomena of CACs effectively, it has a conceptual problem. For example, the [LICENSOR XP[CONC]] feature in (16) originates from the CA *amuli*, which is an implementation of the assumption that the CA licenses/permits the existence of the VE syntactically. However, from a semantic point of view, it is usually assumed that the VE licenses the CA rather than the other way around. The VE has its own meaning of condition or concession, but the meaning of the CA cannot always be defined clearly. In addition, the VE together with its host verb can stand alone, while the CA cannot. These facts indicate that the VE licenses the CA, at least semantically. In the face of this problem, it is assumed in Chae (2003, 2004) that there is a mismatch between syntactic licensing and semantic licensing in CACs. That is, we need to assume that the CA licenses the VE syntactically, but the VE licenses the CA semantically.

We can overcome the conceptual problem by introducing a new stacked feature LICENSEE. In the LICENSOR approach, the feature has only a syntactic role. It indicates that an element carrying it is a syntactic licensor of the target. In this approach, we have to assume another mechanism to account for the semantic relationship between the two elements⁸ However, in the LICENSEE approach, the feature can perform both syntactic and semantic roles. Syntactically, it has the same function as the LICENSOR feature. Just like the LICENSOR feature, it originates from a CA and acts as the syntactic “connector” of the CA and its correspondent VE. However, unlike the LICENSOR feature, it has a semantic function as well. Because it has the conception of being a “passive licensee” rather than being an “active licensor,” the fact is naturally implemented into the system that semantically an element carrying it is what is licensed by another element Now it becomes clear that the CA as a carrier of the LICENSEE feature functions as a syntactic licensor of the VE and, at the same time, as a semantic licensee of the VE.

The LICENSEE feature will be discharged when it meets an element which licenses it semantically. Hence, this semantic licensor becomes its value. As we introduced a new feature, the principle in (13) has to be revised accordingly. A common property of the three features introduced thus far, i.e. LICENSOR (LR), MODIFIER and LICENSEE (LE), is that they are all “stacked features.” We will revise the principle as follows:

(17) The Discharge Principle of Stacked Features (SFs):

A stacked feature [SF XP] on a node (pops out of the stack and) licenses one of this node’s daughters when the specification of the feature’s value (i.e. XP) is the same as that of this daughter node.

We can regulate the distribution of all the stacked features with this principle.

Now, we have a revised version of the system in Chae (2003, 2004). We do not have to assume a mismatch in the syntactic and semantic licensing. We will see that the new LICENSEE approach does not have syntactic or semantic/conceptual problems any more.

4 An IPSG Analysis of the [*manyak ... V-telato*] Constructions

In this section, we will provide an analysis of the [*manyak ... V-telato*] constructions, i.e. the Conditional-Concessive Constructions (CCCs) under our revised IPSG framework:

(2) manyak chulswu-lul manna-telato (ke kes-ul mal haysenun antoyn-ta.
 {CA ‘if’} -Acc meet-{VE ‘although’} that thing-Acc must not say-Decl
 ‘Even if you meet Chulsoo, (you should not say about that thing.)’

As we saw before, the CCCs contain a CA and a VE which seem to be incompatible semantically: a combination of a conditional adverb and a concessive verbal ending. Unlike these constructions, sentences containing a concessive adverb and a conditional ending are ungrammatical:

⁸ It is assumed in Chae (2003, 2004) that a CA can be licensed by a VE semantically in case the former is in the scope of the latter.

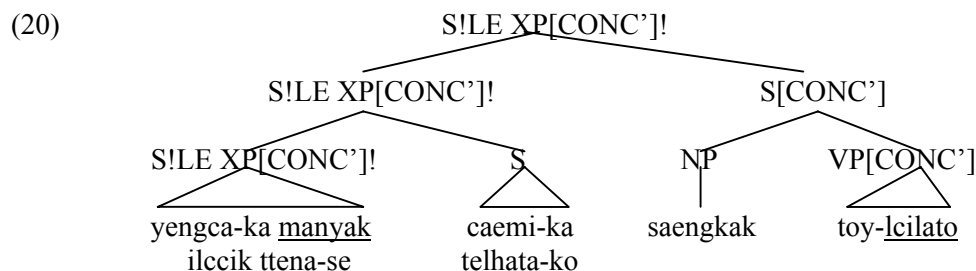
- (18) *pilok chulswu-lul manna-myen
 {CA ‘although’} -Acc meet- {VE ‘if’}

As for the analysis of CCCs, there are two possible approaches to take. One might assume that there are two different lexemes involved: *manyak*₁ for the adverbial in the regular CACs and *manyak*₂ for the adverbial in the CCCs. In this approach, we can maintain that a conditional CA always corresponds with a conditional VE, under the assumption that *manyak*₁ is a CA but *manyak*₂ is a regular (non-concord) adverb (even though it has a conditional meaning). However, this analysis is not tenable because *manyak*₂ also induces an unbounded dependency. Notice that we can replace the concessive CA *pilok* with the conditional CA *manyak* in such examples as the following:

- (19) a. [yengca-ka pilok ilccik ttena-se] caemi-ka telhata-ko] saengkak toy-lcilato, ...
 Youngja-Nom {CA} early leave-as interest-Nom be less-Comp be thought- {VE ‘although’}
 ‘Although it may be thought that it is less interesting because Youngja left early, ...’
 b. [yengca-ka manyak ilccik ttena-se] caemi-ka telhata-ko] saengkak toy-lcilato, ...
 Youngja-Nom {CA} early leave-as interest-Nom be less-Comp be thought- {VE ‘although’}
 ‘Even if it may be thought that it is less interesting because Youngja left early, ...’

As *manyak*₂ also induces unboundedness, it cannot be regarded as a non-concord adverb. Therefore, we cannot maintain this assumption.

Instead, we argue that the conditional CA *manyak* corresponds with two kinds of VEs: conditional VEs and a subgroup of concessive VEs⁹. Under this approach, the CA has a LICENSEE feature and the value of this feature can be either a conditional VE or a concessive VE. That is, it has the feature of !L(ICENSE)E XP[COND]/XP[CONC’]!¹⁰ Now we can analyze sentence (19b) as follows:



In this analysis, the CA is responsible for characterizing the construction concerned because it is the trigger of the construction. On the other hand, the VE has a more prominent role in providing the meaning. An implication of this approach is that the CCC is basically a conditional construction because it is triggered by a conditional CA. This analysis is compatible with the widely accepted observation that clauses with the concessive meaning are basically conditionals (Koenig 1994; Lee, et al. 2000; Kim 2002). Koenig (1994: 680), for example, says that “concessive clauses are closely related to certain types of conditionals and frequently derive from such conditionals.” In this respect, the English “even if” clauses are basically conditionals.

Under the present approach, we can provide an explanation of the ungrammaticality of the concessive-conditional combination in such expressions as (18). An expression of this combination would be analyzed as a concessive construction due to the concessive CA. Then, we have to assume that the conditional meaning that the expression would have derives from this concessive construction, which is contrary to the above-mentioned observation. It is also widely observed that the concessive meaning can be derivable from a variety of different constructions and/or contexts:

⁹ The conditional CA *manyak* or *manil* is compatible only with such concessive VEs as *-(te)lato*, *-eto* and *-lcilato*. It is not compatible with such concessive VEs as *-ntul*, *-lmangceng*, and *-lcienceng*.

¹⁰ We assume that [CONC’] is a subtype of [CONC] (cf. footnote 9).

- (21) a. “Under the right contextual conditions, many types of adverbial clauses can receive a concessive interpretation.” (Koenig 1994: 681)
b. “The meaning of ‘concession’ is based on the notion of “low compatibility” of two propositions: That is, it is least likely for the two propositions to occur at the same situation. So, we often get a concessive reading in contrastive contexts.” (Lee, Chung & Nam 2000: 113)

According to the observations here, it is more likely that the concessive reading can be derived from a conditional construction than the conditional reading can be derived from a concessive construction.

5 Conclusion

In this paper, we have provided an IPSP analysis of the [*manyak* ... *V-telato*] constructions (CCCs), which constitute a subtype of the Concord Adverbial Constructions (CACs). We looked at some important properties of CACs: they show “downward” unbounded dependency relationships. After examining Chae’s (2003, 2004) IPSP analysis of them, we revised the framework by introducing a new stacked feature LICENSEE. Under this revised framework, we could account for the special properties of the CCCs very effectively. Most of all, we came up with an account of the impossibility of the combination of a concessive CA and a conditional VE.

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