Syntactic Causatives in Korean: Clause Union or Not?

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Abstract

Clause Union Laws require causee nominals to assume the relation of direct object or indirect object depending on the transitivity of corresponding non-causative constructions (Perlmutter & Postal 1974) or in accordance with the language specific rules (Gibson & Raposo 1986) in forming causative constructions. However, the causee nominals in Korean syntactic causatives are nominatively, accusatively or datively marked regardless of the transitivity of corresponding non-causative constructions. This paper argues that this intriguing case marker alternation is due to the interaction of the subcategorization of the verb *ha* with Subject-to-Object Raising, not the reflection of causative unions as argued in Gerdts (1990) and Kim (1990).

1. Introduction

One of the major syntactic differences between non-causative and causative constructions is the increased valency of the latter. A more interesting phenomenon is that the increased argument usually takes either a relation of direct object or a relation of indirect object, which is different from the one assumed in corresponding non-causative constructions. To explicate this phenomenon, clause union analyses have been suggested within the framework of Relational Grammar, supposing that causative constructions are universally biclausal at the initial stratum but monoclausal at the final stratum.

Perlmutter & Postal (1974) propose that the intransitive downstairs subject is revalued as an upstairs direct object whereas the transitive downstairs subject is revalued as an upstairs indirect object. Gibson (1980) and Gibson & Raposo (1986), however, claim that the revaluation of downstairs subject is parametrized in accordance with language particular rules. On the other hand, Rosen (1983) contends that Italian allows another type of clause union in which the downstairs subject undergoes no revaluation.

Korean syntactic causative constructions below reveal more intriguing phenomena with respect to the revaluation of the downstairs subject:[1]

(1) a. Chelswu-ka Swuni-ka/-lul/-eykey ttena-key ha-yess-ta.
      -N   -N/-A/-D   leave-Cmp do-Pst
    'Chelswu made Swuni leave.'
  b. Chelswu-ka Swuni-ka/-lul/-eykey chayk-ul ilk-key ha-yess-ta.
      -N   -N/-A/-D   book-A read-Cmp do-Pst
    'Chelswu made Swuni read a book.'

As illustrated, the downstairs subject is marked nominatively, accusatively, or datively, regardless of the transitivity of the downstairs clause. To account for this, Gerdts (1990) and Kim (1990) propose a clause union analysis, partly adopting P & P, G & R, and Rosen (1983).

However, this paper claims that the constructions in (1) are finally as well as initially biclausal due to the subcategorizational features of the verb *ha,* not instances of clause union. This paper argues against Gerdts and Kim's

analyses and discusses the theoretical inadequacies of the clause union analyses. On the other hand, this paper demonstrates that the biclausal analysis is empirically valid in that it can provide correct predictions in connection with clause boundary sensitive phenomena.

2. Clause Union Laws

Assuming that causative constructions are taken to consist of two clauses in the initial stratum which collapse into one clause at a subsequent stratum, P & P (1974) propose the Union Laws below.[2]

(2) a. The intransitive downstairs 1 is revalued as a 2 in the union stratum.
    b. The transitive downstairs 1 is revalued as a 3 in the union stratum.

However, Gibson (1980) argues that in Chamorro the downstairs final 1 always revalues to 2 and the 2 of the transitive downstairs is put en chomage. Gibson & Raposo (1986) also demonstrate that in French the downstairs final 1 always revalues to 3 forcing the initial 3 into chomage, and that the revalued 3 may further advance to 2. For this reason, G & R (1986) propose the following principles as a general treatment of causatives:

(3) a. <u>Clause Union Revaluation Parameter</u>
    The downstairs 1 must become a 2 or a 3,
    Language particular rules specify which and under what conditions.
   b. <u>Inheritance Principle</u>
    All other nominals inherit their downstairs relation subject to
    the Stratal Uniqueness Law and the Motivated Chomage Law.

Arguing for broadening G & R's Inheritance Principle, Rosen (1983) proposes that Italian has causative unions in which the downstairs final 1, instead of revaluing to 2 or 3, is chomeurized. In (4), *un interprete* is marked with the preposition *da* like other 1-chomeurs and she calls this type of union a No-Revaluation Union.

(4) Faremo   accompagnare il   gruppo da un interprete.
    we'll-make accompany   the group by an interpreter
    'We will have an interpreter accompany the group.'

3. Clause Union Analyses and Biclausal Analysis

This section discusses the inadequacies of Gerdts' (1990) and Kim's (1990) union   analyses   and   proposes   a   biclausal   analysis   based   on   the subcategorizational features of the verb *ha* as an alternative solution.

3.1 Clause Union Analyses

Following P & P, G & R and Rosen, Gerdts (1990) and Kim (1990) account for the case marker alternations in (1) under the assumption that Korean syntactic causatives are initially biclausal but finally monoclausal. So, (5a,b) are the initial structures of (1a,b), respectively, in their analyses:

(5) a. [Chelswu [Swuni ttena] ha]
    b. [Chelswu [Swuni chayk ilk] ha]

According to them, *Swuni* in (1a,b) is, respectively, assigned an accusative case and a dative case because it is revalued as the 2 and 3 of the matrix clause (P & P's Union Laws), *chayk* in (1b) is assigned an accusative case by virtue of G & R's Inheritance Principle, and *Swuni* in (1b) can be assigned an accusative case due to the advancement to 2 after the revaluation to 3. Gerdts and Kim further claim that Korean allows another type of clause union in which the downstairs final 1 is put into a 1-chomeur relation (Rosen). For this reason, *Swuni* in (1a,b) can be also nominatively marked.

At first glance, with the admittance of the two types of unions and 3-to-2 Advancement, Gerdts and Kim seem to account for the case marker alternations in (1). However, their analyses are not only inadequate to account for the case marker alternations but also theoretically invalid. First, the appearance of the dative case in (1a) is problematic because no union law allows the intransitive downstairs 1 to revalue to 3. Although Gerdts does not mention anything, the problem could be solved if the further retreatment of the revalued 2 to 3 is assumed. However, it cannot but be an ad hoc solution because the retreatment of 2 to 3 is not allowable in Korean. Kim (1990:189-92) instead proposes that the intransitive downstairs 1 revalues to 2 or 3 in the union stratum in accordance with the given meaning. If coercive causation is involved, the downstairs 1 appears as a 2, while if noncoercive causation is involved, the downstairs 1 appears as a 3. However, Kim's proposal cannot but be another ad hoc solution in the sense that he proposes another peculiar union law which is restricted to Korean syntactic causatives. Moreover, Kim's proposal would also be ad hoc unless a principled answer could be given to account for the assymetry between the intransitive and transitive causatives.

Second, in a No-Revaluation Union, a stipulation is required to guarantee that the embedded 1 will be put en chomage by the matrix 1 (Davies & Rosen 1988:82-5).[3] That is, the Chomeur Law and the Motivated Chomage Law require the nominal which bears a term relation in the matrix before union to be put en chomage to satisfy stratal uniqueness; but precisely the opposite happens in clause unions. Thus, Gerdts' and Kim's analyses relying on Rosen are not permissible analyses within the framework of Relational Grammar.

3.2 Biclausal Analysis

Cho (1987) and Lee (1991) show that the verb *ha* subcategorizes a direct object alone, a direct object and an indirect object together, or a clause, as shown below:

(6) a. Swuni-ka swukjey-lul ha-yess-ta.
        -N homework-A do-Pst
    'Swuni did a homework.'
   b. Chelswu-ka Swuni-eykey yok-ul ha-yess-ta.
        -N   -D   abuse-A do-Pst
    'Chelswu spoke ill of Swuni.'
   c. Emeni-ka [sSwuni-ka hakkyo-ey ka-tolok] ha-yess-ta.
      mother-N   -N school-to go   do-Pst
    'The mother made Swuni go to school.'

Given multi-attachment (i.e., structure-sharing), the following are assumed to be the final structures of the sentences in (1):

(7) a. [Chelswu-ka [Swuni-ka chayk-ul ilk-key] ha-yess-ta.
　　b. [Chelswu-ka Swuni$_i$-lul [Swuni$_i$-ka chayk-ul ilk-key] ha-yess-ta.
　　c. [Chelswu-ka Swuni$_i$-eykey [Swuni$_i$-ka chayk-ul ilk-key] ha-yess-ta.

Then, *Swuni* takes a relation of downstairs 1 in (7a), a relation of upstairs 2 in (7b) by virtue of the Relational Succession Law due to subject raising to object, and a relation of upstairs 3 in (7c). For this reason, *Swuni*, the causee nominal, is nominatively, accusatively or datively marked whereas *chayk* is accusatively marked because it is always a downstairs 2.[4]

Under the proposed analysis, *Swuni* in (7c) takes the 3 relation due to the subcategorizational feature of the matrix verb, not the result of clause union. Note that a phonologically non-null subject can appear, as can be seen in (8).

(8) [Chelswu-ka Swuni$_i$-eykey [kuney$_{i/*j}$-ka chayk-ul ilk-key]　ha-yess-ta]
　　　　-N　　　　-D　　she-N　　book-A　　read-Cmp do-Pst
　　'Chelswu made Swuni$_i$ herself$_{i/*j}$ read the book.

The biclausal analysis postulates that *Swuni* shares relations of upstairs 3 and downstairs 1 so that the downstairs 1 disappears when not emphasized, whereas a pronominal subject appears when emphasized. For this reason, (8) conveys an emphatic meaning and becomes ungrammatical if the pronoun is not o-referential with the causee.

Choi (1988) and Youn (1990) argues that Korean allows quantifiers to float from 1s and 2s but not from 3s. If so, the examples in (9) again confirm that the causee shares an upstairs 3 relation and a downstairs 1 relation.

(9) a. Sensayngnim-i sey myeng-uy haksayng-tul-eykey chayk-ul ilk-key
　　　　teacher-N　　　three people-G student-PL-D　book-A　　read-Cmp
　　　　ha-si-ess-ta.
　　　　do-H-Pst
　　　　'The teacher made the three students read the book.'
　　b. *Sensayngim-i haksayng-tul-eykey sey myeng-eykey chayk-ul ilk-ey
　　　　ha-si-ess-ta.
　　c. Sensayngim-i haksayng-tul-eykey sey myeng-i chayk-ul ilk-key
　　　　ha-si-ess-ta.

The fact that the causee can be nominatively, but not datively, marked shows that the quantifier is floated from the downstairs 1, not from the upstairs 3. This follows from the fact that quantifier floating is not allowed from 3s.

Further note that accusative markers can appear between the downstairs verb and the matrix verb, as in (10).

(10) Chelswu-ka Swuni-ka/-lul/-eykey chayk-ul ilk-key-lul ha-yess-ta.

The accusative marker can be attached to the embedded clause itself because it is a final 2 in (7a,c) and is a final 2-chomeur by virtue of the Relational Succession Law although the downstairs 1 raises to upstairs object. This is exactly what the proposed analysis claims. In other words, the intervening

accusative marker above is the evidence that the embedded clause itself is taken as a direct object of the matrix verb.

4. Arguments for the Biclausal Analysis

This section shows that the proposed biclausal analysis is superior to the union analyses in that the former makes a correct prediction with respect to several syntactic phenomena whereas the latter do not.

4.1. Subject Honorification

As is well known, the final 1 triggers subject honorific marker *-si-* on the predicate in the same clause. The nominatively marked causee is a 1-chomeur in Gerdts' and Kim's analyses whereas it is the downstairs 1 in the biclausal analysis. Therefore, only upstairs 1 would be expected to control subject honorification under union analyses but both the downstairs 1 and the upstairs 1 would be expected to control subject honorification under the biclausal analysis. Take a look at the following examples:

(11) a. *Sensayngnim-i haksayng-i chayk-ul ilk-key ha-yess-ta.
    b. Sensayngnim-i haksayng-i chayk-ul ilk-key ha-si-ess-ta.

According to Gerdts and Kim, (11) is the monoclausal sentence in which *ilk-key ha* is a single verb and *sensayngnim* is the final 1 due to clause union. For this reason, *sensayngnim* controls subject honorification. However, let us look at further examples:

(12) a. Haksayng-i sensayngnim-i chayk-ul ilk-usi-key ha-si-ess-ta.
    b. *Haksayng-i sensayngnim-i chayk-ul ilk-key ha-si-ess-ta.
    c. *Sensayngnim-i haksayng-i chayk-ul ilk-usi-key ha-yess-ta.
    d. Apeci-kkeyse sensayngnim--kkeyse chayk-ul ilk-usi-key ha-si-ess-ta

(12a,b,c) show that the downstairs 1 controls the honorific marker on the downstairs verb whereas (12d) shows that both the upstairs and downstairs 1s, respectively, trigger the honorific marker on the upstairs and downstairs verbs. Choi (1988) observes that only final 1 can be marked with the subjective honorific marker *-kkeyse*. The fact that both the upstairs and downstairs 1s can be marked with *-kkeyse* again shows that the downstairs 1 is a final 1, not a 1-chomeur, and that the sentences above are finally biclausal.

On the other hand, Gerdts' and Kim's analyses predict that the accusatively or datively marked causee cannot control subject honorification. This is because the downstairs 1 revalues as a 2 and the revalued 2 may advance to the 3 under the union analyses. However, the biclausal analysis predicts exactly the opposite and the examples in (13) show that the prediction of the biclausal analysis is borne out.

(13) a. Sensayngnim-i Swuni-lul/-eykey chayk-ul ilk-(*usi)-key ha-si-ess-ta.
    b. Swuni-ka sensayngnim-ul/-eykey chayk-ul ilk-*(usi)-key ha-yess-ta.

Under the proposed analysis, the causee can control subject honorification because the causee shares the final 1 relation of the downstairs clause even

when it is marked accusatively or datively. As a consequence, the biclausal analysis correctly predicts that *Swuni* in (13a) cannot control subject honorification on the downstairs verb since *Swuni* is not honorable whereas *sensayngnim* in (13b) can control subject honorification on the downstairs verb since *sensayngnim* is honorable. However, the clause union analyses provide an opposite prediction.

4.2. Object Honorification

In Korean, the object honorific marker *-e tuli* appears on the verb if the direct object or the indirect object within the same clause is honorable. Thus, both analyses equally predict that the accusatively or datively marked causee cannot trigger object honorification as in (14) but their explanations are basically different.

(14) Chelswu-ka sensayngnim-ul/-eykey chayk-ul ilk-key ha-ye tuli-ess-ta.

What the union analyses predict is that *-e tuli* appears on *ilk-key ha* because it is a single verb and *sensayngnim* is in the relation of 2 or 3 in that same clause. However, the prediction of the biclausal analysis is that *-e tuli* appears on the upstairs verb *ha* since *sensayngnim* takes the 2 or 3 relation of the upstairs clause. Thus, both the union analyses and the biclausal analysis superficially seem to make the same predictions but they provide exactly opposite predictions in connection with object honorification and subject honorification. Union analyses predict that *sensayngnim* cannot control the subject honorific marker on the verb *ilk*. However, the biclausal analysis predicts that *sensayngnim* can control the subject honorific marker on the verb *ha* because *ilk* is a downstairs verb and *sensayngnim* shares the relation of downstairs 1. (15) shows that such a prediction is correct.

(15) Chelswu-ka sensayngnim-ul/-eykey chayk-ul ilk-usi-key ha-ye tuli-essta.

4.3. Time Adverbs

Fodor (1970) argues that each clause, more precisely each verb, allows at most one independent time adverb such as *ecey* 'yesterday', *onul* 'tomorrow', as far as clause level constituents go. Thus, union analyses predict that the sentences in question include only one time adverb whereas the biclausal analysis predicts that they can include two different time adverbs. Let us first look at the sentence in (16).

(16) %Sensayngnim-i haksayng-i/-ul/-eykey chaky-ul onul ilk-key ha-yes-ta.

Gerdts (1990:208) argues that the fact that adverbials such as *onul* 'yesterday' cannot occur between the upstairs verb and the downstairs verb for almost half of Korean speakers is evidence that the downstairs verb and upstairs verb form a single verb in the union stratum. However, her argument does not seem convincing. In the first place, the grammaticality judgement of the illustrated sentence is not determinate because over half of Korean speakers admit (16) as a grammatical sentence, as she indicates. Lee (1991) suggests that the obscure grammaticality may be ascribed to the semantic peculiarity of the verb *ha*.

That is, the sequence of the downstairs verb and *ha* seems to be perceived as a single constituent because the verb *ha* itself is not strong in its lexical meaning. If this is the case, (16) should be considered grammatical since the grammaticality of (16) is a matter of perception, not syntax.

In addition, two different time adverbs can occur in the sentences under discussion, as shown below:

(17)   Swuni-ka Chelswu-ka/-lul/-eykey onul chayk-ul ilk-key ecey ha-yess-ta.

As shown above, the appearance of two different time adverbs reveals that the downstairs verb and the upstairs verb are separate verbs of each clause and that the sentences in question are consequently biclausal. This follows from the fact that the scope of time adverbs is restricted to the clause which the time adverbs belong to.

4.4. Negation Words

In Korean, a negation word like *an* 'not' occur only in the position immediately preceding the main verb within the same simplex clause unless it negates a whole sentence. Hence, the negation word would be expected to appear only in front of the downstairs verb under the union analyses but in front of the downstairs verb as well as the upstairs verb under the biclausal analysis. Now take a look at the following examples:

(18) a. Chelswu-ka Swuni-ka/-lul/-eykey chayk-ul an ilk-key ha-yess-ta.
      'Cheslwu made Swuni not read the book.'
  b. Chelswu-ka Swuni-ka/-lul/-eykey chayk-ul ilk-key an ha-yess-ta.
      'Chelswu did not make Swuni read the book.'
  c. Chelswu-ka Swuni-ka/-lul/-eykey chayk-ul an ilk-key an ha-yess-ta.
      'Chelswu did not make Swuni not read the book.'

The above show that the negation word can occur with the downstairs verb or/and the upstairs verb. If the insertion of a negation word is a surface phenomenon, the union analyses predict that (18a) is possible but (18b,c) are impossible. Thus, the union analyses cannot but make a wrong prediction. However, the biclausal analysis predicts that the above three are possible sentences. Moreover, the appearance of a negation word between the downstairs verb and the upstairs verb is another strong evidence that they do not form a single verb as claimed in the union analyses.

4.5. Scrambling

Scrambling in Korean is a process by which some of sentential elements are fronted for stylistic reasons. Generally, final 2s and 2-chomeurs can scramble. In addition, downstairs final 2s and the embedded clauses bearing a relation of final 2 or 2-chomeur can be scrambled. Let us again look at the sentences in issue to discuss the predictions under the two different analyses with respect to scrambling:

(19) a. Chelswu-ka Swuni-ka chayk-ul ilk-key ha-yess-ta.
  b. Cheslwu-ka Swuni-lul chayk-ul ilk-key ha-yess-ta.

   c. Cheslwu-ka Swuni-eykey chayk-ul ilk-key ha-yess-ta.

Under the union analyses, *chalk* in (19a, c) and *Swuni* in (19b) take a final 2 relation but *chayk* in (19b) is a 2-chomeur. Under the biclausal analysis, *chayk* in (19a,b,c) is the final 2 of the downstairs clause but *Swuni* in (19b) is the final 2 of the upstairs clause. For this reason, although their accounts are slightly different, both the union analyses and the biclausal analysis equally predict that *Swuni* and *chayk* can be scrambled, as in (20).

(20) a. Chayk-ul Chelswu-ka Swuni-ka ilk-key ha-yess-ta.
      b. Swuni-lul Chelswu-ka chayk-ul ilk-key ha-yess-ta.
      c. Chayk-ul Chelswu-ka Swuni-eykey ilk-key ha-yes-ta.
      d. Swuni-lul Cheslwu-ka Swuni-eykey ilk-key ha-yess-ta.

However, the causative sentences under discussion are finally monoclausal under the union analyses whereas under the biclausal analysis they are finally biclausal so that the downstairs clause bears a relation of 2 in (19a,c) or 2-chomeur in (19b).[5] Accordingly, the latter can additionally predict that the downstairs is itself scrambled, as in (21), but the former cannot.

(21) a. Swuni-ka chayk-ul ilk-key-(<u>lul</u>) Chelswu-ka ha-yess-ta.
      b. Chayk-ul ilk-key-(<u>lul</u>) Chelswu-ka Swuni-lul/-eykey ha-yess-ta.

(21a) is the case in which the downstairs in (19a) is scrambled and (21b) is the case in which the downstairs in (19b,c) is scrambled. Especially the appearance of the accusative marker after the complementizer *-key* strongly suggests that the embedded clause *per se* is scrambled. Moreover, the split of the downstairs verb from the matrix verb in (21) cannot be accounted for if the downstairs verb and the upstairs verb form a single verb by virtue of clause union as argued in Gerdts. However, unlike the union analyses, the biclausal analysis can provide not only a correct prediction but also a principled explanation in regard to the split of the two verbs by scrambling.

4.6. Passivization

     Passivization is an advancement to subject from direct object. On the other hand, passivization is a cyclic rule which is sensitive to clause boundaries. For this reason, downstairs 2s cannot be passivized at the upstairs level.
     There might be only one final 2 under the union analyses since the final monoclausality is assumed. By contrast, there might be a downstairs 2 as well as an upstairs 2 under the biclausal analysis because the final biclausality is taken. The downstairs clause itself can be a final 2 or a final 2-chomeur due to a raising to upstairs 2 of the downstairs 1. Therefore, the union analyses predict that only nominals bearing a final 2 relation at the collapsed clause level can be passivized whereas the biclausal analysis predicts that any nominals or the downstairs *per se* can be passivized if they come to bear a relation of final 2 regardless of stairs status (downstairs or upstairs). Thus, the two types of analyses are completely different from each other in their predictions with respect to the passivization of the sentences in question.
     To save space, let us directly plunge into the cyclicity of passivization, although there might be many other instances which would be differently

predicted under the two types of analyses. As mentioned, passivization presupposes sentences containing a transitive stratum. For this reason, the biclausal analysis predicts that passivization can be cyclically applied to (19b) only since the passivization within the downstairs clause would be prevented due to subject raising to upstairs 2 in (19b) and the deletion of the downstairs 1 in (19c). Now let us look at the sentence below:

(22) Chelswu-eyuyhay chayk-i Swuni-eyuyhay ilk-e ci-key toy-ess-ta.
       -by   book-N   -by   read-Pass-Cmp Pass-Pst
    'It was made by Chelswu that the book was read by Swuni.'

(22) is a sentence in which the downstairs 2 is passivized and then the downstairs clause bearing the 2 relation of the upstairs clause is passivized. As expected, the biclausal analysis predicts that the cyclic application of passivization would result in (22), and (22) is indeed a grammatical sentence. However, the union analyses would not even expect the existence of a sentence like (22).

It seems worthwhile to discuss an additional issue regarding the passivization of the sentence in (19a). Look at the following:

(23) a. Chelswu-ka Swuni-ka chayk-ul ilk-key ha-yess-ta.
    b. Chelswu-ka chayk-i Swuni-eyuyhay ilk-e ci-key ha-yess-ta.
       -N book-N   -by   read-Pass-Cmp do-Pst
    'Chelswu made the book to be read by Swuni.'

(23b) is the sentence in which passivization is applied only within the downstairs clause. Following Rosen, Gerdts and Kim claim that (23a) is an instance of clause union in which the downstairs 1 undergoes no revaluation but is put into the 1-chomeur relation because of the upstairs 1. Then (23b) should be also considered a causative sentence insofar as the sequence -ke ha is treated as a causative morpheme. Observing that, on the one hand, in Italian a passive morpheme cannot occur with causative sentences, and on the other hand, in Romance languages the argument of unaccusative predicates cannot appear in the causative sentences, Rosen (1983:347) claims that if a nominal heads a 1-arc in the complement clause of a union, it heads an initial 1-arc in that clause. Following Rosen's claim, Gerdts and Kim implicitly argue that the downstairs clause *Swuni-ka chayk-ul ilk-key* in (23a) is not a passive clause so that *Swuni* is an initial 1, but is put en 1-chomage due to the Stratal Uniqueness Law. However, if the downstairs clause *chayk-i Swuni-eyuyhay ilk-e ci-key* in (23b) is a passive clause, as the passive morpheme *-e ci-* indicates, the nominatively-marked subject *chayk* should not be an initial 1. If Rosen's observation is valid, Gerdts' and Kim's union analyses based on Rosen's No Revaluation Union should treat sentences like (23b) as ungrammatical or as different sentences from causative sentences at least. This may amount to saying that Gerdts and Kim cannot but treat -*key ha* as two different grammatical formatives.

5. Conclusion

This paper has argued against Gerdts' and Kim's union analyses of the Korean syntactic causatives. As an alternative, a biclausal analysis has been

proposed which relies on the subcategorizational features of the verb *ha*. It has been demonstrated that the union analyses, unlike the biclausal analysis, cannot satisfy even observational adequacy in accounting for the phenomena which the constructions at issue reveal with respect to subject honorification, object honorification, time adverbs, negation word, scrambling, and passivization. Most significantly, wrong predictions of the union analyses with respect to the syntactic processes which are sensitive to clause boundaries at the surface level reveal that *ha*-causatives are not instances of clause unions at all.

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Notes

1. The Yale romanization system is used for the transcription of Korean, and English glosses to Korean examples are given on their first appearance.

2. A subject is referred to as 1, a direct object as 2, and an indirect object as 3.

3. See Dubinsky (1985) and Davies & Rosen (1988) for the discussion of the theoretical inadequacies of clause union analyses in general.

4. For expository purposes, transitive causative sentences are discussed because identical accounts can be applied to intransitive causative sentences.

5. In (19a), the downstairs [Swuni-ka chayk-ul ilk] bears the upstairs 2 relation. In (19b), [Φ chayk-ul ilk] takes the relation of 2-chomeur by virtue of Equi and the Relational Succession Law. In (19c), [Φ chayk-ul ilk] assumes the upstairs final 2 relation due to pronominalization.