

Modification vs. Complementation:

The So-Called Internally Headed Relative Clauses Reconsidered

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1. Introduction

I reexamine one particular Korean (and in part, Japanese) construction which has been described as a special kind of relative clauses in the recent literature, i.e., the so-called internally headed relative clauses (IHRCs, hereafter):

- (1) swunkyeng-i [totwuk-i pin cip-eyse nao-nun] kes-ul po-ass-ta.
policeman-NOM thief-NOM empty house-from come-REL thing-ACC saw
'The policeman saw a thief coming out an uninhabited house.'

As the usual analyses go, *kes-ul* 'thing-ACC' in (1) is modified by the embedded clause indicated by the parentheses, and yet the head noun *totwuk* 'thief' is inside the embedded modifying clause, not outside the relative clause as is usually the case in ordinary relative clauses, and for this reason it is called an internally headed relative clause. Under this account, the IHRC in (1) has an ordinary Externally Headed Relative Clause (EHRC) counterpart like (2):

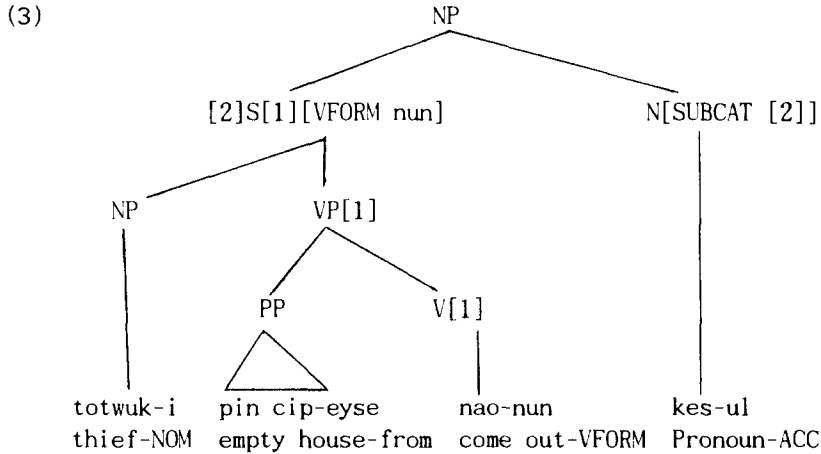
- (2) swunkyeng-i [_____ pin cip-eyse nao-nun] totwuk-ul po-ass-ta.
'The policeman saw the thief who was coming out of an uninhabited house.'

In this paper, I reject the notion of IHRC in Korean (and perhaps, even in Japanese) syntax, and argue that sentences like (1) are instances of complementation, not of relativization: the embedded clauses in them are noun complements rather than relative clauses. I also present a view of the semantics of complementation.

2. The Complement Approach (as Apposed to the Relative Clause Approach)

I argue that the embedded clause in (1) is a sentential complement which is subcategorized for by the particular (pro)noun *kes*. This (pro)noun can be characterized as "incomplete" in two senses: (i) (morpho)syntactically, it may not occur on its own in any position in a sentence and (ii) semantically, it

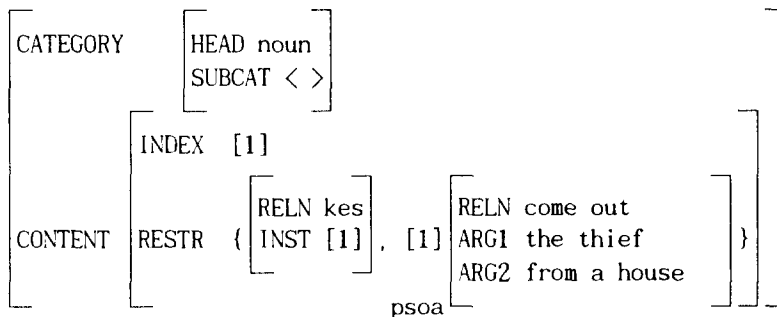
means "something unspecified." It follows that the pronoun requires a complement. The embedded clause in (1) serves as the complement. Adopting the HPSG syntax, we can analyze the structure of the embedded clause in question in the following way:



The whole structure is a noun phrase whose head noun is the incomplete pronoun *kes*, and the pronoun subcategorizes for an S whose VFORM value is required to be one of the complementizing suffixes, *-nun* in the present case. Let us call this a complement approach as opposed to the conventional relative clause approach.

With respect to the semantics of the clause, I contend that the meaning of the noun phrase is the same as the sentential complement, that is, "an action of the thief coming out of an empty house." In terms of HPSG semantics, we can say that the semantic CONTENT of the noun phrase is a referential index restricted to the condition defined by the meaning of the complement clause and by the noun *kes*. This can be shown in the following way using the HPSG framework:

- (4) The SYNSEM Value of the NP *totwuk-i cip-eyse nao-nun kes*
(the thief coming out of a house)



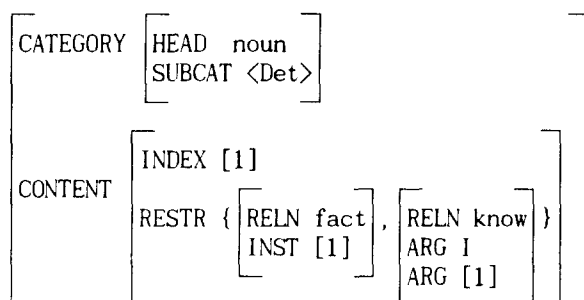
Note in (4) that the index value of the whole noun phrase is shared by the instance value of *kes* and by the parametrized state of affair (=psoa) "a thief comes out of a store" itself. In short, what (4) depicts is that the meaning of the whole noun phrase is the action of the thief coming out of a store. This semantic description is based on a general view of the semantics of complementation. (See below.)

3. The Semantics of Complementation and Modification

As an attempt to put our discussion in a broader perspective, we will consider the semantics of complementation in contrast to that of modification along the lines of Pollard and Sag (1994).

In Pollard and Sag (1994), what plays a crucial role in describing the meaning of a modifier is a restricted index: a referential index restricted to certain conditions defined by both the modifier and its head noun. For example, in an N' *fact which I know*, the semantic content of the modifier *which I know* is the referential index restricted to the conditions defined by the two parameterized states of affair (psoas), i.e. the relation of 'fact' described by the head noun and another psoa 'I know the fact'. The SYNSEM phrase will be as in (5):

(5) The SYNSEM Value of N' *fact which I know*



In short, the semantic content of the noun phrase *fact which I know* represents a thing which is a fact and at the same time which I know.

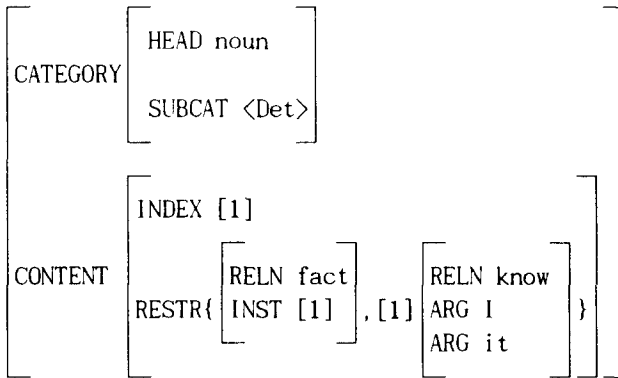
The semantics of noun complementation as in an N' *fact that I know it, assertion that you saw her, etc.* is quite different from that of modification. First of all, however, we have to distinguish between pure nouns like *fact, situation, etc.* and deverbal nouns like *claim, assertion, etc.* As for the latter, a complement following it is simply an argument of the predicate expressed by the verb from which it is derived. In other words, the meaning of the noun phrase *assertion that I saw her* will be identical to a verb phrase *assert that I saw her*. *Assertion* is a two-place predicate just like *assert* is. However, as for the pure nouns which take a *that*-clause as a complement, the semantic relation

between the noun and its complement seems to me to be a one-place function, in particular, an identity function. In other words, I assume that the meaning of *the fact that I know it* is similar to the following sentence:

(6) The fact is that I know it.

So I suggest that the SYNSEM value of an N' *fact that I know it* might be something like this:

(7) The SYNSEM Value of N' *fact that I know it*



Note that the referential index is structure-shared by an instance of the relation 'fact' and the psao 'I know it'. When the phrase *fact that I know it* is used referentially, the index introduced by the use of the phrase must be anchored to a thing which is simultaneously an instance of a fact and a situation that 'I know it.' I contend that this is what pure noun complementation generally means. The smantic content of the sentential complement in (1) shown in (4) is based on this view.

4. Arguments for the Complement Approach

First, note that the embedded clause in (1) is an obligatory element, without which the setence would be ungrammatical:

(8) *swunkyung-i kes-ul cap-ass-ta.

Secondly, note that pronominal modifiers *i* 'this' or *ce* 'that' or *ke* 'that over there' may occur before the incomplete noun *kes*:

(9) swunkyeng-i i/ce/ke kes-ul cap-ass-ta.

'The policeman caught this one/that one/that one over there.'

However, no pronominal modifier may occur before the incomplete noun if it is preceded by a embedded clause like the one in (1):

- (10) *swunkeyeng-i [totwuk-i pin cip-eyse nao-nun] i/ce/Ke Kes-ul
po-ass-ta.

It is clear that a pronominal modifier and a clause without a syntactic gap are in complementary distribution with each other with respect to the position before the incomplete pronoun *kes*. This fact leads us to see that the pronominal element, either a clause or a demonstrative adjective, is not merely a modifier. If it were a modifier, i.e., a relative clause, what would be the explanation for the fact that occurrences of two consecutive modifiers are blocked? However, this fact can be readily explained as a consequence of my complement approach: the incomplete pronoun *kes* requires only one complement, either a sentential complement or a demonstrative adjective, but never both.

Further note that certain IHRCs have no EHRC counterparts. Consider the following sentences:

- (11) [sinsenhan sikumchi-lul salm-un] kes...
fresh spinach boil
'(literally) *the one that somebody boiled fresh spinach '

- (12) ??[_____ salm-un] sinsehan sikumchi...
'?? fresh spinach which somebody boiled.'

The first sentence is perfectly normal, and may be part of a certain cooking instruction, while the second is bizarre. The unacceptableness of the second is due to the contradiction implied by the sentence: the spinach is both boiled and fresh. On the IHRC approach, which would claim that the semantic head is *sinsenhan sikumchi* 'fresh spinach' both in (11) and (12), there would be no explanation for the contrast between (11) and (12). Under my complement approach, (11) is not contradictory because there would be nothing contradictory in the situation that somebody boiled fresh spinach. And yet (12) is contradictory because saying "fresh spinach which somebody boiled" is similar to saying some spinach is both fresh and boiled, which is an impossible state of affair.

The constructions under consideration most frequently occur as a direct object, but very rarely as indirect objects or subjects:

- (13) a. *[totwuk-i kaKey-eyse nao-nun] Kes-eyKey "kkomccak ma!" hako
thief store-from come out-PAST one-DAT Don't move
swunkeyeng-i ochessta.
policeman shouted
'The policeman shouted to the thief coming out of the store,
"Don't move!"

- b. *[totwuk-i kaKey-eyse nao-nun] kes-i ce ccoK-ulo talanassta.
that side-to ran away
'The thief coming out of the store ran away that way.'

I don't see how the relative clause approach will be able to explain why sentences like (13) are unacceptable. If the noun *kes* were coindexed with the 'thief', then the policeman should be able to shout to the thief or the thief should be able to run away, and there would be no reason why sentences (13 a and b) are unacceptable. Under my complement approach, the explanation is simple enough: they are anomalous because the indirect object in (13a) and the subject (13b) are actions rather than persons or at least animate things. You can't shout to an action, and an action can't run away.

5. Action Reading and Entity Reading: Apparent Counterexamples

It would seem at first flight that sentences like (1) have two different readings. In one reading, what the policeman saw was the action of the thief coming out of the house. In another reading, it was the thief, who was coming out of an uninhabited house, that the policeman saw. Call the former an action reading, and the latter an entity reading. Nonetheless, I believe it to be a mistake to claim that sentences like (1) are semantically ambiguous. I think (1) has only one semantic interpretation, i.e., the one that is directly associated with the action reading, and the entity reading comes as a pragmatic consequence of that semantic interpretation. It is usually the case in our world that if one sees someone doing something, then one sees someone (or something); in the case of (1), in a world in which it is true that the policeman saw a thief coming out of an uninhabited house, it is also true that he saw the thief, who was coming out of it.

To sum up, the constructions containing the particular type of complement clauses we have considered so far are unambiguous. The action reading is primary, and the entity reading is a pragmatic derivative of the primary reading.

Now consider the following sentence:

- (14) swunKyeng-i [totwuk-i kaKey-eyse nao-nun] kes-ul putcapassta.
grabbed
'The policeman grabbed the thief coming out of a store.'

It seems that verbs like *putcapassta* 'grabbed' need a thing or something physical as its direct object, and expressions meaning actions or motions do not qualify as its direct object. Now the embedded clause in (14) means an action of a thief coming out of a store, which is the way it is under my complement approach, and (14) should be anomalous since it means that the policeman grabbed an action, but it is not. Why? Is this a counterexample to the semantics of my complement approach?

I think we can answer this question in two ways. First, we will have to reconsider the semantics of verbs like *capta* 'catch', *putcapta* 'grab' so that they may have direct object nouns which mean actions. So the semantics of the Korean verbs like *putcapta* are different from those of their English equivalents like *grab*. This is one of accounting for the apparent counter example like (14).

The second way appeals to an abbreviation tactics, which is widely operative in languages like Korean. What the abbreviation tactics does is this: You may leave out anything that can be recovered contextually. Thus (14) is taken to be an abbreviated version of the following sentence (15), in which the embedded clause is naturally interpreted as an action because that is now the argument of the predicate "see":

- (15) swunkyeng-i [totwuk-i pin cip-eyse nao-nun] kes-ul (po-ko
see-and
 ku-lul) putcapassta.
 him
 'The policeman saw the thief coming out of an uninhabited house and grabbed him.'

In either way, sentences like (14) need not be a counterexample to the complement approach.

Kuroda (1976) proposes a Relevancy Condition to distinguish between acceptable and unacceptable IHRCs. I think we can dispense with his pragmatic Relevancy Condition if we utilize the abbreviation tactics.

- (16) a. Taroo-nun [sakwa-ka cepsi wi-ey iss-nun] kes-ul cipessta.
apple dish on exist picked up
 'Taroo picked up the apple lying on the dish.'
 b. *Taroo-nun [ecey sakwa-ka cepsi wi-ey iss-nun] kes onul
yesterday today
 cipessta.
 'Today Taroo picked up the apple lying on the dish yesterday.'

According to Kuroda, (16b) is odd because the time when Taroo picked up the apple and the time when the apple lay on the dish are not identical, which he thinks is a violation of a Relevancy Condition. However, the Abbreviation Tactics produces the same result, in a different, but more general way. It will say that because the unabbreviated version (17) is odd, its abbreviated version (16b) is odd.

- (17) ??Taroo-nun [ecey sakwa-ka cepsi wi-ey iss-nun] kes-ul (po-ko kukes-ul)
 onul cipessta.

This sentence sounds strange since it describes an unnatural action which violates a pragmatic condition that the action of looking at an apple on a dish

and the action of picking it up occur simultaneously or with a relatively very short time interval when he picks it up at all.

6. Conclusion

I have shown that the idea of "internally headed relative clause" is a misconception as far as Korean syntax is concerned. It seems to complicate the syntax of relativization with no gain elsewhere. The syntax and semantics of complementation can deal with the relevant data with no difficulty. The obvious next question is: "Does this conclusion hold universally?" Although I cannot at the moment go into this matter in detail, my conjecture is that the answer may turn out to be "Yes." I leave this question open for the time being.

Another problem that should be pursued more extensively is the Abbreviation Tactics, which has never been explicitly formulated, to my knowledge. I also leave this important discourse device open.

While discussing the problem of the alleged internally headed relativization, we have been able to show the semantic difference between relativization and complementation. This can adequately be accommodated into the framework of HPSG, a linguistic theory which clearly recognizes the importance of syntax-semantic interface and attempts to formalize it explicitly.

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