An Inversion Analysis of Korean Tough Constructions
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1. Inversion.

In this paper, we provide a Relational Grammar account of the case alternations found in Tough Constructions like (1) and (2); the experiencer may be in either the NOM or DAT case, and a non-subject within the embedded clause, e.g. cheok in (1), can be in either its expected clause internal case, that is ACC, or NOM case.1,2,3

(1) Sensaenemia-i/eykey(n+n) k+ chaek-r/-i lik+-ai-ki-ka
    teacher- NOM/-DAT(TOP) the book-ACC/NOM read-SH-cap-NOM
    swi-usi-et-ta.
    easy-SH-pat-ind

    "It is easy for the teacher to read the book."

(2) Chelau-ka/eykey(n+n) ce *yca-ey/-ka an-ki-ka elyp-ta.
    C. -NOM/-DAT(TOP) that chair-LOC/-NOM sit-cmp-NOM hard-ind
    "It is hard for Chulsoo to sit in that chair."

Our analysis makes use of an observation concerning Tough Constructions made by Yang (1972) that the Tough predicates swipta/elypea are Psychological predicates, and like many other such predicates, they optionally allow the rule of Psych Movement (Postal 1971), as illustrated in (3-5).4

(3) Eenen-i/ka/eykey(n+n) ai-/-i k+li-usi-et-ta.
    mother- NOM/DAT(TOP) child-pl-NOM miss-SH-pat-ind
    "Mother missed children."

(4) Haksaang-t+/-i/eykey(n+n) ton-i philyona-ta,
    student-pl-NOM/DAT(TOP) money-NOM need-ind
    "Students need money."

(5) Sunse-ka/eykey(n+n) mubak-i swi-wet-ta.
    S. -NOM/DAT(NOM) math-NOM easy-pat-ind
    "Math was easy for Soon Ae."

Some examples of predicates which appear with DAT experiencers are listed in (6).
As typical in the cross-linguistic literature on Inversion, the experiencer in Korean shows a variety of subject properties—-even when it is DAT marked. As discussed in Youn (1985), it determines subject honorification, antecedes the reflexive casin, and controls a PRO subject in a 

As usual, these properties are otherwise limited to subjects. \(^5\)

(10) Mikukaisain-i casin(to), speci-kkeyae/eykey(n-nn) U.S. citizen be-although father=NOM/SON=DAT(TOP)

thongyekkwan-i casin-+y esse-ttaemuney philyoha-si-ta.
interpreter-NOM self-GEN business-for need-SH-ind

"Although he, *i is an American citizen, Father needs an interpreter; for hisi, *i business."

With respect to Unaccusative Advancement in Korean Inversion, Youn claims that only impersonal constructions (as in 9c) are possible in Korean: they involve the advance of an invisible dummy to subject. Therefore, the theme, lacks subject properties: it cannot control subject honorification, reflexives, or ase nese constructions as seen in (10) and (11).

(11) Sunhi-ka/eykey(n-nn) yenggaensaengnim-i/*kkeyae S. -NOM/DAT(TOP) English teacher-NOM/*NOM+SON

philyoha-(*si)-et-ta.
need-SH-pat-ind

"Soon Hee needs an English teacher."

We assume that the case of the theme, which is NOM in both the base transitive and the inversion construction, is assigned via a rule which assigns NOM to objects in stative or low-transitive clauses along the lines of Kuno's rule for Japanese.

Unfortunately not all psychological predicates can also take a clausal theme which has a PRO subject controlled by the experiencer; when the clause takes the nominal complementizer ki it can be case marked NOM, like nominal Themas. As seen in (12) the Tough predicates are among those that appear with a clausal theme.

(12) Yengau-ka/eykey(n-nn) i chaeck-+l ilk-ki-lka Y. -NOM/DAT(TOP) this book-ACC read-cap-NOM

swi-/muwela-/tuye/-cincelmeling/cikye-/cilhua-yet-ta.
easy/simple/dreadful/disgusting/tedious/boring-pat-ind

"Young Soo finds this book easy/simple/dreadful/etc. to read."

In Psych Moveinent, the rule that supposedly derives clauses like (7b) from those like (7a), the experiencer/subject becomes some sort of object and the theme/object becomes the subject as schematized in (8).

(7) a. Bill likes this book. EXP THEREE

b. This book pleases John. THEMEE EXP

In Relational Grammar (see especially Perlisutter 1983, 1984), as in other modern theories, Psych Movement effects are dealt with in two stages. First, there is Inversion where the subject retreats to indirect object, as represented in (9a). Second, there is Unaccusative Advancement of the subject to subject as in (9b), or-alternatively--there is Impersonal Unaccusative Advancement involving an inserted dummy as in (9c).

a. INVERSION b. PERSONAL INVERSION c. IMPERSONAL INVERSION
Furthermore, Inversion is also possible in such examples, as seen by the DAT case on the experiencer in (12). The as-subject in this case can be indirect experiencer or an initial subject which can retreat to indirect experiencer, nevertheless maintaining some subject properties, that object, nevertheless maintaining some subject properties, that object, it determines Subject honorification on the main clause predicate, antecedes reflexives, and controls the subject PRO in a synsame construction, as seen in (13).

(13) Nollaun auwanka-i-ayense(to), apeci-kkeye/eykey(n+n) remarkable able person-be-although, father-NOM=NOM/DAT(TOP) k* hoyas-yy macang-i caain-y maepp-tteumey k* hoyas-yy macang-i caain-y maepp-tteuney the firm-GEN head-ACC self-GEN business-for

asse-i-xi-ka eyeh-uei-et-ta.
asse-i-xi-ka eyeh-uei-et-ta. meet-SH-cmp-NOM hard-SH-pat-ind

"Although he, was a remarkably capable man, it was difficult for father to meet the president of the firm on account of his business."

An inversion analysis thus provides an account of the NOM/DAT alternation of the experiencer and also motivates NOM case for the conautal theme.

2. Ascension.

The second problem this paper deals with is the fact that a
non-subject in the embedded clause of psychological predicates
may take on NOM case as an alternative to the case it would be
assigned within the embedded clause, as seen in (14) and (15) as
well as in (1) and (2) above.

(14) Hakeaen-t+1-1/eykey(n+n) i accen+/+l student-pl=NOM/DAT(TOP) this dictionary-ACC/NOM

asse-i-ka awi--wet-ta.
asse-i-ka awi--wet-ta. use-cmp-NOM easy-pat-ind

"The students found this dictionary hard to use."

(15) Hallenaen-kkeye/eykey(n+n) k* iyaki-l+1/ka grandmother-NOM=NOM/DAT(TOP) the story-ACC/NOM

t+1--ai-ki-ka cikye-wesit-ep-ta.
t+1--ai-ki-ka cikye-wesit-ep-ta. listen to-SH-cmp-NOM tedious-SH-pat-ind

"Grandmother found the story tedious to listen to."

This phenomenon, referred to as Tough movement, has been
variably treated as a case of Raising or WH-Movement. Since
the Korean data do not, to our knowledge, bear on this issue, we
have treated it as appropriate within Relational Grammar as
a case of Ascension. Specifically, the relevant nominal in the
embedded clause may ascend to take over the grammatical relation
of the host, that is the entire embedded clause, as forecasted by the
Relational Succession Law (Perlmutter and Postal 1983). We
have represented this analysis in (16).

(16)

There may also be inversion in which case there is, as
proscribed for Korean, Impersonal unaccusative advancement, as
represented in (17).

(17)

Two types of scrambling in Korean present evidence for an
ascension analysis. First, in Korean Tough constructions it is
possible to scramble nominals between the embedded clause and
the psychological predicate, as seen in (16), where the DAT
marked inversion nominal appears between the two predicates.
(18) I ascen-i1 as-si-ki-ka halspeci-eykey(n+n) this dictionary-ACC use-SH-cmp-NOM grandfather-DAT(TOP) swi-usi-et-ta. easy-SH-pst-ind

"Grandfather found this dictionary easy to use."

The complement non-subject may also appear in this position as shown in (19), but only if it is case marked-NOM.

(19) Halspeci-kkeye/sykey(n+n) as-si-ki-ka I ascen-i/*1 grandfather-NOM+NOM/DAT(TOP) use-SH-cmp-NOM this dictionary-NOM/*ACC swi-usi-et-ta. easy-SH-pst-ind

This would follow from an ascension analysis and a stipulation that this rightward movement rule be clause-bounded.

Movement to the left peripheral of the clause also seems to have some clause-bounding effects. As seen in (20), a complement non-subject can appear in sentence-initial position in front of a DAT experiencer, but only if it is case marked-NOM.

(20) I ascen-i/*1 halspeci-eykey(n+n) as-si-ki-ka swi-usi-et-ta.

Under the ascension analysis where the complement non-subject ascends, as evidenced by NOM case, to be a non-subject ante to the experiencer and the psychological predicate, a freer range of word orders is expected.

Finally, since Korean does not allow personal unaccusative advancement, the complement non-subject, although it may ascend to object position, will never advance to subject, as do the to object position, will never advance to subject, as do the non-subject nominals in English tough constructions. As seen in equivalent nominals in English tough constructions. As seen in equivalent nominals in English tough constructions, Honorifics, Reflexives, or the PRO in a yonsean construction, these properties being jealously guarded by the experiencer nominal.


"Although he had beautiful handwriting, it was difficult for Chulsan to cheat his grandfather with his letter."

To summarize, Korean tough constructions involve optional Inversion (which implies Impersonal Unaccusative advancement) and also an optional Ascension of a complement non-subject, yielding the four possible case patterns illustrated in (1) and (2) above.

3. A Typology of Tough Constructions.

To place Korean in cross-linguistic perspective, other languages, for example the Romance languages and English, have been noted to involve Inversion with Tough predicates: however, in these languages, unlike Korean, Inversion is obligatory rather than optional, thus NOM case is not a possible realization for the experiencer, as seen in (22).

(22) a. It is easy for John to read this book.
   b. *John is easy to read this book.

Furthermore, in the Romance languages and English, Personal as well as Impersonal Unaccusative advancement is possible in Inversion constructions. Since these languages also allow Ascension of a complement non-subject, the net effect is that these nominals may be final subjects, as seen in (23).

(23) These books are easy for John to read.

An analysis from a Relational perspective shows that Inversion, Personal vs. Impersonal Unaccusative advancement, and Ascension are sub-constructions which are universally available to Tough sentences. Korean, as we have seen, makes a different range of selections than English or Romance languages.

4. Inversion as a Tough Construction?

The data we have presented above are, in fact, compatible with many versions of Psych Movement & Tough Movement available in various frameworks. However, there is one proposal concerning the interrelationship of Inversion and Tough
constructions which the Korean data fail to support. Throughout the above discussion we have taken the point of view that Tough sentences were a type of Inversion construction. Pesetsky (1987) has put forward the opposite claim. In order to account for unexpected cases of anaphors in clauses with psychological predicates, like (24) without relying on an essentially global rule of Reflexive, necessary in an Inversion treatment, Pesetsky posits that sentences like (24) are actually Tough constructions as in (25).

(24) Stories about herself generally please Mary.

(25) Stories about herself generally please Mary (PRO to listen to).

Mary is base-generated as an object which controls a PRO which in turn antecedes the reflexive herself. After the Tough Movement and binding of stories about herself the remnant clause is deleted. Thus unexpected anaphors, Pesetsky claims, reduces to the more run-of-the-mill problem of connectivity, as illustrated in (26).

(26) Pictures of himself I know John likes.

In short, Pesetsky is claiming that Inversion clauses are a type of Tough construction, the opposite of the viewpoint which we assumed above.

In addition requiring the basically unpalatable rule of deletion which Pesetsky needs in order to get from (25) to (24), his treatment offers no insight into the behaviour of the Korean experences. As we have shown above, anteceding Reflexives is just one of the subject properties of the Korean experences. The inability of these nominals to determine subject honorification on the higher predicate and to control a PRO in a ayensae construction, which is limited to matrix subjects, cannot be accounted for by passing the responsibility down to the PRO in the lower clause, as a nominal in this position would be ineligible for these rules anyway. As schematized in (27), it is completely mysterious under Pesetsky's analysis why grandfather controls subject honorification since neither that nominal nor the PRO it controls is ever subject of the matrix clause.

(27) It's easy-SH for grandfather (PRO to read these books).

We conclude then that from a cross-linguistic viewpoint Pesetsky has not offered a reasonable alternative to the Inversion analysis. We stand by our analysis that Tough sentences can involve Inversion -- not vice versa.

FOOTNOTES:

1 However, this paper does not discuss the above cases where the clausal theses are marked with ey locative, as in:

(1) k* cheek-i ilk-ki-ey awip-ta.

the book-nom read-nom-LOC easy-ing

"The book is easy to read."

In (1972, 1974) also points out this possibility. Although he does not give an analysis of sentences like (1), he claims that they have a different structure from sentences like (1) and (2).

2 It was mentioned to us by some participants at the conference that not all speakers accept DAT-marked experimenters in these constructions. However, these constructions are acceptable to the dozen speakers we checked with, especially if the Topic marking follows the DAT case. Furthermore, Yang (1972) is one of several Korean scholars who gives such data.

3 This paper deals only with the 'easy'/ 'difficult' readings of awip-ta/eyep-ta. As Yang (1972) points out, the 'likely/unlikely' readings of these verbs govern a different structure which involves a sentential subject, as represented in (1); this structure does not allow the experiencer to be DAT, the non-subject within the clause to be NOM, for subject honorification on the higher verb.

(1) [Sensseengin-i k* cheek-i ilk-si-ki-ka awip-ta.

"The teacher is likely to read the book."

4 Yang (1972) discusses two classes of Psychological predicates--verbs of 'self-judgement' and of 'semi-self-judgement'--which are distinguished on semantic not syntactic grounds.

5 To be precise, SH and the reflexive casin, but not the PRO in ayensae constructions, can also be controlled by the possessor within the subject, as discussed in Yoon (in preparation). As Yoon (1985) notes, working la control SH and ayensae while metastratal la control casin.

6 Other scholars, e.g. Lee (1985), have also broken down scrambling phenomena into two rules.

7 We found conflicting judgments concerning the scrambling of a NOM experiencer into this position:

(1) ?I la casen-i ss-si-ki-ka halaepeki-keye swi-usi-ta.
Perhaps a ban on scrambling one NOM nominal across another would explain *ii.

In contrast, this example is good with a NOM experiencer; we have no explanation for this:

(i) I ascen-i/-1 halapeci-kkeyse ss--si-ke-ka awi-usi-et-ta.

REFERENCES


On Case Conversion in Korean
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Saito (1983 p. 250) observes that in Japanese the nominative Case marker が can be converted to the genitive Case marker に in relative clauses or prenominal sentential modifiers (ga/no conversion), whereas the accusative Case marker と cannot (*o/no conversion) as shown in the following.

(1) a. John-ɡa kaita hon 'the book that John wrote'
     b. John-ɡo kaita hon

(2) a. hon-ɡ kaita hito 'the person that wrote a book'
     b. hon-ɡo kaita hito

According to Saito (1983 p. 251), (1a) can optionally undergo Bedell’s (1972) restructuring rule as illustrated in the following:

(3) a. [np [s John-ɡa pro1 kaita ] hon1 ] -->
     b. [np [np John-ɡo ] [np [s pro1 kaita ] hon1 ]]

As a result of restructuring, John in (3b) is now in the environment for genitive Case marking, which he assumes to be as follows.

(4) \[N-V\] *\[-V\] *\[N-V\]

(4) amounts to saying that NP’s or PP’s which are immediately dominated by a projection of N are assigned genitive Case. Assuming that Bedell’s restructuring rule is responsible for ga/no conversion, Saito raises a question of why (2b) should be ruled out. To be more specific, why is the following restructuring not possible?

(5) a. [np [s --- hon-ɡ kaita ] hito ] -->
     b. [np --- [np hon-ɡo ] [np kaita hito]]

Saito argues that this asymmetry can be explained by his hypothesis about Japanese Case marking, that is, accusative Case is assigned by the verb to its object (presumably under