This paper is concerned with a particular kind of Korean relative clause constructions that contain possessive specifier gaps, as opposed to complement or adjunct gaps. Those relative clauses have been known to violate Ross's Complex NP Constraint, and various attempts have been made to account for the apparent island violations. This paper argues that those relative clauses have possessive specifier gaps in the main relative clause, rather than in the embedded relative clause, and so there are no island violations involved in such relative clauses. It is argued that the island violations in question can be viewed as violations of selection restrictions of very general kind holding between nouns and their specifiers. It is not necessary to impose any special constraints to account for the apparent violations observed in the particular kind of relative clauses discussed in this paper.

1. INTRODUCTION

In this paper, I discuss a class of relative clauses that are distinct from ordinary relative clauses (RCs) in that no complement or adjunct gaps occur in the relative clause. A typical example is a phrase like (1).

(1) [nwun-i yeypp-un] ai
   eye-nom pretty-rel child
   'child whose eyes are pretty'

I will argue that the subject NP of the RC nwun 'eye' has a specifier gap inside it and the gap is coindexed with the head noun ai 'child'. Let me propose to call RCs like (1) possessive RC constructions, partly borrowing from the English possessive relative pronoun whose.

Korean, Japanese and Chinese linguists have long been interested in such possessive RC constructions because they appear to violate Ross's Complex NP Constraint (CNPC) when the subject is modified with another relative clause, as shown in (2):

(2) [i, ip-un], os-i terewu-n], sinsa,
   wear-rel clothes-nom dirty-rel gentleman
   'gentleman whose clothes that he wears are dirty'

It has been claimed that the expression like (2) constitutes a CNPC violation because the subject of the embedded relative clause ip-un has been extracted to the head noun crossing two S boundaries, as indicated by the gap in the inner RC and the two occurrences of its index in (2). (Kuno (1976) and Yang (1986)) Recently, Na and Huck (1993) proposed essentially a semantic-pragmatic approach to possessive RCs, and their explanation is based on a certain pragmatic relation between a noun in the relative clause and its head noun, for example, os 'clothes' and sinsa 'gentleman' in (2), what they call a "thematic subordination" relation. In the case of the two nouns 'clothes' and 'gentleman,' according to their
definition of thematic subordination, 'clothes' are subordinately related to the 'gentleman' in our real world because the former may be part of the latter's personal property. Similarly, the noun nwun 'eye' is thematically subordinated to the noun ai 'child' because of the inalienable relationship between the two. Both (1) and (2) are well-formed RC constructions since a noun in the RC is thematically subordinate to the head noun, as their explanation goes. If such a relation does not hold, unacceptable RCs are produced. For example, a gentleman is not in the relationship of thematic subordination with clothes, because it is inconceivable to imagine that the gentleman is part of the clothes, and so (3a) is unacceptable. For a similar reason, (3b) is unacceptable: sunset hardly has anything to do with the property of a pencil and so the former is not thematically subordinated to the latter.

(3) a. ??[sinsa-ka terewu-n] os
gentleman-nom dirty-rel clothes
'Clothes whose gentleman is dirty'
b. ??[nol-i yeppu-n] yenphil
sunset-nom pretty-rel pencil
'Pencil whose sunset is pretty'

So in order for such a RC as (1) or (2) to be well formed, the denotation of a noun in a relative clause must be thematically subordinated to the denotation of the head noun of the relative clause.

Although their pragmatic description is interesting on its own, revealing certain conventional world views and attitudes of the speakers, such a line of investigation is short of a linguistic explanation of the phenomenon under consideration unless it is shown how it is connected with and supported by some solid syntactic grounds. For example, it would be linguistically uninteresting to merely point out that expressions such as "Colorless green ideas sleep furiously" are pragmatically odd; what we are really interested in is to show how the pragmatic oddness comes about from the syntax of the sentence. Since we want to understand why noun phrases like (1) or (2) are well formed while (3) ill-formed, we need to look for syntactic explanation before we are complacent of pragmatic speculation and then to show how the two components interact. This paper is an attempt to formulate such a syntactic explanation and furthermore the syntax-semantics-pragmatics interface.

2. POSSESSIVE RELATIVE CLAUSE CONSTRUCTIONS

First, consider some examples of the ordinary relative clauses in (4) and compare them with the possessive RCs in (5).

(4) a. [wuli-ka e, manna-n] salami
we-nom met-rel person
'person who we met'
b. [e, wuli-lul manna-n] salami
we-acc meet-rel
'person who met us'
c. [wuli-ka swuni-lul e, manna-n] kos/sikan/ . . .
Swuni-acc met-rel place/time/
'place/time . . . that we met Swuni'

...
Each of the ordinary RCs in (4) contains a gap, which is coindexed with the head noun, with the gap functioning either as a complement or as an adjunct of the relative clause. The gap in the relative clause in (4a) is a direct object, while that in (4b) is the subject. The RC construction (4c) shows that the gap may function as a locative or temporal adjunct, among others. By contrast, no such gap is available in any of the RCs in (5): the necessary complements or adjuncts are all already filled in the relative clauses. One common property of the type of RCs in (5) is that there is an ownership relation between the head noun of the RC and the subject NP of the RC: the head noun is always understood as the owner of the subject. It is for this reason that we call such RCs possessive RCs.

Na and Huck (1993) has pointed out that the possessive RC constructions are characteristically related with double subject constructions (DSCs). If we put the head noun at the first subject position and the RC after that, changing the verb form from the relative yeppu-n into the declarative morphology yeppu-ta, we will have a DSC:

(6) a. ai-nun [nwun-i yeppu-ta].
   child-nom eye-nom pretty-decl
   'As for the child, she has pretty eyes.'

b. sinsa-nun [os-i terep-ta].
   gentleman-nom clothes-nom dirty-decl
   'As for the gentleman, his clothes are dirty'

Consider some more examples in which verbs, instead of adjectives, occur in the relative clauses:

(7) a. [apeci-ka tayhak-ey tani-nun] ai
   father-nom college-to go-rel boy
   'boy whose father goes to college'

b. [chinkwu-ka mikwuk-ey iminka-n] salam
   friend-nom America-to immigrate-rel person
   'person whose friend immigrated to America'

We could obtain apparent CNPC violations from sentences like (7) by having the subject modified by another RC:

(8) [[e, e, mayil manna-ten] chinkwu-ka, mikwuk-ey iminka-n] salam,
   every day meet-rel friend-nom America-to immigrate-rel person
   'person whose friend who he met every day immigrated to America'

In all the RCs above, the head noun of the relative clause must be interpreted as the possessor of the subject of the RC. Thus the father (apeci ‘father’) in (7a) is not just any father, but the father of the child (ai ‘child’)–the head noun, and the subject of the RC chinkwu ‘friend’ in (7b) can only be the friend of the person (salam ‘person’)–the head noun. It seems to be always the case that a certain possessive specifier is "understood" in the subject NP of the RC. The analogous situation may be found in English possessive
relative pronouns as in *whose friend immigrated to America*. In English, the overt possessive specifier *whose* actually occurs, but in Korean, it is unexpressed in the sentence.

Despite the fact that there are no complement or adjunct gaps in the relative clauses that could be coindexed with the head nouns in (5), I suggest that there is in fact a syntactic gap in this type of RCs just as in ordinary RCs. I contend that the syntactic gap is an unexpressed possessive specifier. For example, in the RC (5a), the possessive specifier of the subject noun *nwun* 'eye' is "understood." My proposal is that the index of the unexpressed possessive specifier is identical with the index of the head noun in the RC. Taking (5b) as an example again, we can see that the unexpressed possessive specifier of the subject noun *os* 'clothes' is coindexed with the head noun *sinsa* 'gentleman'. The situation in this sentence may be depicted as follows:

(9) [(e,-uy) os-i terewu-n] sinsa,
of clothes-nom dirty-rel gentleman

The possessive specifier *sinsa-uy* 'gentleman's' is extracted and in the process of extraction, the possessive marker *uy* 'of' is "deleted." But I do not mean by this that there is actually a syntactic process of deleting the specifier or moving it to the head noun position. I only intend to show that the specifier marker *-uy* is understood there though it does not appear in the sentence. Similarly, postpositions must be unexpressed but understood in RCs:

(10) a. wuli-ka Swuni-lul ku kos-eyse manna-ss-ta.
    we-nom Swuni-acc that place-at meet-past-decl
b. [wuli-ka Swuni-lul e, manna-n] kos (=(4c))
c. *[wuli-ka Swuni-lul eye manna-n] kos

Note that, if the coindex relation between the specifier and the head noun does not hold, the result is consistently ungrammatical:

(11) a. *[na-uy/ne-uy/ku-uy, nwun-i yeyppu-n] ai,
    my/your/his
    'child who my/your/his eyes are pretty'
b. *[ku-uy, nwun-i yeyppu-n] ai,
    'child who his eyes are pretty'

The ungrammatical expressions in (11) reveal that the possessive specifier must not occur in an RC; it must remain unexpressed in the clause.3

---

2 I assume that the common noun (e.g., *nwun* 'eye') has the specifier feature [SPR DetP] and forms a fully saturated NP after combining with its specifier *Mary-uy* 'Mary's':

```
NP                  
|                |
DetP     N[SPR DetP]|
|                |
|                |
NP       N        |
|                |
Mary-uy  nwun    
```

3 The reflexive pronoun *caki* may occur in the specifier position as in the following RC constriction below, but I will not pursue this problem any further in this paper. This might be described by appealing to the special syntactic-semantic property of the reflexive pronoun.
The structure of a possessive RC construction like (5b) may be represented as the following tree, using the theoretical device of Head-Driven Phrase Structure Grammar (HPSG)\(^4\).

\[
\begin{align*}
&\text{NP} \\
&\text{S}[	ext{MOD}_1] \\
&\text{N'}[\text{SLASH} \{\text{DetP}_i\}] \\
&\text{AP}[	ext{MOD}_1 \{\text{NP}_i\}] \\
&\quad \text{os-i} \\
&\quad \text{terewu-n} \\
&\quad \text{sinsa} \\
&\quad \text{'clothes-nom'} \\
&\quad \text{'dirty-rel'} \\
&\quad \text{'gentleman'}
\end{align*}
\]

It is assumed that an N' has a possessive specifier, e.g., \(\text{na-uy os} \) 'my clothes', \(\text{ne-uy os} \) 'your clothes', \(\text{sinsa-uy os} \) 'gentleman's clothes'. The category of the possessive specifier is assumed to be Determiner Phrase or DetP, and it is the value of the feature SPR (specifier). However, in (12), the possessive specifier does not appear on the surface and so N' contains a SLASH feature and the sole value of the SLASH feature is DetP. It simply means that the N' os-i 'clothes-nom' here occurs without its possessive specifier. The adjective terewun 'dirty-rel' contains the relative-clause-forming suffix -un and so it occurs only as the main predicative adjective of a RC, and furthermore it must have the MOD(IFIED) feature, signaling that it forms a modifier phrase. Exactly what it modifies is shown as the value of the MOD feature. In the tree above, the value of the MOD feature is the head noun sinsa 'gentleman'. This is indicated by the three occurrences of the same tag [\(i\)], one in the AP and another in its subject NP in the RC and still another in

\[
\begin{align*}
&\text{NP}_1 \\
&\text{S}[\text{SLASH} \{\text{DetP}_1\}] \\
&\quad \text{sinsa-ka} \\
&\quad \text{'gentleman'} \\
&\quad \text{N'}[\text{SLASH} \{\text{DetP}_2\}] \\
&\quad \text{AP} \\
&\quad \text{os-i} \\
&\quad \text{terep-ta} \\
&\quad \text{'clothes'} \\
&\quad \text{'dirty'}
\end{align*}
\]

I also assume that Korean adjectives may be used in two fundamentally different constructions, either in single subject constructions or in double subject constructions. For example, the lexical property of the adjective terep-ta, 'dirty' is represented as (i) and terep-ta2 as (ii).

(i) terep-ta : [SUBJ <NP>]
(ii) terep-ta2 : [SUBJ <NP[SLASH <DetP>]]

\(\text{terep-ta}\) requires an ordinary NP whereas \(\text{terep-ta2}\) requires a special NP which contains a SLASH feature since the NP has a specifier gap, and a lexical rule derives the latter from the former. To account for the top local tree in the tree above, it is assumed that the top S is subject to the following type constraint:

\[
[(\text{iii}) \text{NONHEAD-DTR} <\text{NP}[\text{INDEX }i>] \quad \text{HEAD-DTR} <\text{S}[\text{SLASH} \{\text{DetP}[\text{INDEX }i] \}]]
\]

\(^4\) This structure of the RC construction is based on my view of the DSC, which is represented as the following tree. Note that the index of the first NP is coindexed with the value NP of the SPR feature of the second NP and that the possessive specifier does not show up in the structure.
the head noun position.

Notice that the index of the DetP, the value of the SPR, is identical with the index of the NP value of the MOD feature in the AP. Note also that the coindex relation between the two elements, the DetP that is only "understood" and the subject NP that actually shows up, is specified strictly locally as the two elements are immediate sisters of S[MOD []].

It is important to note that the "understood" possessive specifier of an RC is represented as part of the feature structure of the subject NP, not as a constituent, by virtue of the feature structure geometry of HPSG. The understood element in the sentence is also understood in its syntactic structure, so to speak. This will turn out to be a crucial merit in accounting for the apparent CNPC violations, while this would be a problem in a theory in which empty elements like syntactic gaps actually occurs in the structure.

3. THE PROBLEM OF CNPC RESOLVED

Now, we are ready to consider the type of RC (2) (repeated below) or (8), which has long been seen as a problem since it appears to violate the CNPC.

(2) a. [[e, ip-un] os-i terewu-n] sinsa;
   wear-rel clothes-nom dirty-rel gentleman
   'gentleman whose clothes that he wears are dirty'

b. [[pro ip-un] os-i [SLASH{DetP,}] terewu-n] sinsa

This is problematic only insofar as the subject gap of the embedded RC is taken to be extracted and so coindexed with the head noun as shown in (2a) above. But this need not be the only way of looking at the coindex relationship in the RC construction. Given the analysis of the possessive RC that I propose in (12), a fresh view of the problem suggests itself. The index which is identical with the index of the head noun in (2) is the index of the unexpressed specifier of the subject NP of the main RC, that is, os-i 'clothes-nom', rather than the subject NP of the embedded RC ip-un 'who wears' as shown in (2b). Under this analysis, the problem of the CNPC violation simply does not arise in the first place, because the coindex relation holds within the boundary of a simple NP scope, not involving any complex NP.

And yet the question remains what has happened to the subject of the embedded RC. How is it brought to be coindexed with the head noun of the main RC? I argue that the identity of the null subject of the embedded RC is interpreted through the cooperation of pragmatics and syntax. To provide an answer to this question, we need to look at a slightly different direction: the phenomenon of ellipsis, which is extremely prevalent in languages like Korean (and Chinese and Japanese). I propose that the subject gap in the embedded RC in (2) is not a syntactic gap, but a discourse gap. The identity of a discourse gap depends on discourse principles that are entirely different from syntactic rules. It may be determined by an antecedent occurring in a prior context or by some other pragmatic factors. It may be the case that there appeared an NP sinsa 'gentleman' before the occurrence of this sentence (2) in the discourse and then that NP, which happens to be the owner of the clothes, may be coindexed with this subject gap. Another way of looking at it is possible (and perhaps more plausible). Given a phrase like [e ip-un] os 'clothes which (somebody) wears', despite the fact that there is no overt information about who wears the clothes in the phrase, it is conventionally natural to understand that the owner of the clothes wears the clothes because that is usually the most natural situation that one can anticipate. In either way, in (2), the owner of the clothes is understood as the subject of the RC. However, the owner of the clothes itself is unexpressed in (2); it is understood as the possessive specifier of the NP os 'clothes'. This much is pragmatics. Then syntax and semantics take over. Crucially, the possessive specifier of the subject of the main RC must be coindexed with the head noun of the main RC sinsa 'gentleman' as we saw in (12). As a result, the subject of the embedded RC is interpreted as coreferential with the head noun of the main RC. In sum, the identity of the subject gap of the embedded RC is determined pragmatically, that is, understood typically as the owner of the clothes in question. The identity of the owner of the clothes, in other words, the identity of the possessive specifier of the subject of the main RC is determined as part of the syntactic-semantic property of the possessive RC, derived from the property of the associated double subject construction (See
Note that the locality principle is strictly observed in determining the identity of the unexpressed subject of the embedded RC. The identity of the subject NP gap of the embedded RC can now be defined in two steps, with each step being defined within a local boundary. First, the identity of the subject gap of an embedded RC (if it ever occurs at all) is determined by a feature specification of the head noun of the embedded RC, not of any element higher than that. Next, whatever happens in the higher structure will be determined within the local boundary there, actually by the index identity between the unexpressed possessive specifier of the subject NP and the MOD value of the predicate AP of the main RC as we observed in the tree (12). In each case, the index identity is defined in a local tree.

I said above that it is natural in reality that one wears one's own clothes. But, of course, it is possible that one wears someone else's clothes. In this situation, the subject gap of the embedded RC is not coindexed with the possessive specifier of the head noun of the embedded RC:

(13) [ej ip-un] os-i[\slash DetP, >] terewu-n] sinsa,
    wear-rel clothes-nom                 dirty-rel gentleman
    'gentleman, whose, clothes that somebody, wears are dirty'

The situation described by this expression is somewhat bizarre, but it could happen. Imagine, for example, that Gentleman A wears Gentleman B's clothes and the clothes look dirty to Gentleman B. That is a situation that (13) could describe. Even when an overt subject NP which is not coindexed with the possessive specifier of the head noun of the embedded RC actually occurs as in (14) below, the expression may be acceptable, as long as the head noun of the main RC is coindexed with the possessive specifier of the subject NP, though its acceptability seems marginal:

(14) ?[Swum-kai ip-un] os-i terewu-n] sinsa,

What has been clear so far is that the overall grammaticality of the RC constructions with possessive specifier gaps like (2), (8), (13), or (14) does not depend on the structure of the embedded RCs that modify the subject of the main RC. It does not matter whether there is a gap in it or not and what kind of gap it is in case there is one. The crucial condition for the grammaticality involves the subject NP of the main RC and its head noun: the unexpressed possessive specifier of the subject must be coindexed with the head noun. We only have to check the following points in the subject NP of the main RC:

(15) a. Is there a SLASH feature in it?
    b. Is the SLASH value DetP?
    c. Is the SLASH value coindexed with the MOD value of the predicate AP?

If an RC construction receives positive responses to the three checkpoint questions above, it will be a grammatical expression. However, whether it is a natural and acceptable expression or not is a different matter. For example, let us consider the expression (3) again, which we judged as ungrammatical above. (3) is repeated below:

(3) *[sinsa-ka terewu-n] os
    gentleman-nom dirty-rel clothes
    'Clothes whose gentleman is dirty'

If the subject NP sinsa-ka 'gentleman-nom' is analyzed as containing an unexpressed specifier and it is coindexed with the head noun os 'clothes', then it should be a grammatical expression. I argue that (3) is indeed grammatical but only unacceptable. It is unacceptable because it is nonsensical for clothes to own a gentleman. The expression (3) is just as unacceptable as (16) below, where a possessive specifier actually occurs. The expression (16) also implies that clothes own a gentleman, and so it is unacceptable, but syntactically well formed.
The NP os-uy 'clothes's' is not an appropriate possessive specifier of the noun sinsa 'gentleman' because it is bizarre that clothes own a gentleman. The motivation of Na and Huck's (1993) painstaking discussion to establish what they call 'thematic subordination' was to answer the question of why expressions like (3) are unnatural and why expressions like (2) are natural. However, to answer that question, under my analysis presented here, such a condition as Na and Huck's imposed on parts of an RC using the notion of thematic subordination is not needed. What is needed instead is a very general pragmatic selection restriction imposed on the possessive specifier of a noun. This constraint will tell us what kind of things can possibly possess something and what kind cannot. According to this general pragmatic constraint, it is natural, for example, that a gentleman owns clothes or a child possesses eyes while it is unnatural that clothes own a gentleman or a pencil owns sunset. For this reason, (16) is strange, and for the same reason (3) is bizarre. There is nothing new in this pragmatic constraint. The constraint itself may even be trivial, but its status becomes important when it is associated with possessive RCs because it offers us a criterion by which acceptable possessive RCs may be distinguished from unacceptable ones.

A serious problem of Na and Huck's thematic subordination analysis is that it is not clear how their pragmatic condition is related with the syntactic structure of a possessive RC. They do not clearly define what is the syntactic status of each of the two NPs that would be in the relationship of thematic subordination. By contrast, under my possessive specifier approach, it is clearly defined on what syntactic position the possessive constraint is imposed. Given a possessive RC, it is imposed on the unexpressed possessive specifiers of the subject noun of the RC. Given a double subject construction, it is imposed on the unexpressed specifier of the second subject of the DSC.5

4. CONCLUSION

I have presented a new analysis of possessive RC constructions that were claimed to involve certain CNPC violations in previous studies. I characterize them as RC constructions with possessive specifier gaps, as opposed to ordinary RC constructions with complement or adjunct gaps. It is irrelevant to ask whether possessive RCs violate the CNPC or not, since the index identity between a gap in an RC and the head noun of the RC is determined within the boundary of a simple NP, not involving any complex NPs.6

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5 Except the particular type of RCs we discuss above in this paper, common RCs do observe the CNPC.

6 It has been long known that there is another group of counterexamples to the CNPC. A typical example is shown below. (Yang (1989))
Under my analysis, Na and Huck's (1993) pragmatic constraints imposed upon relative clause constructions are rendered otiose as they can be incorporated into part of very general selection restrictions holding between common nouns and their possessive specifiers.

I have also shown that the HPSG architecture proves highly effective in dealing with "empty" elements like specifier gaps in RCs. The syntax-semantics interface involving SLASH features and referential indices makes it possible to treat specifier gaps as elements that play crucial roles as part of feature structures for the RCs without ever occurring in the RCs.

REFERENCES

Cha, Jong-Yul. 1998. "Relative Clause or Noun Complement Clause: The Diagnoses." In Proceedings of the 11th International Conference on Korean Linguistics.

Huang, C.-T. James. 1984. "On the Distribution and Reference of Empty Pronouns." Linguistic Inquiry 15.

Kameshima, Nanako. 1990. "On 'Aboutness Conditions'." In Hoji Hajime (ed.), Japanese/Korean Linguistics I: 255-67. Stanford: CSLI Publications.

Kim, Jong-Bok (To appear). "Local Treatment of Nonlocal Relativization." To be presented at the Berkeley Linguistic Society 1999.

Kuno, Susumu. 1976. "Subject, Theme, and the Speaker's Empathy: A Reexamination of Relativization Phenomena." In Charles N. Li (ed.), Subject and Topic, Academic Press.

Li, Charles N. and Sandra A. Thompson. 1976. "Subject and Topic: A New Typology of Language." In Charles N. Li (ed.) Subject and Topic. Academic Press, New York.

Na, Younghee and G. J. Huck. 1993. "On the Status of Certain Island Violations in Korean." Linguistics and Philosophy 16.

Park, Byung-Soo. 1982. "The Double Subject Constructions Revisited." In Linguistics in the Morning Calm: Selected Papers from SICOL 1981, Seoul, Hanshin Publishing Co.

Park, Byung-Soo. 1993. "A Constraint-Based Approach to the Relative Clause Constructions in Korean." Unpublished paper presented for the HPSG Workshop at Ohio State University.

Pollard, Carl and Ivan A. Sag. 1994. Head-Driven Phrase Structure Grammar. Sanford, CSLI.

Rosch, Eleanor, Carolyn Mervis, Wyne G. Gray, David M. Johnson and Penny Boyes-Braem. 1976. "Basic Objects In Natural Categories." Cognitive Science 8.

(i) [pang-i ilkess-ul ttay(-ey)] motun aitul-i wulless-ten phyenci
   class-head-nom read-rel time(-at) all children cried-rel letter
   'the letter at which the whole class cried at the time when the class-head read (it)'

The embedded relative clause pang-i ilkess-ten 'the class-head read' supposedly contains a gap and it is coindexed with the head noun phyenci 'letter', crossing a complex NP and an S boundary and therefore it was argued that sentences like (15) constituted a CNPC violation.

However, I argue again that sentences like (15) do not violate the CNPC. The previous analysis has overlooked an important fact that the main RC motun aitul-i wulless-ten 'the whole class cried (at)' in (15) also contains a gap. I argue that the gap is a postpositional complement like phenci-ey 'at the letter'. Note that sentences like (ii) show that verbs like wul-ta 'cry' takes a postpositional complement. (This possibility was pointed out to me by Samuel E. Martin at a Special Session of the 11th International Conference on Korean Linguistics held at the University of Hawaii in July, 1998.)

(ii) Swunay-nun salang-ey wul-ess-ta.
   Swunay-top love-at cry
   'Swunay cried at love.'

Therefore, there is good reason to assume that it is a complement gap in the main RC, not the gap in the embedded RC, that is coindexed with the head noun in (i).

(iii) [pang-i ilkess-ut ttay-ey motun pan aitul-ey wulless-ten phyenci,
     class-head read-rel time-at all class children-nom cried-rel letter
     'letter which all the class children cried at when the class head read it'

As usual, the gap in the embedded RC should be interpreted in the discourse in the same way as the gap in the embedded RC of (2) above is interpreted. In this way, we see that RC constructions like (i) turn out to have nothing to do with the island constraint.
Ross, John R. 1967. *Constraints on Variables in Syntax*. MIT Ph.D Dissertation.
Sag, Ivan A. and Thomas Wasow. To appear. *Syntactic Theory: A Formal Introduction*.
Yang, Dong-Whee. 1975. *Topicalization and Relativization*. Indiana University Doctoral Dissertation.
Yang, Dong-Whee. 1989. *Fundamentals of Government and Binding Theory* (In Korean). Seoul, Top Press.