Korean Kes-Relative Clauses as Stages ∗

Sang-Hee Park

Department of English Language and Literature, Seoul National University,
599 Gwanak-ro, Gwanak-gu, Seoul 151-742, Korea
sang8316@gmail.com

Abstract. Recently, M.-J. Kim (2008) provided a reformulation of the Relevancy Condition on kes-relative clauses (kes-RCs) (Kim, Y.-B. 2002), the so-called internally headed relative clauses in Korean. In her analysis, the bipartite conditions of Kim (2002), one involving simultaneity between the main and the relative clause and the other involving a ‘resultant theme’, are collapsed into one involving a temporal overlap between the main and the relative clauses. In Kim (2008), the kes-RC is assumed to describe a temporary state which overlaps with the main event (i) if the relative clause contains an atelic predicate and the aspect is progressive, or (ii) if the relative clause contains a telic predicate and the aspect is perfect as well as progressive. This paper, however, claims that M.-J. Kim’s analysis still suffers from empirical problems, based on new type of examples; they show that (i) the relative clause can contain an atelic, perfect predicate if it is a stative type and (ii) the relative clause denote the volition or prediction of the speaker. The present paper proposes that kes-RCs denote a stage, which instantiates at the time of the main clause’s event.

Keywords: internally-headed relative clauses (IHRC), stage, the Relevancy Condition, aspect, tense

1 Introduction

The kes-relative clause (kes-RCs), the so-called internally headed relative clause (IHRC), is identified by a relative clause and the morpheme kes, which is followed by a predicate that requires an entity argument. Typical examples of the kes-RC are shown in (1), where the relative clause appears within the bracket.

(1) a. [cholahah-n senpi-ka kama-lul syewu-ko ccelecclmya-nun] kes-ul
[poor gentleman-Nom a palanquin-A cc  stop in a fluster-Imprf ] kes-A cc
manna-ass-ta
meet-Pst-Decl
‘A poor gentleman was in a fluster while holding on a palanquin and I met him.’

b. [chenge-lul passak mali-n] kes-ul tocangkwuk-uy comisengpun-ulo
[herring-Acc completely dry-Prf-Rel] kes-Acc soup seasoning-Instr
sse-ss-ta
use-Pst-Decl
‘A/The herring had been completely dried, and I used it to give flavor to the soup.’

(Sejong Corpus)

∗ I would like to deliver sincere gratitude to Prof. Ki-Sun Hong for insightful comments on earlier versions of this paper.

Copyright 2010 by Sang-Hee Park
Kes-RCs have been claimed to be subject to the Relevancy Condition (Kuroda 1976 for Japanese, Y.-B. Kim 2002, M.-J. Kim 2008 for Korean). This paper examines two recent renditions of the Relevancy Condition in Y.-B. Kim (2002) and M.-J. Kim (2008) and shows that they still suffer from empirical problems. As it will be argued later, the varying degree of acceptability of kes-RCs with respect to the relative clause’s tense and aspect can be better explained under the notion of stages in the sense of Carlson (1997).

## 2 The Relevancy Condition

Compared to the externally headed relative clause (EHRC), IHRCs have been known to observe an additional interpretability condition, the Relevancy Condition. The following is a rendition of the Relevancy Condition for Korean kes-RCs, provided by Y.-B. Kim (2002).

### (2) Revised Relevancy Condition (RRC)

An event $e$ is relevant to some other event(s) $e'$ iff

1. $<e,e'> \in R_m$, where $R_m$ is a set of relations retrievable from the background knowledge of the discourse participants,
2. the predicates denoting $e$ and $e'$ share arguments which are pragmatically conspicuous w.r.t. $r_m$ ($r_m \in R_m$), and
3. the speaker is attuned to $r_m$.

(Y.-B. Kim 2002: 558 (40))

According to Y.-B. Kim, the event of the relative clause and that of the main clause must be in a meaningful relation, which he defines as binding relation of location variables through the sharing of pragmatically conspicuous arguments. Notably, what is the pragmatically conspicuous argument depends on the aspectual properties of the relative clause. If an activity verb appears within the relative clause, it is a spatio-temporally co-occurring argument. Thus, in this case, the event of the relative clause and that of the main clause must have a point of spatial or temporal overlap. On the other hand, if an achievement or accomplishment verb appears within the relative clause, the pragmatically conspicuous argument is a resultant theme, which is defined as an object obtained through the culmination of the event described by the relative clause.

As it is noted by M.-J. Kim (2008), the RRC-based analysis offers an important insight in that it shows the aspectual property of the predicate within the relative clause affects the interpretability of the sentences involving kes-RCs, and thus provides a way to explain the contrast between (3) and (4); the two events in (3) are related by a pragmatically conspicuous argument, namely, a doll, because the relative clause contains an accomplishment type

---

1. This new terminology is used in this paper because the term IHRC erroneously implies that its head corresponds to that of EHRC. In fact, one of the properties of kes-RCs is that the semantic head of kes-RCs is inside the embedded clause, whereas the head of EHRCs occurs outside of it (Chung and Kim 2003, Kim 2004, among many others). The following examples, however, show that apparent semantic head of the kes-RC, underlined in (i) and (ii), does not correspond to the semantic head of an EHRC.

1. (i) [milkalwa-lul pancwukha-n] kes flour-Acc knead-Prf-Rel kes ‘dough made from flour’
2. (ii) [nokmalkalwa-lul mul-ye pule ikheyse congi-celem yaylke kuthin] kes starch-Acc in-Loc resolve-Comp cook-Comp paper-like thinly harden-Prf-Rel kes ‘dried dough made from starch which has been resolved in water and then it (=resolved starch) has been cooked and hardened thin like a piece of paper’

2. In this paper, the following abbreviations are used for transcribing the Korean data: ACC: accusative case; Comp: complex predicate marker; Decl: declarative sentence; Hon: honorific marker; Instr: Instrumental case; Loc: locative particle; Nom: nominative case; Non-Pst: non-past tense; Imprf: imperfective aspect; Pass: passive voice; Prf: perfect aspect; Pst: past tense; Rel: relative marker.
predicate. On the other hand, the two events in (4) must be spatio-temporally overlapped because an activity type predicate is involved. As a result, (3) is judged as acceptable while (4) is judged as unacceptable.

(3) John-un [Mary-ka ece inhyeng-ul mantul-ø-un] kes-ul onul nayta
    J.-Top [M.-Nom yesterday doll-Acc make-Prf-Rel] kes-Acc today take and
    peli-ess-ta
    ‘Mary made a doll yesterday and John threw it away today.’

(4) *John-un [Mary-ka ece inhyeng-ul halwu congil kaci-ko nol-ø-un] kes-ul
    J.-Top [M.-Nom yesterday doll-Acc day long have-Comp play-Prf-Rel] kes-Acc
    onul nayta peli-ess-ta
    today take and throw away-Pst-Decl
    Intended: ‘Mary played with a doll all day yesterday and John threw it away today.’
    (M.-J. Kim 2008: (4), (5))

Yet, the RRC-based analysis still falls short of its problems. First, the RRC-based analysis fails to predict the acceptability of examples such as (5); since the relative clause involves an achievement type predicate, there must be a resultant theme in order that the two events can be meaningfully related. Because there is no such an object, (5) is wrongly predicted to be unacceptable.

(5) Na-nun [emeni-ka konghang-ey tochakha-shi-n] cip-ulo
    I-Top [mother-Nom airport-Loc arrive-Hon-Prf-Rel] kes-Acc home-goal
    moshi-ess-ta
    ‘My mother arrived at the airport, and I took her home.’
    (Y.-B. Kim 2002: (9))

Also, the unacceptability of sentences such as (6) cannot simply be attributed to the lack of a resultant theme. Instead, it is because this kind of sentences describes impossible situations where the two embedded events are contradictory; the boat is not at the time of the destroying event. In fact, the externally-headed counterpart of (6), illustrated in (6)’, is equally unacceptable.

(6) *[Pay-lul kenchoha-l] kes-ul pwuswu-ess-ta
    [boat-Acc build-Rel] kes-Acc destroy-Pst-Decl
    ‘(Someone) destroyed the boat that will be built.’
    (Y.-B. Kim 2002: (37c))

(6)’ *[Kenchoha-l] pay-lul pwuswu-ess-ta
    [Build-Rel] boat-Acc destroy-Pst-Decl
    Intended: ‘(Someone) destroyed the boat that will be built.’

Recently, M.-J. Kim (2008) offered a grammatical component of the RRC, shown in (7).

(7) M.-J. Kim’s Interpretability Condition (partial)³

In order for a kes-RC to be interpretable, for events $e$ and $e'$ the embedded and the embedding clauses describe, respectively, and a temporary state $s$, and individual $k$, and thematic relations $P$ and $Q$,

(i) $s \leq e \& s \preceq e'$; and

³ The full condition additionally states a pragmatic sub-condition. In order to limit the present discussion to the grammatical component, the partial version is adopted here.
(ii) $P(k,s) \& Q(k,e')$
Here, ‘≤’ indicates a part-whole relation, and $\infty$ temporal overlap

(M.-J. Kim 2008 (11))

What is required by this condition is that the event described by the relative clause must have a stative subpart denoting a temporary state which temporally overlaps with the event of the main clause and the temporary state and the event of the main clause must share an argument. Underlying this condition are two crucial assumptions; (i) temporary states are either in-progressive states or target states in view of Parsons’ (1990) account of Aspect, and (ii) target states can only be described by perfect sentences involving a telic predicate whereas any progressive sentences can describe in-progressive states.

Notably, M.-J. Kim’s analysis provides a unified account on the phenomenon by providing a way to subsume the bipartite conditions of Y.-B. Kim’s RRC, under which sentences involving kes-RCs are judged acceptable if either simultaneity or a resultant theme obtains. In addition, it provides clear explanations to a wider range of data than the RRC. For instance, M.-J. Kim’s interpretability condition predicts the acceptability of (5) since the relative clause describes a target state and *emien* ‘mother’ is both the argument of the predicates within the relative and the main clause. Furthermore, by making a clear distinction between the lexical and the grammatical aspect, M.-J. Kim’s analysis correctly predicts the contrast between the following examples; though the relative clauses in both sentences are perfect, only (9) contains a telic predicate *machii- ‘finish’.*

(8) *John-un [Mary-ka tali-ø-n] kes-ul mwul-ul cwu-ess-ta
   J.-Top [M.-Nom run-Prf-Rel]kes-Acc water-Acc give-Pst-Decl
   Intended: ‘Mary ran and John offered water to her (immediately after that).’

(9) (?!)John-un [Mary-ka tali-ki-lul mak machi-ø-n] kes-ul mwul-ul cwu-ess-ta
   J.-Top M.-Nom run-nom-Acc just finish-Prf-Rel kes-Acc water-Acc give-Pst-Decl
   ‘Mary just finished running and John offered water to her (immediately after that).’

(M.-J. Kim 2008 (8)-(9))

There are, however, still several empirical problems in M.-J. Kim’s analysis. First of all, it fails to predict the acceptability of (10), where the aspect of the relative clause is perfect and the predicate *pangchi- ‘neglect’* is atelic, because under her analysis a perfect-atelic combination cannot describe a temporary state. Similarly, the relative clause within the sentence (11) has an atelic predicate *nam- ‘remain’ and the aspect is perfect, and yet it is completely acceptable.

(10) [Cip-i olyastongan pyeyka-lo pangchi-toy-ø-n] kes-ul pucilenhan
    [house for a long time deserted house-as neglect-Pass-Prf-Rel] kes-Acc diligent
    senwen hana-ka soncilhya-ess-ta
    sailor one-Acc repair-Pst-Decl
    ‘The house had been abandoned for a long time and a diligent sailor repaired the house.’

(Sejong Corpus)

(11) [Cemsim-ye ppang-i nam-ø-un] kes-ul ceneyk-ye mek-ess-ta
    [lunch-at bread-Nom remain-Prf-Rel] kes-Acc dinner-at eat-Pst-Decl
    ‘(The) bread was left after lunch and (I) ate it (=the bread) at dinner.’

4 It seems that (9) is degraded because two accusatives NPs (kes-ul and mwul-ul) consecutively occur. Compared to (9), the following example is fully acceptable.

(i) *John-un [Mary-ka tali-ki-lul mak machi-ø-n] kes-ul ana cwu-ess-ta
   J.-Top M.-Nom run-nom-ACC just finish-Prf-Rel] kes-Acc hug give-Pst-Decl
   ‘Mary just finished running and John hugged her.’
These sentences seem to show that an atelic predicate with perfect aspect is allowed to appear within the relative clause. The contrast between (8) and (9), however, conflicts with this observation; again, (8) and (9) differ from each other with respect to the telicity of the predicate within the relative clause. Still, there is an important difference between (8) and (9) on the one hand, and (10) and (11) on the other hand; the relative clauses within the former contain activity predicates, whereas those within the latter contain state predicates. Thus, what can be deduced from (8)-(11) is that if the predicate within the relative clause describes an active event, only telic-perfect predicate is allowed, whereas such a constraint does not apply for perfect predicates describing a stative event.

Another shortcoming of M.-J. Kim’s analysis is that it cannot explain sentences embedding kes-RCs which describe the speaker’s volition or prediction, such as (12). In all cases, the relative clause does not describe a temporary state because it refers to neither an in-progressive state nor a target state, and hence all the sentences in (12) will be judged unacceptable.

(12) a. [John-i sangkum-ul pat-ul] kes-ul nya-ka kalocya-ess-ta
   [J.-Nom prize money receive-Predict] kes-Acc I take-Pst-Decl
   ‘John was supposed to get prize money but I took the prize money (before he gets it).’

b. [Ttang han ttoyki-lul muleypat-ul] kes-ul molya pal-ass-ta
   [land one piece-Acc inherit-pat-ul] kes-Acc secretly sell-Pst-Decl
   ‘(I) was supposed to inherit a piece of land but (I) sold the land secretly (before someone inherits he land).’

c. [Cip-i olyastongan pyeyka-lo pangchitoy-l] kes-ul pucilenhan
   [house for a long time deserted house-as neglect-Pass-Predict] kes-Acc diligent
   senwen hana-ka soncilhya-ess-ta
   sailor one-Acc repair-Pst-Decl
   ‘A/The house would have been continued to be abandoned but a diligent sailor repaired the house.’

d. [Ttalki-lul kalamek-ul] kes-ul sawa-ess-ta
   [strawberry-Acc grind.eat-Volition] kes-Acc buy.come-Pst-Decl
   ‘(I) bought some strawberries, which I was going to grind and eat.’

(modified on the sentences from Sejong Corpus)

These examples seem to suggest that there must be further modifications to M.-J. Kim’s interpretability condition, so that it can account for a wider range of data. However, in what follows, I will propose an alternative analysis of kes-RC, which employs the notion of stages. It will be shown that the puzzling effect of lexical and grammatical aspects simply derives from the analysis.

3 A New Analysis

I propose that kes-RCs denote stages, which are defined as temporal instantiations of individuals by Carlson. In addition, I assume that in order the kes-RC to be interpretable, the individual denoted by the kes-RC must be at the time of the event described by main clause. One of the evidence for this treatment of kes-RCs as stages comes from the widely accepted observation that the relative clause cannot contain an Individual-level predicate (Y.-B. Kim 2002, M.-J. Kim 2008), as illustrated by (13).

---

5 Regarding the morpheme -ul, the predominant view is to treat it as a future tense marker. On the other hand, S.-O. S. Sohn (1995) refutes this claim and assumes that -ul is a modal element that refers to the speaker’s or hearer’s prediction (1995: 46). Under his analysis, the futurity of examples such as (12) comes from the unmarked tense suffix -ø, which refers to non-past (i.e. present and future). In this paper, I subscribe to this view but further assume that -ul also denotes speaker’s volition.

6 The predicate within each relative clause originally appeared in perfect aspect.
Here, the relative clause describes a semi-permanent property of an individual’s mentality. On the other hand, the relative clause in (14) describes a temporary state of a raw fish, namely being fresh at the time of the main clause’s event. Assuming that \textit{kes}-RCs are stages, the contrast between (13) and (14) can be correctly predicted.

(14) \[\text{Hoy-ka } \text{singsingha-ø-n} \text{ kes-ul mek- ess-ta}\]
\[
[\text{raw fish-Nom fresh-Rel} \text{} \text{kes-Acc eat-Pst-Decl}]
\]
‘(I) ate raw fish while it was (still) fresh.’

Though it seems that M.-J. Kim’s notion of temporary state nearly captures what can be referred to by stages, there is an important difference between them; while the individual at a temporary state in the sense of M.-J. Kim explicitly refers to an object that occurs with progressive or perfect predicates, I assume that stages are also compatible with other types of predicates as long as they describe a temporary state. Given this, the problematic examples (15)-(16) under the analysis of M.-J. Kim can be accounted for under the present analysis; the \textit{kes}-RC in (15) denotes a stage, namely, an abandoned house for some duration of time and this individual instantiates at the time of the main clause. Also, the \textit{kes}-RC in (16) denotes the bread at the state of being left after lunch and that state also holds at the time of the main clause (examples are repeated from (10) and (11)).

(15) \[\text{Cip-i olyastongan pyeyka-lo pangchi-toy-ø-n} \text{ kes-ul pucilenhan}\]
\[
[\text{house for a long time deserted house-as neglect-Pass-Prf-Rel} \text{ } \text{kes-Acc diligent}\]
\]
‘sailor one-Acc repair-Pst-Decl
‘The house had been abandoned for a long time and a diligent sailor repaired the house.’

(16) \[\text{Cemsim-ye ppang-i nam-ø-un} \text{ kes-ul ceneyk-ye mek-ess-ta}\]
\[
[\text{lunch-at bread-Nom remain-Prf-Rel} \text{ } \text{kes-Acc dinner-at eat-Pst-Decl}\]
\]
‘(The) bread was left after lunch and (I) ate it (=the bread) at dinner.’

Under the proposed analysis, the varying degree of acceptability of \textit{kes}-RCs follows from treating them as stages, together with the aspectual properties of predicates within the relative clause. For instance, since an activity type predicate inherently describes a temporary event, the individual that instantiates the event described by this predicate can potentially be a stage. As we observed, however, a \textit{kes}-RC that embeds an activity type predicate is allowed only if the aspect of the embedded predicate is progressive, and not perfect. This is because the relative clause with a perfect predicate describes an activity that has completed, and thus the individual denoted by the \textit{kes}-RC cannot be at the time of the main clause’s event. On the other hand, if the predicate within the relative clause describes an on-going activity, the individual denoted by the \textit{kes}-RC is at the time of the main clause’s event, and hence the whole sentence is judged acceptable. To illustrate this, reconsider the example (17), repeated from (8). Here, the \textit{kes}-RC denotes a stage, namely, Mary who is temporally bounded when the act of running takes place. Since the event of Mary’s running has completed before the time of the main clause’s event, (17) is judged unacceptable.

(17) *\[\text{John-un [Mary-ka tali-ø-n} \text{ kes-ul mwul-ul cwu-ess-ta}\]
\[
J.-Top [M.-Nom run-Prf-Rel]kes-Acc water-Acc give-Pst-Decl
\]
Intended: ‘Mary ran and John offered water to her (immediately after that).’

In contrast, the sentence in (18) is acceptable since the embedded kes-RC denotes a stage, that is, a pedestrian who instantiates the running activity at the time of the main clause.

(18) [Haygin-i talliko iss-nun] kes-ul kay-ka mwul-ess-ta
    [pedestrian-Nom running is-Rel] kes-Acc dog-Nom bite-Pst-Decl
    ‘A dog bit a pedestrian who was running.’

(modified on Y.-B. Kim’s 2002: (36a))

Under the present account, the acceptability of (19) is also predictable. Here, the kes-RC denotes Mary who is at the moment of finishing the running event, which overlaps with the time of the main clause’s event.

(19) (?Joh-un [Mary-ka tali-ki-lul mak machi-ø-n] kes-ul mwul-ul cwu-ess-ta
    J.-Top [M.-Nom run-nom-Acc just finish-Prf-Rel] kes-Acc water-Acc give-Pst-Decl
    ‘Mary just finished running and John offered water to her (immediately after that).’

Contrary to the kes-RCs that embed activity type predicate, those that embed accomplishment or achievement type predicates are always acceptable regardless of their grammatical aspect. This is because an accomplishment or an achievement type predicate denotes an event composed of a process and a final state, and either state is compatible with stages. For example, in (20), the kes-RC denotes the doll at the final state of the event of Mary’s making this doll, and this individual is at the time of the main clause’s event. Also, the kes-RC in (21) denotes an individual that is being made into a doll, and it is also at the time of the main clause’s event.

(20) John-un [Mary-ka ece inhyeng-ul mantul-ø-un] kes-ul onul nayta
    J.-Top [M.-Nom yesterday doll-Acc make-Prf-Rel] kes-Acc today take and
    peli-ess-ta
    throw away-Pst-Decl
    ‘Mary made a doll yesterday and John threw it away today.’
    (repeated from (3))

(21) John-un [Mary-ka inhyeng-ul mantulko iss-nun] kes-ul nayta peli-ess-ta
    J.-Top [M.-Nom doll-Acc making be-Rel] kes-Acc take and throw away-Pst-Decl
    ‘Mary was making a doll and John threw it away.’

Now, let us reconsider the cases where the relative clause describes a speaker’s volition or prediction. In (22), the kes-RC denotes the prize money, which is at the moment that it is supposed to be given to John, that is, from the moment that John’s getting the prize money is decided until John finally gets the prize money. Since this individual is also at the time that the event of one’s taking this individual takes place, the sentence is judged acceptable.

(22) [John-i sangkum-ul pat-ul] kes-ul nya-ka kalocyxa-ess-ta
    [J.-Nom prize money receive-Predict] kes-Acc I take-Pst-Decl
    ‘John was supposed to get prize money but I took the prize money (before he gets it).’
    (repeated from (12a))

So far, it is shown that how the varying acceptability of kes-RCs with respect to the aspectual properties can be accounted for under the proposed analysis. However, there is one problem for the proposed account. The problem is posed by sentences such as (23), which is similar to (22).

---

7 I assume that the final state denotes the state of an individual’s being, which holds at the time that the individual exists.
The analysis as it is proposed here does not correctly explain the unacceptability of (23); here, the kes-RC can be assumed to denote Mary, who at the moment that it is supposed to run, that is, from the moment that her running is decided until she finally starts running. Since this individual is also at the time that the event of one’s taking this individual takes place, the sentence can incorrectly be judged acceptable. The best approximation that I can make at this moment is that in examples such as (23) the relative clause describes a future event, and not the speaker’s volition or prediction. For now, I assume that this is a problem that will be resolved by completely understanding the semantic properties of sentences involving the modal expression -lul.

4 Conclusion

This paper began by examining recent renditions of Relevancy Conditions in Y.-B. Kim (2002) and M.-J. Kim (2008). It has been shown that while the account based on these conditions offers an explicit description of kes-RCs with respect to the aspectual properties of the relative clause, they still falls short of explaining a wider range of examples. As an alternative analysis, this paper has attempted to account for the kes-RC under Carlson’s notion of stages. In particular, this paper has proposed that kes-RCs are stages, which instantiates at the time of the main clause’s event. Although there still remains a problem, this paper has shown that the varying degree of acceptability of kes-RCs with the relative clause’s aspectual properties can be better accounted for under the proposed analysis.

References

Carlson, G. N. 1977. Reference to kinds in English, Doctoral dissertation, University of Massachusetts-Amherst.
Kim, M.-J. 2008. Relevance of Grammar and Pragmatics to the Relevancy Condition. Language Research 44 (1).
Kim, Y.-B. 2002. Relevancy in internally headed relative clauses in Korean. Lingua 112, 541-559.
Kuroda, S. 1976. Pivot-independent relativizations in Japanese III: Types of Japanese relatives. Papers in Japanese Linguistics 5, 157-179.
Parsons, T. 1990. Events in the Semantics of English: A study in Subatomic Semantics. Cambridge, MA: The MIT Press.
Sohn, S.-O. S. 1995. Tense and aspect in Korean. Center for Korean Studies, University of Hawai’i.