REANALYSIS OF KOREAN CAUSATIVES: An Argument Structure Account

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1. Introduction

Korean has two types of causative constructions: so-called short form causatives and periphrastic (V-key ha-) causatives. One outstanding problem with the Korean causatives is that the causee in these two constructions displays various case alternations as shown in (1).

(1) a. Emma-ka ai-eykey/-lul/-ka os-ul ip-hi-ess-ta. mom-Nom child-Datt -Ace/ -Norn clothes-Ace put on-Caus-Past-Dec 'Mom got (her} child dressed.'

b. Emma-ka ai-eykey/-lul/-ka os-ul ip-key ha-ess-ta. mom-Nom child-Datt -Ace/ -Nom clothes-Ace put on-Caus-Past-Dec 'Mom had (her} child get dressed.'

In order to explain the case alternation of the causee in Korean causative constructions, different analyses have been proposed: e.g., the restructuring analysis by Kang (1986), the incorporation analysis by Chang & Cho (1991} and the case minimality analysis by J.-S. Lee (1992). None have integrated the causative constructions.

In this paper I propose that not only the V-key ha- constructions but also short form causatives are variants of a unified process of complex predicate formation, i.e., the process of 'Add Argument' suggested by Ritter & Rosen (1993a,b). The verb ha- in the V-key ha- construction is analyzed as kind of functor predicate that shows some characteristics of a lexically specified causative verb like make and some characteristics of the true functor predicate have. I regard short form causatives as morphological ones that are synchronically reanalyzed as lexical causatives.

2. An Argument Structure Approach to Korean Causative Constructions

Korean causative constructions are different from those in other languages in that the causee of the Korean causatives alternates its case between accusative or dative and nominative. The case alternation phenomenon has been unsuccessfully accounted for in the recent literature by assuming the application of an optional rule, whether it is Verb Raising as in Kang (1986), Head Movement as in Chang & Cho (1991), or ECM as in J.-S. Lee (1992). Each study assumes that the optionality of the rule in question is due to the properties of the matrix verb ha- (as in Chang & Cho 1991) or to the properties of the embedded verb (as in J.-S. Lee 1992).

We observe the following case alternations in the Korean causative constructions.

(i) In short form causative constructions, the causee is invariably accusative case-marked, if the base verb is intransitive.

(ii) The causee can be either dative or accusative case-marked in short form causatives, if the base verb is transitive.

(iii) In periphrastic causative constructions, the causee is either nominative or accusative case-marked, if the embedded verb is intransitive.

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The causee in periphrastic causatives can be nominative, dative, or accusative case-marked, if the embedded verb is transitive.

In order to account for the case alternation facts not only in short form causatives but also in periphrastic causatives in a uniform way, I will adopt an Argument Structure account from the works of Grimshaw (1990), Rosen (1989), and Ritter & Rosen (1993a,b). I will analyze the V-key ha-constructions first and then apply the same account to the short form causatives since the former is more regular and productive than the latter.

2.1 An Argument Structure Account of the V-key ha-Constructions

The V-key ha-constructions have a meaning of either 'causative' or 'permissive' as shown in (2) below. When the causee is accusative case-marked, the whole sentence denotes a causative event. If the causee is nominative case-marked, the same sentence represents a permissive event rather than a causative one.

(2) a. John-i Mary-lul cip-ey ka-key ha-ess-ta.
   J. -Nom M. -Acc house-at go-Caus-Past-Dec
   'John made Mary go home.'

   J. -Nom M. -Nom house-at go-Caus-Past-Dec
   'John allowed Mary to go home.'

If the embedded verb is transitive, as shown in (3), then the causee is dative, accusative, or nominative case-marked. When the causee is dative or accusative case-marked, the whole sentence denotes a causative event although grammaticality of the sentence with an accusative case-marked causee is marginal. The sentence with a nominative case-marked causee represents a permissive event.

(3) a. Mary-ka ai-eykey pap-ul mek-key ha-ess-ta.
   M. -Nom child-Dat meal-Acc eat-Caus-Past-Dec
   'Mary caused (her/the) child to eat cooked rice.'

b. ?Mary-ka ai-lul pap-ul mek-key ha-ess-ta.
   M. -Nom child-Acc meal-Acc eat-Caus-Past-Dec
   'Mary caused (her/the) child to eat cooked rice.'

c. Mary-ka ai-ka pap-ul mek-key ha-ess-ta.
   M. -Nom child-Nom meal-Acc eat-Caus-Past-Dec
   'Mary allowed (her/the) child to eat cooked rice.'

We also observe the following contrasts in (3). (3b) and (3c) surface as a double accusative construction and a double nominative construction, respectively. The causee in either (3b) or (3c) can get a focus/contrast reading: 'Mary caused the CHILD, not any other person, to eat cooked rice.' A long pause can be inserted in between the accusative case-marked NPs in (3b), whereas the insertion of a long pause is possible in between the nominative case-marked NPs in (3c). In addition, we find the following semantic contrast between the V-key ha-constructions and the short form causatives. If a short form causative and the V-key ha-construction vie for the meaning of causation, then the former tends to bear a stronger meaning. For example, there are two verbs mek-i- and mek-key ha-competing for the meaning of 'cause to eat'; the former denotes a direct causation, whereas the latter carries a meaning of indirect causation. Compare (4a) with (4b). Mary in (4a) directly participates in the child's eating event, as its English translation indicates, whereas she is involved in the event only indirectly in (4b). Here the case alternations of the causee are disregarded because they are immaterial to the point.
   M. -Nom child-Dat meal-Acc eat-Caus-Past-Dec
   'Mary fed the child.'

   b. Mary-ka ai-eykey pap-ul mek-key ha-ess-ta.
   M. -Nom child-Dat meal-Acc eat-Caus-Past-Dec
   'Mary caused the child to eat cooked rice.'

If there is no short form causative corresponding to the V-key ha- construction, the latter tends to carry a meaning of coercive causation. Compare the sentences in (5) and (6).

   J. -Nom B. -Ace work-Caus-Past-Dec
   'John made Bob work.'

   a'. John-i Bob-i ilha-key ha-ess-ta.
   J. -Nom B. -Nom work-Caus-Past-Dec
   'John caused BOB, not any other person, to work.' or
   'John allowed Bob to work.'

   b. no corresponding short form causative

   J. -Nom B. -Oat book-Acc box-in put-Caus-Past-Dec
   'John made Bob put books in the box.'

   a'. John-i Bob-ul chayk-ul sangca-ey neh-key ha-ess-ta.
   J. -Nom B. -Dat book-Acc box-in put-Caus-Past-Dec
   'John made Bob put books in the box.'

   a''. John-i Bob-i chayk-ul sangca-ey neh-key ha-ess-ta.
   J. -Nom B. -Nom book-Acc box-in put-Caus-Past-Dec
   'John made BOB, not any other person, put books in the box.' or
   'John allowed Bob to put books in the box.'

   b. no corresponding short form causative

How can we account for these observations? Preliminary assumptions are: (i) The causee is primarily accusative case-marked when the embedded verb is intransitive; nominative case assigned to the causee is a secondary case-marking. (ii) The causee is primarily dative case-marked if the embedded verb is transitive; nominative or accusative causee is the one secondarily case-marked. (iii) Secondary case-marking occurs at the post-syntactic level, presumably at PF. (iv) Indirect causers are aspectual arguments. (v) The verb ha- in the V-key ha- constructions is a functor predicate which is unable to assign theta roles.

Let's consider whether the verb ha- in the V-key ha- constructions is a functor predicate or a lexically specified causative verb. If a sentence like (3a) is a periphrastic causative, then the matrix verb ha- should be either a lexically specified causative verb such as make in (7a) or a functor predicate like have in (8), where the added argument is interpreted as a causer or an experiencer. (7b) is ungrammatical because have requires that the embedded predicate be agentive. The data in (8) show that the 'causitive' interpretation of have is syntactically derived, not lexically specified. The data in (9) show that make takes an infeclional clause as its complement, whereas have takes a bare VP. The data in (10) show that make denotes two distinct and separate events, whereas have and its embedded predicate altogether denotes a single event.

(7) a. The warm sunshine made the plants grow.

   b. *The warm sunshine had the plants grow.
(8) a. Sherry had George water her plant. (causer)
   b. Sherry had George overwater her plant. (experiencer)
(9) a. ?? John has Bill be shelving books whenever the boss walks in.
   b. John makes Bill be shelving books whenever the boss walks in.
(10) a. John didn't make Mary cheat on the test, but she did it anyway.
   b. * John didn't have Mary cheat on the test, but she did it anyway.

According to Ritter & Rosen (1993a), distinctions between *make* and *have* in English periphrastic causatives are summarized as follows.

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<tr>
<th></th>
<th><em>make</em></th>
<th><em>have</em></th>
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<tr>
<td>thematic/semantic</td>
<td>lexically specified as 'cause'</td>
<td>thematically unspecified</td>
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<td>content</td>
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<tr>
<td>theta-role</td>
<td>impose thematic restrictions on its arguments</td>
<td>cannot assign theta-roles</td>
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<td>assignment</td>
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<td>type of a clausal</td>
<td>an inflectional projection</td>
<td>a bare VP</td>
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<td>complement</td>
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<td>restrictions on</td>
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<td>the embedded</td>
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<td>predicate</td>
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<td>number of events</td>
<td>denotes two distinct events</td>
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Some evidence shows that the syntactic pattern of the Korean verb *ha* is similar to that of the English verb *make*. First, the negation of the V-key *ha* construction seems to denote a two-event causation. Consider the data in (11). There are two types of negation in Korean: one is the *an(i)* V construction and the other is the V-ci *anh*-construction. *An(i)* is a negation adverb and *anh-* is an auxiliary verb, which is a contraction of *aniha- 'not do*. When the matrix verb *ha-* is negated, the causing event has not taken place; however, the core event may still occur. Thus, the addition of the 'but' clause to the negated complex predicate is grammatical as we see in (11c).

   B. -Nom J. -Acc Sunday-on work-Caus-Past-Dec
   'Bill made John work on Sunday.'
   B. -Nom J. -Acc Sunday-on work-Caus-Neg-Past-Dec
   'Bill didn't make John work on Sunday.'
   b'. Bill-i John-ul ilyoil-ey ilha-key an ha-ess-ta.
   B. -Nom J. -Acc Sunday-on work-not Caus-Past-Dec
   'Bill didn't make John work on Sunday.'
   c. Bill-i John-ul ilyoil-ey ilha-key ha-ci anh-ass-una,
   B. -Nom J. -Acc Sunday-on work-Caus-Nec-Past-but
   John-un kulehkey ha-ess-ta.
   J. -Top so do-Past-Dec
   'Bill did not make John work on Sunday, but John did so.'
A second piece of evidence comes from the fact that certain unaccusative verbs can be embedded under the verb ha- and that causative meaning of the resulting complex predicate may be possible. The following (a) sentences are the examples.

    J. -Nom B. -Acc/-Nom fall down-Caus-Pasr-Dec
    'John made Bill fall down.'

    J. -Nom B. -ACC/*-Nom make fall down-PAST-DEC
    'John made Bill fall down.'

(13) a. Ttattushan hayspyeth-i sikmwul-ul cal cala-key ha-n-ta.
    warm sunshine-Nom plants-Acc well grow-Caus-Pres-Dec
    'A warm sunshine makes plants grow well.'

b. no corresponding short form causative

However, the verb ha- in the V-key ha- construction does not take a finite clause as its complement and it allows only stage-level predicates to be embedded. The verb ha- in the V-key ha- construction denotes a partially independent event; it must rely on another predicate denoting a fully independent event. That's why an individual-level predicate cannot be embedded under the verb ha-. In this respect the Korean verb ha- is assumed to correspond to the English verb have.

Consider the contrasts in (14) and (15). (14b) is ungrammatical because the embedded clause is tensed. The data in (15) show that the matrix verb ha- takes only stage-level predicates as its complement.

    J. -Nom M. -Dat Chinese cuisine-Acc eat-Caus-Past-Dec
    'John made Mary eat Chinese cuisine.'

    J. -Nom M. -Dat Chinese cuisine-Acc eat-PAST-CAUS-PAST-DEC

    J. -Nom M. -Dat French know-Caus-Past-Dec
    'John made Mary know French.'

    J. -Nom M. -Dat French learn-Caus-Past-Dec
    'John made Mary learn French.'

Another piece of evidence showing that the Korean verb ha- is equivalent to the English verb have comes from the fact that the complex predicate does not denote causation unless the subject of the embedded clause takes volitional control of the action named by the embedded predicate. Consider the contrast between (16a) and (16b). The subject of the embedded clause in (16b) cannot take volitional control of the action named by the verb ip- 'to put on'; thus, the causative reading of the sentence is impossible. The external argument of the complex predicate ip-key ha- launches the core event but does not perform the action named by the embedded predicate; therefore, it is construed as an indirect causer of the core event.

    mother-Nom child-Dat clothes-Acc put on-Caus-Past-Dec
    'Mother caused the child to put on his/her clothes.'

b. * Ai-ka inhyeng-eykey os-ul ip-key ha-ess-ta.
    child-Nom doll-Dat clothes-Acc put on-Caus-Past-Dec
    * 'The child caused a doll to put on its clothes.'
We have observed the ambiguous characteristics of the Korean $V$-key $ha$- constructions along with some syntactic evidence. Such ambiguity might be attributed to the assumption that the process of causative formation in Korean is shifting from morphological causativization to periphrastic, where $key ha$- is then reanalyzed as an affix by some speakers. If this conjecture is true, we may further assume that the Korean $V$-key $ha$- construction is a third type of periphrastic causative, that is, an intermediate type between make-type causatives and have-type causatives. The third type is characterized as: (i) the external argument of the complex predicate is an aspectual argument; (ii) the addition of an extra argument to the argument array of a core predicate is done at the level of a-structure; (iii) argument structures are completely merged but event types are only partially merged.

Let's apply an Argument Structure account to the sentences in (3a), (5a), and (6a) where a two-place, one-place, or three-place predicate is included respectively. The LCS representations and a-structures of the predicates in those examples are given in (17) - (19).

(17) a. Mary-ka ai-eykey pap-ul mek-key ha-ess-ta.
   M. -Nom child-Dat meal-Acc eat-Caus-Past-Dec
   'Mary caused the child to eat cooked rice.'

   b. LCS of mek- 'eat': [ x EAT y ] / mek-

   c. A-structure of mek-

      ( x ( y ))

      mek-

      < E >

   A-structure of mek-key ha-

      ( a ( x ( y )))

      mek-

      ha-

      < E > < E >

   J. -Nom B. -Acc work-Caus-Past-Dec
   'John made Bob work.'

   b. LCS of ilha- 'work': [ x WORK ] / ilha-

   c. A-structure of ilha-

      ( x )

      ilha-

      < E >

   A-structure of ilha-key ha-

      ( a ( x ))

      ilha-

      ha-

      < E > < E >

   J. -Nom B. -Dat book-Acc box-in put-Caus-Past-Dec
   'John made Bob put books in the box.'

   b. LCS of neh- 'put': [ x CAUSE y GO BE AT z ] / neh-
Reanalysis of Korean Causatives

Representations in (c) of (17) - (19) imply the following. First, it is not Mary, but the child, who was eating in (17a); it is Bob who was working in (18a); and in (19a) it is Bob, not John, who was putting books in the box. The external argument of complex predicates is an indirect causer whose role is just to initiate the core event. Thus, the extra argument added to the argument structure of a core event is construed as an aspectual argument. Second, a causative reading is available for these examples because the subject argument of the embedded clause is able to take volitional control of the action. If the argument of the embedded clause is unable to take volitional control of the action, then the resulting complex predicate does not denote causation. The subject of an unaccusative verb cwuk- 'to die' is also assumed to be unable to take volitional control of the action named by the verb. Nevertheless, we have a sentence like (20). Does the complex predicate cwuk-key ha- denote a true causation? The answer to this question is 'No'. The causative meaning is available only in a specific context such as a film-making situation: 'Bill, the film director, caused John, the actor, to die (in a specific scene).'

(20) Bill-i John-ul cwuk-key ha-ess-ta.
B. -Nom J. -Ace die-Caus-Past-Dec 'Bill caused John to die.'

Or in a very specific context as in (21), the external argument of the resulting complex predicate may be construed as an experiencer. Bill in (21) lost his son in the Gulf War and regretted that he caused his son to participate in the Gulf War presumably by urging him to do so. Thus, we can hardly say that Bill is a causer of his son's dying.

B. -Top self-Norn son-Ace Gulf War-in die-Caus-Past-Dec-Comp sob-Past-Dec 'Bill sobbed that he made his son die in the Gulf War.'

Third, the V-key ha- construction is construed as one complex event which can be divided into two subevents, a causing event and a caused event. Although the causing event is represented as an independent event type, it is not utterly independent because the verb ha- cannot assign a theta role to its external argument. The interpretation of the external argument as a causer is determined according to the role it plays in the action named by the embedded predicate.

Now let's consider the syntax of the V-key ha- construction. It was pointed out that the verb ha- takes a non-finite clause as its complement (cf. example (12b)). Thus, it has the d-structure depicted in (22).
Case alternations of the causee can be accounted for as follows. If the embedded predicate has only one argument, then the argument (i.e., the causee) gets an accusative case from the embedded verb; therefore, the causee need not move to Spec of IP to get case. Even though the embedded predicate is intransitive, it can assign case when it maps onto d-structure like (22). Case assignment like this observes a condition of adjacency stated in Chomsky (1981: 94): 'Case is assigned by V or P to an adjacent NP, and if an adjacent NP has been assigned Case, to the next NP.' (On the strict adjacency requirement for case assignment, see Stowell 1981.) Furthermore, intransitive verbs in Korean frequently assign accusative case: e.g. sophwung-ul ka-ta 'go on a picnic' (sophwung-ul 'picnic-Acc', ka-ta 'go-Dec'). If the verb is a two-place predicate, NP2 (i.e., the causee) is dative case- and NP3, accusative case-assigned by the embedded verb. Although NP2 is m-commanded by the embedded verb, it gets dative case from the verb because NP3 is closer to the verb. When the causee is moved up to the Spec position of the embedded IP, it has a focus/contrast meaning. Nominative case (or accusative case according to some speakers) is then assigned to the moved NP via a default rule. However, such case assignment produces no case clash because it occurs at the postsyntactic level (i.e., at PF) for some pragmatic reasons whereas case assignment under government takes place at s-structure. If so, then one may raise the following question: Where does Nominative/Accusative case assigned to the moved NP come from? One plausible assumption is: When the causee is moved up to the Spec position of the embedded IP, which is a typical subject position, the causee is assigned nominative case by predication because the potential case assigner cannot assign case to the moved NP. The moved NP is assumed by some speakers to take accusative case from the matrix verb ha- via ECM. That
is why the causative construction with two accusative case-marked NPs is marginal.

To sum up, the verb *ha-* of the Korean *V-key ha-* construction is analyzed as kind of functor predicate which shows both characteristics of a lexically specified causative verb like *make* and those of the true functor predicate *have*. The functional element -*key* is analyzed as an infinitival marker whose function is to indicate that the embedded clause is infinitival. The external argument of the *V-key ha-* construction is analyzed as an aspectual argument, not a thematic one. It gets a CAUSER interpretation because the addition of *ha-* to another predicate has the effect of extending the event denoted by the predicate backward, that is, the effect of initiating the core event. Viewed from such a new perspective, the case alternation facts in the *V-key ha-* construction can be explained consistently. The *d*-structure of the construction was given in (22).

2.2 An Argument Structure account of short form causatives

In the preceding section, the Korean *V-key ha-* construction was analyzed as a process of 'Argument Addition' which takes place at the level of *a*-structure. In this section I will analyze Korean short form causatives in the same vein. I assume that diachronically short form causatives were formed at the level of *a*-structure by the process of 'Argument Addition'. Synchronically, however, most of them are reanalyzed as lexically specified causatives. Thus, the word formation process of short form causatives can be represented as in (23). Take the verb *mek-i-* 'to feed; cause to eat' as an example. Six allomorphs of the causative suffix are represented as an archimorpheme -*I* whose function is to add an extra argument to the argument structure of the base predicate. In this respect the archimorpheme -*I* corresponds to the verb *have* in English periphrastic causatives. When the word formation process occurs at the level of *a*-structure, not only argument structures but also event types are completely merged.

(23) Analysis of *mek-i-* as a morphological causative

(a) The LCS of *mek-* 'to eat': \[ x \ EAT \ y \] / *mek-*

(b) Argument structure of *mek-i-*

(c) *Mary-ka ai-eykey pap-ul mek-i-ess-ta.*

\[ \text{M. -Nom child-Dat rice-Acc eat-Caus-Past-Dec} \]

'Mary had the child eat cooked rice.'

Case alternations of short form causatives can be explained as follows. Let's look at the tree diagram in (24). If a short form causative is considered a morphological causative and its base predicate is transitive, then the causee gets dative case from the base predicate. Since the causee is m-commanded by the base verb, it alternatively gets dative case from the base verb; the innermost embedded NP is accusative case-assigned by the base predicate. Since the causative affix -*I* is a functor predicate, it cannot assign case to the external argument. The added argument (i.e., the causer) is moved up to the Spec of *IP* position to get nominative case from the tensed *I*. If the base predicate is intransitive, then the causee is accusative case-assigned by the base predicate because the former is m-commanded by the latter. Note that the causee is the only argument close to the base predicate.
If the short form causative is reanalyzed as a lexically specified causative verb as in (25), then NP1, i.e., the external argument of the predicate, is base-generated in the Spec of VP position. Look at the tree diagram in (26). The external argument moves up to the Spec of IP position to get nominative case from the tensed I. If the base verb is transitive, NP3 is accusative case-assigned by the base verb since it is closest to the predicate. NP2 is alternatively dative case-assigned. The d-structure representation in (26) is legitimate, because simplex predicates in Korean take at most two internal arguments. There is no short form causative based on the verb like cwu-'give' or neh- 'put into'.

(25) Reanalysis of the short form causative *mek-i-* as *meki-*

a. The LCS of *meki-* 'to feed': \[x \text{ CAUSE } y \text{ EAT } z]\) / *meki-*

b. Argument structure of *meki-*

\[
(x (y (z)))
\]

meki-

\[
< E >
\]

M. -Nom child-Dat rice-Acc feed-Past-Dec
'Mary fed the child.'
Also note that there are no nominative case-marked causees in short form causatives. (See the example (1a) repeated in (27) below.) This is predicted because there is no embedded [Spec, IP] for it to move even at PF.

    mom-Nom child-Dat/?-Accl*-Nom clothes-Acc put on-Caus-Past-Dec

'Mother put clothes on (her) child.' or 'Mother got (her) child dressed.'

3. Conclusion

Korean causative constructions have attracted researchers' attention because of their ambiguous characteristics. Different theories of grammar have been proposed to explain the ambiguity. In this paper, I have reanalyzed the Korean causative constructions from a new perspective, that is, under an Argument Structure account. I proposed that not only V-key ha-constructions but also short form causatives in Korean are formed by the process of 'Add Argument', which takes place at the level of a-structure.

The V-key ha-constructions are assumed to be periphrastic causatives and the verb ha-is regarded as kind of functor predicate which lacks semantic content. The V-key ha-construction was analyzed as a third type of periphrastic causative since it shows ambiguous syntactic patterns: some are similar to the English have periphrastic causative (e.g., taking only non-finite clause as its complement) and others correspond to the make periphrastic causative (e.g., the number of event types). I have proposed that in the third type of periphrastic causative constructions, argument structures of the two predicates are completely merged but their event types are only partially merged. With respect to the case alternations of the causee I have claimed that if the embedded predicate is transitive, the causee is structurally dative case-assigned by the embedded predicate. If the embedded predicate is intransitive, the causee is accusative case-assigned by the embedded verb. Either nominative case- or accusative case-marked causee is assumed to be assigned case postsyntactically. Short form causatives are regarded as morphological causatives which are synchronically reanalyzed as lexical causatives. I have shown that when they are analyzed within an Argument Structure account, case alternations of the causee can be explained.
consistently. Since we can explain the case alternation facts not only in periphrastic V-key ha-constructions but also in short form causatives in a uniform way without postulating an optimal rule like Chang & Cho's (1991) Head Movement or J.-S. Lee's (1992) ECM, the Argument Structure account is argued to be optimal.

NOTES

1 It is generally assumed that the conditions of case assignment are partly structural: case is assigned under government. The notion of government adopted here requires a relationship of 'm-command' rather than 'c-command'. The following definition of government is due to Chomsky (1986b: 8).

(i) Government
\[ \alpha \text{ governs } \beta \text{ iff } \alpha \text{ m-commands } \beta \text{ and no barrier intervenes between } \alpha \text{ and } \beta. \]

REFERENCES
