Suru, Ha(ta), and Verb Incorporation

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Insoo Kim(1993) **Suru, ha(ta), and verb incorporation**
Lnguistcs, vol 1. This paper pursues three major goals; i) The
element X which occurs right before *Ha/Suru* is not uniformly a
noun, ii) The θ-role assignment for the light verb is not exotic
(Grimshaw and Mester, 1988), iii) If we analyze *X+ha/suru*
Construction as a case of Verb Incorporation (VI), we can
account for the puzzle of the θ-role assignment without the
Argument Transfer Theory.

The current thesis defends the claims mentioned above by
observing similarities between the verbs which trigger VI and
the light verbs: i) Both don't allow a tensed X as their
complement, ii) *Ha/Suru* does not violate the Condition on VI
(Li, 1990), iii) *Ha/Suru* does not violate the Head Movement
Constraint (Li, 1990).

An immediate theoretical consequence is that my proposal
can also explain some related V-V Compounding processes such
as [Movement verb] + [Movement verb] as an instance of VI,
i.e., *kele(V)* + *kata(V)* 'walk and be somewhere'. In sum, I
claim a VI approach which suggests the element X preceding
'light' *ha/suru* is a verb.

1. Argument Transfer Theory

The term 'light verb' is used when we refer to a verb which subcategorizes
and case marks a direct object NP, without assigning a θ-role. Grimshaw and
Mester (1988) claim that the Japanese verb 'suru' is a light verb and all other
Japanese verbs are heavy and take only θ-opaque objects. The Korean verb
ha(-ta) shows a lot of similarities with the Japanese verb suru. As in the case

of _suru_, _ha_- can assign Case to its object.

(1) a. John-un   Bill-kwa   kyumsang-ul   ha-yess-ta.
              top   with   table-sharing-acc HA-past-decl.
    'John shared the table with Bill.'

   b. John-un Bill-kwa   kyumsang   ha-yess-ta.
              top   with   table-sharing HA-past-decl.
    'John shared the table with Bill.'

(2) a. John-wa   Bill-to   AISEKI-o   shita.
              top   with   table sharing-acc suru-past
    'John shared the table with Bill.'

   b. John-wa   Bill-to   AISEKI   shita.
              top   with   table sharing suru-past
    'John shared the table with Bill.'

Sentences in (1) represent the Korean examples and those in (2) are taken from Grimshaw and Mester(1988, 206) for Japanese. If we compare (1a) and (2a), both sentences contain an NP case-marked by the verb, _ha_- and _suru_ respectively. If we compare (1b) and (2b), the formerly case-marked NP appear without any case-marking.

   Grimshaw and Mester (1988) suggest three tests for θ-transparency/opacity as follows:

   i) Whereas θ-opaque NPs can freely be topicalized, θ-transparent NPs resist topicalization.
   ii) Only opaque NPs can relativize.
   iii) Only opaque NPs allow modification by elements like numerals.

i) Topicalization

(3) a. John-un   Mary-lul   salang-ul   ha-n-ta.
              top   acc   love-acc   HA-prs-decl
    'John loves Mary.'

   b. Mary-nun   John-i   salang-ul   ha-n-ta.
              top   nom   love-acc   HA-prs-decl

c. *Salang-un   John-i   Mary-lul ha-n-ta.
   love-top   nom   acc HA-prs-decl.

As we can see in (3), either subject NP or the first object NP can be topicalized in Korean, but the second object N(P) cannot be topicalized as G & M predicted.

ii) Relativization

(4) a. John-i [[emeni-uy   son-ul   capko-iss-nun] Mary-lul] [salang-ul]
        nom mother-gen hand-acc hold-be-comp   acc love-acc
     hanta.
     HA-prs
     'John loves Mary who holds (her) mother's hand.'

    b. * John-i Mary-lul   [[kkut-i eps-nun] salang-ul] hanta.
            nom   acc   end-nom no-comp love-acc HA-prs
       'John loves Mary with a love that has no end.'

iii) Modification by numerals

(5) a. John-i   [se-myung-uy Mary-lul]   salang-ul ha-yess-ta.
        nom three-person-gen   acc   love-acc HA-past-decl
     'John loved three (different) Marys.'

    b. *John-i   Mary-lul [se-pun-uy   salang-ul]   ha-yess-ta.
          nom   acc three-times-gen   love-acc   HA-past-decl
     'John loved Mary three times.'

As we can see in (5a), the first object NP can be modified by numerals whereas the second N(P) cannot be modified as we can see in (5b). Nonetheless, the basic syntax of opaque and transparent NPs is identical.

    i) Both can contain a sequence of prenominal adjectives and other
       modifiers.
    ii) Both reorder within S.
    iii) Case marking is identical: Both NPs receive accusative Case.
    iv) Both allow arguments of the Noun to appear within the NP.

Let's take some examples of the characteristics illustrated above.

i) Both can take prenominal modifiers and adjectives.

(6) a. John-i Mary-lul [alumtawun   salang-ul]   ha-n-ta.
        nom   acc beautiful   love-acc   HA-prs
    'John is in (beautiful) love with Mary.'

   b. John-i   [alumtawun Mary-lul]   salang-ul ha-n-ta.
        nom   beautiful   acc   love-acc HA-prs
    'John loves Mary who is beautiful.'

ii) Both allow reordering within S.

(7) a. Mary-lul   John-i   salang-ul hanta.
        acc   nom love-acc   HA-prs
    'John loves Mary.'

   b. salang-ul   John-i   Mary-lul hanta.
       love-acc   nom   acc HA-prs

   c. *Mary-lul   salang-ul John-i   hanta.
        acc   love-acc   nom   HA-prs

   d. Salang-ul   hanta,   John-i   Mary-lul
      Love-acc   HA-prs   nom   acc

   e. Salang-ul   hanta,   Mary-lul John-i
      Love-acc   HA-prs   acc   nom

As we can see in (7b), the second N(P) cannot move into the position
between the subject NP and the first object NP. (7c) represents that the
subject NP moves into the second object N(P) position, and the first object
NP moves out to the sentence initial position. As indicated, this scrambling
is illegal. One interesting thing to see here is represented in (7d) and (7e). As
long as the second N(P) and *hanta* move together, there is no problem. (8)
and (9) show us some additional examples in this category.

(8) a. John-i   [[nuktay-ka naonta]-nun poto-lul] iz-ess-ta.
        nom   wolf-nom come   Rel   report-acc forget-past-decl.

'John had forgotten the report that the wolf was coming.'

b. [[nuktay-ka naonta]-nun poto-lul] John-i   iz-yess-ta.
   wolf-nom come Rel. report-acc   nom forget-past-decl.
'John had forgotten the report that the wolf was coming.'

(9) a. John-i [nuktay-ka naonta-ko]   poto-lul   ha-yess-ta.
       nom wolf-nom come-comp report-acc HA-past-decl.
   'John reported that the wolf was coming.'

   b. poto-nun [nuktay-ka naonta-ko] John-i   ha-yess-ta.
      report-top wolf-nom come - comp   nom HA-past-decl.
   'John reported that the wolf was coming.'

2. Posing A Problem

The defective verb -Hata shows good productivity in derivation. It can take almost any noun and make the complex form of verb. Thus, the following are possible in Korean:

(10) Noun   -Hata   Complex Verb
      sarang 'love'   -hata 'do'   saranghata 'to love'
      cungo 'hatred'   -hata 'do'   cungohata 'to hate'
      cecwu 'curse'   -hata 'do'   cucwuhata 'to curse'
      kyoyook 'education'   -hata 'do'   kyoyookhata 'educate'

First, -hata can take any noun in Korean, i.e., -Hata does not distinguish original Korean nouns from Sino-Korean nouns, which is a cover-term for words derived from Chinese. Second, this word formation process is very productive and also natural. Third, this process is not limited to Noun-Hata structure. It can also take some verb stems and make a complex verb. Here are some examples of Verb Stem+Hata construction:

(11) Verb Stem   -Hata   Complex Verb
      co-a 'like'   -hata 'do'   coahata 'like'
      sile 'dislike'   -hata 'do'   silehata 'dislike'
      musewe 'afraid'   -hata 'do'   musewehata 'be afraid of'

One interesting phenomenon with these complex verbs is what we call Double Object Construction (or Double Accusative). For example, we can

116 Insoo Kim

produce the following sentences.

(12) a. John-i   Mary-lul   saranghanta.
          -nom   -acc   love, prs
       'John loves Mary.'

    b. John-i   Mary-lul   sarang-ul hanta.
          -nom   acc   acc do, prs
       'John loves Mary'

In (12)a, we can see a complex verb, saranghanta, while a noun incorporated into the complex verb in (12)a takes the Object/accusative case marker in (12)b. One could argue that these two sentences are base-generated and that there is no relation in terms of derivation. However, this claim should answer the following question; Why the second NP in Object position cannot take a θ-role like most other thematic NPs. Notice that -Hata cannot assign a θ-role to its subject or object.

     In order to avoid the confusion, let's consider two types of -Hata in Korean. First, Ha(ta) can be a main verb. Just like many other transitive verbs in Korean, it can select subject and object.

(13) a. John-i   [Seoul-lo-uy yuhayng-ul]   ha-ess-ta.
           nom   to-gen trip-acc   HA-past-decl
       'John made a trip to Seoul.'

    b. *kicha-ka   [Seoul-lo-uy yuhayng-ul]   ha-ess-ta.
        train-nom   to-gen   trip-acc   HA-past-decl
       '(The) train made a trip to Seoul.'

When Ha(ta) is used as a light verb, in the same context as Grimshaw and Mester(1988), Hata has nothing to do with the θ-role of the subject.

(14) a. John-i   Seoul-e   yunchak   ha-ess-ta.
          nom   to   late-arrival   HA-past-decl
       'John arrived late at Seoul.'

    b. Kicha-ka   Seoul-e   yunchak   ha-ess-ta.
       train-nom   to   late-arrival   HA-past-decl
       'The train arrived late at Seoul.'

(14a) uses a human subject but the subject of (14b) is a 'train'. However, both sentences are perfectly grammatical in Korean. G & M also distinguish the two types of -Ha(ta): They called it a θ-opaque verb when Ha(ta) is used as in the case of (13) and θ-transparent verb when it is used as in the case of (14). One more interesting thing to notice is there is no constraints on the number and type of arguments that the θ-transparent Ha(ta) can take.

(15) a. John-un   Mary-eke   yayki-lul ha-n-ta.
             top   to   talk-acc   HA-prs-decl
        'John talked to Mary.'

     b. John-un   Seoul-esu   chulpal-ul   ha-ess-ta.
             top   from   departure-acc HA-past-decl
        'John departed from Seoul.'

     c. John-i   maulsalamtul-eke [ili-ka   o-n-ta-ko] kyungko-lul ha-ess-ta.
             nom   villagers-to   wolf-nom come-comp warn-acc HA-past-decl
        'John warned the villagers that the wolf was coming.'

Since Ha(ta) has no constraints on the number and type of arguments, we need to find a way to assign the θ-role(s) of the arguments of the light verb Ha(ta).

3. Two Previous Approaches to the Problem

It is interesting to see the fact that the θ-role assignment of this type of verb depends upon the element which occurs right before the verb Ha(ta). Let's examine the sentences given in (15) again:

(15) a. John-un   Mary-eke yayki-lul   ha-n-ta.
             top   to talk-acc   HA-prs-decl
        'John talked to Mary.'

     b. John-un   Seoul-esu chulpal-ul   ha-ess-ta.
             top   from depart-acc   HA-past-decl
        'John departed from Seoul.'

     c. John-i   maulsalamtul-eke [ili-ka o-n-ta-ko] kyungko-lul ha-ess-ta.
             nom   villagers-to   wolf-nom come-comp warn-acc HA-past-decl
        'John warned the villagers that the wolf was coming.'

If the element occurring before Ha(ta) is <u>Yayki</u> 'talk' as in (15a), the subject should be an AGENT and the argument of verb becomes, usually, in the PP form which is another human noun. If the element is <u>Chulpal</u> 'depart' as in (15b), the subject should be something movable, either voluntarily or involuntarily, and the object represents the location, either source or goal. In this case, a sentence can involve all the θ-roles, i.e., AGENT-SOURCE-GOAL-X (the element)-Ha(ta). If X is <u>Kyungko</u> 'warn' as in (15c), a sentence has a θ-chain like AGENT-GOAL-THEME-THEME (the X)-Ha (ta).

There are two different approaches to the problem. One is **Argument Transfer Analysis** as in Grimshaw and Mester (1988). The crucial feature of the theory is that <u>Suru</u> subcategorizes and Case-marks a direct object NP, without assigning a θ-role. The <u>Suru</u> construction is properly understood as a case of Argument Transfer, where both <u>Suru</u> and the head of object NP act as θ-markers and have their own θ-marking domain, even though the entire θ-marking capacity resides ultimately in the Noun. They claim that the process of Argument Transfer respects hierarchical organization of argument structure. According to them, the argument structure of <u>shoomei</u> is as follows.

(16)   shoomei (Agent/Source   (Goal$_j$,   (Theme$_k$)

Following Stowell(1981), they assume that θ-marking is assignment of an index from a position in an argument structure to the corresponding phrase. They also assume a suppressed argument, an argument position with no index to assign. Thus, the index of AGENT/SOURCE is not specified in (16). The hierarchical organization and the top-down fashion in transfer cooperate to restrict the selection of arguments. For example, since THEME is the most-deeply located argument in the structure, it will be transferred after GOAL is transferred. If THEME is transferred before GOAL transfer, then an ungrammatical sentence will be produced.

Some problems with this approach, however, are observable. First, G & M's solution complicates the Lexicon as Han(1988) points out. Since they assume that any number of argument can be transferred, one could think of the following three different cases in the organization of the Lexicon.

(17) a. kyungko (Agent,   Goal, Theme)
      b. kyungko (Theme)
      c. kyungko (   )

(18) a. ha-   (   ) <acc>
      b. ha-   (Agent,   Goal) <acc>
      c. ha-   (Agent,   Goal, Theme)   <acc>

(17a) is the lexical entry for kyungko when no transfer takes place, (17b) is the one when AGENT and GOAL are transferred to ha-, and (17c) is the case when all the arguments are transferred to ha-. To prevent the projection principle violation, it is necessary to stipulate that (17a,b,c) should be combined with (18a,b,c) respectively. This amounts to saying that there are three kinds of kyungko in the Lexicon.

Second, two of the three generalizations are not consonant with the Korean ha-construction. Let's look at the generalizations first.

(i) At least one argument apart from subject must be outside the NP.
(ii) The subject argument must always be outside the NP.
(iii) For the Nouns that take a Theme and a Goal, if the Theme argument is realized outside NP, the Goal must also be realized outside NP.

The Korean light verb ha- observes (ii), but generalizations (i) and (iii) don't fit for Korean. For example, the following two sentences are perfectly grammatical in Korean even though the corresponding Japanese sentences are ungrammatical.

(19) John-un [pucang-ulo-uy   sungcin-ul]   ha-n-ta.
             top section chief-to-gen promotion-acc   HA-prs-decl
       'John obtained promotion to section chief.'

According to generalization (i), (19) should be ungrammatical since it violates the θ-criterion. Generalization (iii) also is problematic with respect to the Korean ha-. Let's compare the two sentences taken from two different languages.

(20) a. *John-ga   [ookami-ga kuru-to]   [murabito-ni keikoku]-o shita.
         nom   wolf-nom come-comp   villagers-to warn   acc suru

   b. John-i [ili-ka onta-ko] [maulsalam-eke kyungko]-lul   hayessta.
       nom wolf-nom come-comp villager-to   warn-acc   HA-past-decl
   'John warned the villagers that the wolf was coming.'

The Japanese version in (20a) is ruled out, but the Korean version in (20b) is ruled in.

Third, Korean does not show the Double Accusative Constraint which is active in Japanese. For example, (21a) is ungrammatical in Japanese because of the constraint whereas (21b) is a good sentence in Korean.

(21) a. * Sono hookokusho-wa Mary-ni   [kaiketsu-no   hookoo]-o
         that report-top   -to   solution-gen direction-acc
      shisa-o   shiteiru.
      suggestion-acc   suru
   'That report suggests to Mary the direction of the solution.'

   b. Ku poto-nun Mary-eke   [haykyul-uy panghyang]-ul
      that report -top   to   solution-gen direction-acc
   sisa-lul   hanta
   suggestion-acc   HA-prs
   'That report suggests to Mary the direction of the solution.'

The second one is **Verb Raising Analysis** as in Han (1988). This approach assumes that N+suru compunds as well as Ns are all contained in the lexicon. In other words, keikokusuru 'to warn' is a lexical entry of a verb, whereas keikoku 'warn' is a lexical entry of a noun. Following Chomsky (1986), Han assume Verb Raising which moves either suru or keikokusuru to the Infl-node.
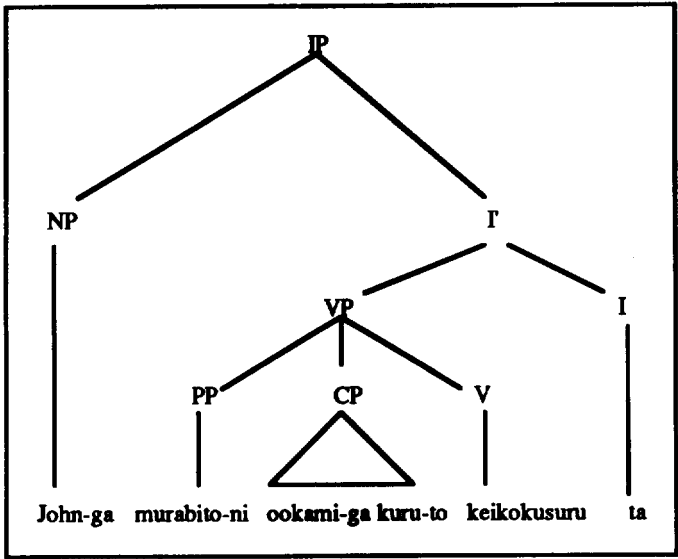
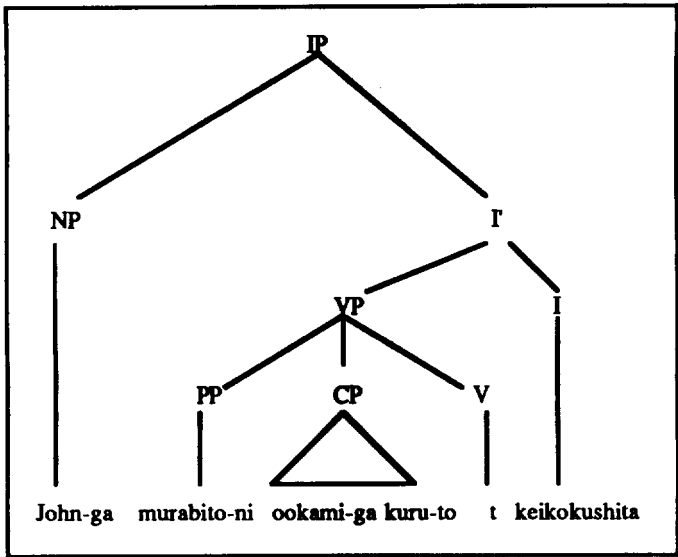Diagram 1: D-structure tree of *suru* verb

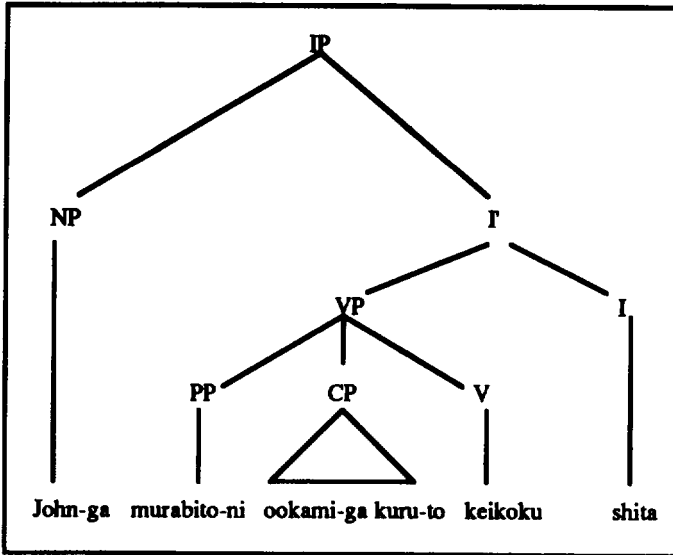Diagram 2: S-structure after V-raising

Diagram 3: S-structure after suru-raising

Han assumes that Verb Raising applies in the sense of Chomsky (1986). Diagram 1 represents the D-structure tree of the suru-complex. If the verb complex keikokusuru moves to the I-node, the result will be like represented in Diagram 2. If the only suru part raises to the Infl-node, then the structure in Diagram 3 happens. One of the problems in this approach is that the Raising of suru can make a noun to appear under the V node. Han assumes that suru is responsible for the accusative case of keikoku. He explains that since keikoku without suru is a noun, it can bear the accusative Case assigned by suru. Another problem with this approach is there is no clear explanation about the θ-role assignment. He seems to suggest that keikoku, a Noun, assigns Goal and Theme and keikokusuru, a complex verb, assigns AGENT/SOURCE, GOAL and THEME. However, since he assumes one D-structure for thw two sentences, there is no reason why we don't assign a θ-role of Agent by the noun keikoku.

4. Towards a Solution

4. 1. Alternative Analysis on the category X

Park(1989) claims that X, which appears right before ha-, is not a noun but a verb responsible for both θ-marking and case-assignment. This claim interests us in that it can provide another angle of view on the ha-complex predicate. He also argues that ha- in an incorporated verb is simply an auxiliary verb. This claim is based on the observations in the following:

i) The Chinese borrowed X has internal structure. Each syllable contains independent meaning, even though it is not used as an independent word in Korean.
ii) Crosslinguistically, the main verb meaning 'to do' or 'to make' often can be used as an auxiliary verb: English do, Japanese suru and Persian karda.
iii) Causative morpheme attaches to 'X' not to 'ha-'
iv) The Passive morpheme attaches to 'X' not to 'ha-'
v) When we use a borrowed word from English, the verb form is used.

Example (22) shows us the insight on the category X.

(22) a. John-i   tayhakwon-e   APPLY-ha-ass-ta.
            nom   graduate school-to   -HA-past-decl
        'John applied to a graduate school.'

    b. *John-i   tayhakwon-e   APLLICATION-ha-ass-ta.
            nom   graduate school-to   -HA-past-decl
        'John applied to a graduate school.'

As Park observed, a verb form fits into the X-position, but a noun form does not. This is an indirect test for the category of X.

4.2. Li's VI-Analysis and Ha(-ta) Construction

Li (1990) proposes an interesting claim that some verbs are subcategorized for VP. For example, English causative verb make can take a bare VP as its complement. Li gives us the following examples:

(23) a. Chris made Liz laugh.
      b. *Chris made Liz to laugh.
      c. *Chris made (that) Liz laugh.

The examples show that make cannot take a finite clause as in (23c), not
even an infinitive with to as in (23b). In other words, the embedded verb
must be in its bare form as in (23a). Thus, (23a) can be represented as follow:

(24)
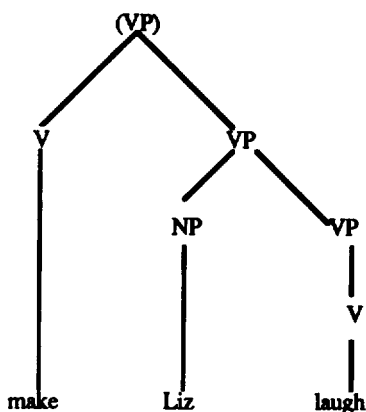
In (24), the complement of the verb make is a VP which can be interpreted as
a "small clause". Since no projection of INFL is involved in this structure, it
can be expected that neither an infinitival nor a finite clause is allowed. Based
on this observation across the VI(Verb Incorporation) languages, she states
the following generalization:

(25)   Condition on Verb Incorporation
       A necessary condition on VI is that the matrix verb must be able   to take
       a bare VP as complement.

The generalization in (25) implies that a matrix verb that takes a CP or an IP
as complement will never trigger VI. This is exactly what we expected from
the Head Movement Contraint which is defined as follow:

(26)　Head Movement Constraint (Li, 1990:8)
　　　An X° may only move into the Y° that selects the maximal projection of X°.

The Head Movement Constraint in (26) allows a head-movement chain like (27a), but doesn't allow a head-movement chain like (27b).

(27)　a. (V, V)
　　　b. (V, C, I, V)

If the verb selects CP as its complement, the head-movement chain like (27b) is necessary. If the verb selects IP as its complement, C will be deleted from the head-movement chain in (27b) but it still violates the Head Movement Constraint.

(28)

John-i maulsaramtul-eke　ili-ka onta-ko kyungko ha-ess-ta
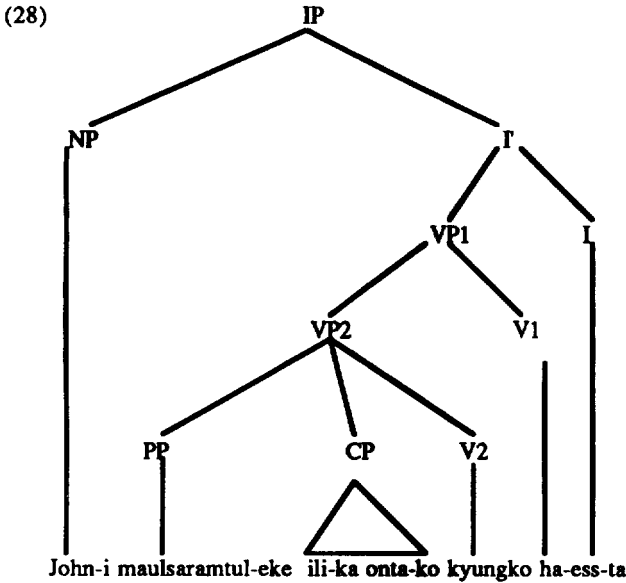
In many ways, the verb which trigger Verb Incorporation and the Korean verb Ha(-ta) are similar. First, both don't allow tensed X as its complement.
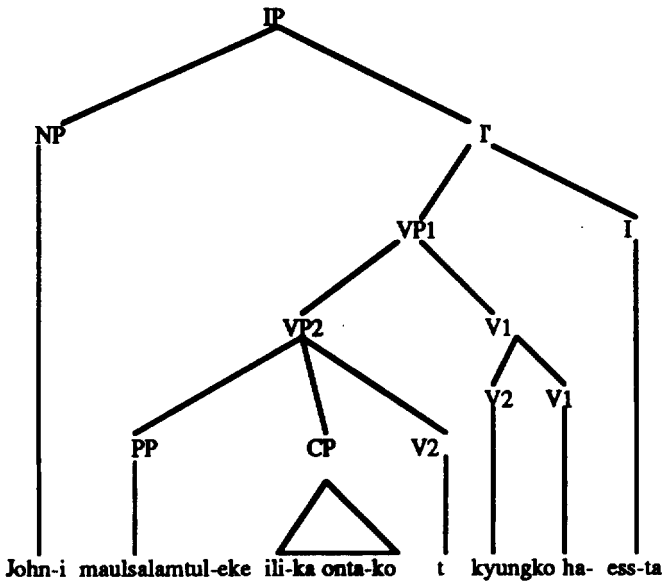
Second, Ha-construction will not violate the Condition on VI which is stated in (25) (Li, 1990:30). Third, Ha-contruction will not violate the Head Movement Constraint stated in (26). Further more, if we can assume VI-Analysis, we will be able to solve most of the problems that we iterated during the course of our discussion. First, we will propose a structural representation which is depicted in (28) for Ha-construction in Korean. We will also assume that (28) represents the D-structure of the sentences given in (29).

(29) a. John-i maulsalamtul-eke [ili-ka onta-ko]   kyungko-lul   ha-yess-ta.
            nom villagers-to   [wolf-nom come-comp] warn-acc   HA-past
    'John warned the villagers that the wolf was coming.'

    b. John-i maulsalamtul-eke [ili-ka onta-ko]   kyungko hayess-ta.
            nom villagers-to   [wolf-nom come-comp] warn-HA-past
    'John warned the villagers that the wolf was coming.'

If there is no VI occurred to the D-structure given in (28), we will get the S-structure like (29a). First, we can notice that the bare VP which is the complement of Ha carries the accussative Case. It is very natural that a verb *ha-* assigns accussative Case to its complement. Second, we will simply accept the idea proposed by Grimshaw and Mester(1988) which claims that the θ-role of the subject of V2, kyungko. is suppressed because both verbs are occurring within the same S. Third, the θ-role assignment to PP and CP became an ordinary fashion in which a verb assigns the θ-roles of its internal arguments. We would like to claim that this is the main advantage of this proposal.

    If the VI occurs, the V_2, kyungko. will move to attach to V_1, ha-, which makes a head-movement chain: (V, V). This process is represented in the following:

I

(30)


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                          IP
                         /  \
                        /    \
                      NP      I'
                       |      / \
                       |     /   \
                       |   VP1    I
                       |   / \     |
                       | VP2  V1   |
                       | /|\  / \   |
                       |/ | \ V2 V1 |
                      PP  CP  V2  |  |  |
                       |  /\   |  |  |  |
                       | /  \  |  |  |  |
   John-i maulsalamtul-eke ili-ka onta-ko   t   kyungko ha-  ess-ta
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The outcome of VI depicted in (30) will produce the S-structure given in (29b). Since θ-roles of internal arguments of V2 are already assigned at D-structure, we don't need to worry about it any more.

How can we treat the variant orderings that we discussed previously? I argue that they are due to the famous syntactic scrambling in Korean and Japanese, i.e., Scrambling in Korean allows the reordering of the NP's and CP's. Thus, the reordered version of (29a) and (29b) is the following.

(31) a. John-i [ili-ka onta-ko]   maulsalamtul-eke kyungkohayess-ta.
         nom wolf-nom come-comp   villager-to   warned
      'John warned the villagers that the wolf was coming.'

     b. John-i [ili-ka onta-ko]   [maulsalam-eke kyungko]-lul   hayessta.
         nom wolf-nom come-comp villager-to   warn - acc   HA-past
      'John warned the villagers that the wolf was coming.'

The sentence (31a) can be produced by applying the Scrambling after VI

while the sentence (31b) can be produced by Scrambling before VI. Since both of the sentences are grammatical, there must be a way to produce these sentences. However, Grimshaw and Mester (1988) don't allow these scrambled sentences.

Now, let's consider the property of the verb Ha(-ta) in Korean. I would like to propose the unified theory of the θ-role assignment. First, Ha- will have the θ-grid as follows:

(32)   Ha- : (, Theme)

The grid is exactly the same as ha-, the main verb, except for the fact that there is no θ-role requirement for the subject. Second, the auxiliary-like properties of ha- are largely due to VI. We can see many other cases where a verb which behaves as a main verb may function like an auxiliary verb. For example, movement verbs are easily combined to become a large verb-complex. In this case, the second verbs behave like an auxiliary verb.

5. Conclusion and Its Theoretical Implications

The current study has pursued three major goals; i) To present arguments that the element X which occurs right before Ha/Suru is not a noun, ii) To claim that the θ-role assignment for the light verbs is not so exotic as has been assumed by Grimshaw and Mester (1988, G & M), iii) If X+ha/suru Construction is analyzed as an instance of Verb Incorporation (VI), the puzzle related to the θ-role assignment can be explained without assuming the fancy Argument Transfer Theory (ATT).

Two major works on the issue have been rejected. First, G & M observe the two types of suru in Japanese and propose an ATT wherein a noun assigns θ-roles to its argument(s). A crucial point of G & M's approach is the assumption that the light verb suru has an intrinsic property of assigning accusative Case to the X preceding suru, while it lacks the θ-role assigning power, which violates Burzio's Generalization. They assume the element X is a noun, since X carries an accusative Case in some instances, i.e., when suru is heavy in our terms. This approach, however, has two serious problems; i)

Their theory complicates the Lexicon as Han (1988) points out; ii) They try to explain both light suru and heavy suru within the same framework. Second, pointing out that G & M do not distinguish the two instances of ha/suru, Ahn (1990) argues that the element X is a noun (Miyagawa 1987), claiming that it actually is an NP. He further argues that the process of making the X-ha/suru complex is a sort of Syntactic Incorporation (SI). Yet, his reasons for doing so are not explicit, leaving one to conclude that he has done so simply because the X is assumed to be an NP. First, Ahn argues X is an NP because some function markers such as delimiters are allowed inside the verb complex (VC). Park (1989:324) points out, however, that the verb stems also allow the attachment of the function markers. Second, it is a verb form rather than a noun form that ha/suru requires to make a VC, as (22) suggests:
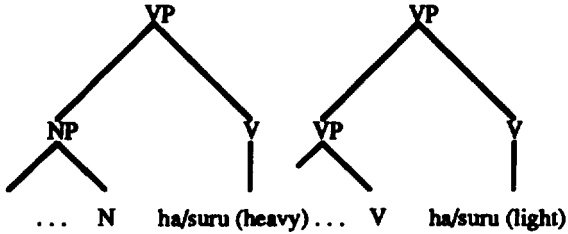
(22) a. John-ka   tayhakwen-ey   APPLY-ha-ass-ta.
          nom   grad. school-to   APPLY-do-past-decl.
     'John applied to graduate school.'

   b. *John-ka tayhakwen-ey   APPLICATION-ha-ass-ta.

Third, if X is monosyllabic, it may not be case-marked, whereas, if X is multisyllabic, it can be. The difference between the two is not simply the number of syllables involved. The monosyllabic X is a verb stem while the multisyllabic X has an internal structure and can appear as a noun. It is obvious that the X in the light VC is a verb.

    To address these problems, in this proposal, I have proposed three things: i) The difference between heavy and light ha/suru lies on the subcategorization frame in that the heavy ha/suru requires [NP,VP], whereas the light one requires [VP,VP] as the following trees show:

(33)

```
        VP                        VP
       /  \                      /  \
      /    \                    /    \
    NP      V               VP        V
   /  \     |              /  \       |
  /    \    |             /    \      |
 ... N   ha/suru (heavy) ... V   ha/suru (light)
```

Subsequently, it is obvious that the X appearing with light ha/suru is not a noun but a verb, ii) When ha/suru is heavy, the X is responsible for both θ-marking and Case assignment, but when ha/suru is light, the X-ha/suru complex is responsible for these. Argument transfer occurs only when ha/suru is heavy. iii) The operation for making the X-ha/suru complex is a process of VI rather than SI (Li, 1990). I have defended this hypothesis by observing some similarities between the verbs which trigger VI and, what G & M call, the light verbs: i) Both don't allow a tensed X as their complement, ii) Ha/Suru does not violate the Condition on VI (Li, 1990:30), iii) Ha/Suru does not violate the Head Movement Constraint (HMC) (Li (1990).

With current analysis, I generalize that the Ha/Suru Construction is an instance of VI which observes the HMC. An immediate consequence of my analysis is that V-V Compound-ing processes such as [Movement verb] + [Movement verb] can also be explained as an instance of VI, i.e., kele(V) + kata(V) 'walk and be somewhere'. In sum, I claim a VI approach which suggests the element X preceding light ha/suru is a verb.

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