Verb Raising, Object Shift, and Word Order[*]

Sun-Woong Kim

There are two main approaches to the question: How are the various surface linear orders (precedence) derived in the most plausible and economical way? One is the Parameter Approach (Chomsky 1991, 1993, 1994, 1995), which implies that languages are partly defined by the head parameter that sets the positions of the head of a phrase either initial or final. In this approach, languages are divided into two types according to the position of the head. English, for example, is head-initial and Korean is head-final. The other is the Universal Base Hypothesis (Kayne 1994 and Zwart 1997). This hypothesizes that "since structure is all languages essentially the same, so is word order" (Zwart 1997 : 249). This is the hypothesis that will be pursed in this paper. This paper is an attempt to show that the basic word order across languages is SOV, contrary to a recent claim by Zwart (1997). He claims that the universal basic word order is SVO, or more generally, head-initial. As a consequence, he allegedly claims that the head initial/head-final parameter is superfluous and it is a theoretical consequence of two movement operations like object shift and verb raising. However, the tenability of a version of Universal Base Hypothesis in the domain of rigid SOV languages like Korean/Japanese has never been investigated or testified before him. In this paper, it will be argued that both English, which has overt object shift and verb raising (contra Chomsky 1995) and Korean, which has no verb raising (contra Koizumi 1995), have SOV as the basic word order.

1. Introduction

This paper is an attempt to show that the basic word order across languages is SOV, contrary to a recent claim by Zwart (1997). Based on

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arguments with regard to some Germanic languages, including English, Zwart (1997) claims that the order of elements in a linear string is a function of the hierarchical relationships among the elements in a structure. In this regard, he adopts the so-called Universal Base Hypothesis (Kayne 1994) and concludes that the universal basic word order is SVO or more generally head-initial. As a consequence, he allegedly claims that the head-initial/head-final parameter is superfluous and it is a theoretical consequence of two movement operations, such as object shift and verb raising.

However, as Zwart (1997:263) himself points out, the tenability of a version of the Universal Base Hypothesis in the domain of rigid SOV languages like Korean and Japanese has never been investigated or testified before him. Quite recently, however, Fukui and Takano (1998) argue against SVO as the universal base word order, as hypothesized in Kayne (1994), and claim that SOV rather than SVO is basic.

In this paper, it will be argued that both English, which has overt object shift and verb raising (contra Chomsky 1995), and Korean, which has no verb raising (contra Koizumi 1995), have SOV as the basic word order. Section 2 introduces Zwart's (1997) version of the Universal Base Hypothesis and critically reviews his proposals. Also, evidence in favor of object shift in English will be provided. Section 3 advocates Fukui and Takano's (1996) claim. Evidence will be given to argue that there is no verb raising in Korean. Evidence in favor of overt object shift and verb raising in English will also be provided. Section 4 summarizes the conclusions of this paper.

2. Basic Word Order

2.1. Universal Base Hypothesis

Assuming that the specifier comes at either edge of a sequence, there may be four typological combinations of possible word order: SVO, SOV, VOS, and OVS. Putting aside the problem of how hierarchy can be reflected on linear order (Kayne 1994), there are two main approaches to the question, "How are the various surface linear order (precedence) derived in the most plausible and economic way?" One is the Parameter Approach (Chomsky 1991, 1993, 1994, 1995), which implies that languages are partly defined by a head parameter that sets the position of the head of a phrase

as either initial or final. In this approach, languages are divided into two types according to the position of the head. English, for example, is head-initial and Korean is head-final. The other is the Universal Base Hypothesis (Kayne 1994 and Zwart 1997). This hypothesizes that "the order of elements in a linear string is a function of the hierarchical relations among the elements in a structure. In other words, since structure is in all languages essentially the same, so is word order" (Zwart 1997 : 249). This is the hypothesis that will be pursued in this paper.

2.2. Zwart (1997)

Zwart (1997) suggests a grouping of four types of Germanic languages as follows:

(1) a. West Germanic
  i. English
  ii. Dutch, Frisian, German (Continental West Germanic)
 b. North Germanic
  i. Norwegian, Danish, Swedish (Mainland Scandinavian)
  ii. Icelandic

These four types of languages show mutually different behavior with respect to object shift and verb movement to Agrs (or C for verb second word order). Zwart (1997 : 255) summarizes the surface word order of the four types of Germanic languages as follows:

(2)

	word order	object shift	verb second
English	SVO	−	−
Dutch−main	SVO	+	+
−embedded	SOV	+	−
Swedish−main	SVO	−	+
−embedded	SVO	−	−
Icelandic	SVO	+	+

Based on these observations, he draws the following generalization about the surface word order of languages as follows:

(3) (= his [27])
 a. If a sentence has the verb second property, its word order is VO.

b. If a sentence does not have verb second property, then

   i . if it has the object shift property, its word order is OV, and

   ii. if it does not have the object shift property, its word order is VO.

Since English shows neither the verb second property (as in (4)) nor the object shift property (as in (5)), according to him, the surface word order would be SVO.

(4) a. John probably read the book. (main clause)

   b. ⋯ that John probably read the book. (embedded clause)

(5) a. *John read yesterday the book.

   b. *John the book yesterday read.

"(4) shows that in English the object and the verb cannot be separated either by the rightward movement of the object or by the leftward movement of the object." (Zwart 1997 : 253)

2.3. Object Shift in English

Putting aside discussion of other languages besides English, Zwart's (1997) generalizations about English do not seem to be quite right, since there are tons of evidences to support object shift and verb raising in English (contra Chomsky 1995). In fact, if the basic word order is SVO, the surface word order SVO of English can be derived either by no application of any movement at all, or by the application of both verb raising and object shift as shown in (6):

(6) a. SVO → SVO

   b. SVO → S V O

The most convincing argument in favor of object shift in English (and verb raising as well) comes from Lasnik's (1995a) work of concerning Pseudo-gapping. Lasnik (1995a) convincingly argues that the following Pseudo-gapping examples render further support to the view that objects and verbs move overtly in English.

(7) a. John will select me and Bill will you.

b. Bill ate the peaches and Harry did the grapes.

The ellipsis phenomenon in (7) shows some traits of Gapping and VP-ellipsis at the same time: there is a right side remnant (Gapping) and there is a finite auxiliary (VP-ellipsis). Jayaseelan (1990), who appealed to Heavy NP Shift analysis, proposed a hitherto accepted analysis of Pseudogapping construction. For example, Jayaseelan (1990) analyzes (7a) as in (8).

(8) John will [$_{VP}$[$_{VP}$ select t$_i$] me$_i$] and Bill will [$_{VP}$[$_{VP}$ select t$_j$] you$_j$].

After the target NP *you* shifts out of VP, the internal VP containing the verb gets deleted.

Based on Jayaseelan's VP-deletion analysis, Lasnik (1995a) argues that the remnant NP moves to the Spec of AgroP and the remaining VP with the trace of the moved NP deletes at PF (PF deletion).

(9) [= structure of (7a)]
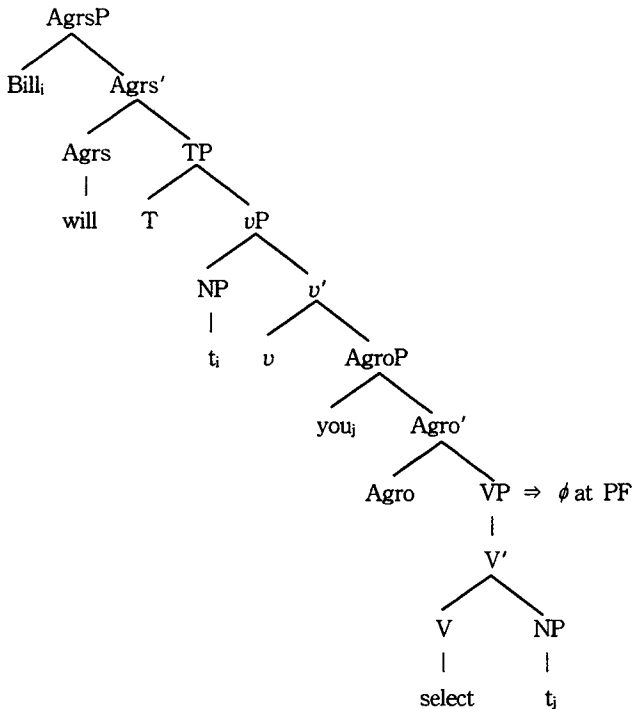
In (9) *you* raises to the Spec of AgroP and the remaining VP gets deleted

at PF. Assuming covert movement of objects in English, Pseudogapping sentences in (7) would require some extra device for explanation.

Antecedent Contained Deletion (ACD) renders good support in favor of object shift in English. Runner (1995) argues that objects in English move overtly to the Spec of AgroP, based on ACD facts. Consider the following sentences:

(10) a. Cindy read every book that Bobby did e.
     b. e = [$_{VP}$ read every book that Bobby did e]

In (10a) the antecedent of the missing VP contains a missing VP (10b). The copying of the antecedent into the missing VP would result in infinite regress as shown in (11):

(11) Cindy read every book that Bobby did [read every book that Bobby did read ⋯

Interestingly enough, if the NP heading the relative clause is interpreted "cardinal/existential," ACD is not allowed (Diesing 1992).

(12) a. Cindy read the/every/most books(s) that Bobby did e.
         (proportional/quantificational NP)
     b. *Cindy read many/few/two book(s) that Bobby did e.
         (cardinal/existential NP)

Runner (1995) claims that the contrast in (12) would be explained if we assume that objects in English move overtly before LF under the assumption that A-movement employs the copy and deletes strategy. After SPELL-OUT, both in (12a) and (12b), the objects would be in the Spec of AgroP. Although their PFs are the same, their LFs would be different. In (12a) the VP-internal copy of the NP deletes, leaving only a VP-external NP, while in (12b) the NP copy in the Spec of AgroP deletes, leaving only a VP-internal NP. The difference is shown below in (13):

(13) a. ⋯ [$_{AgroP}$ [the/every/most book(s) that you did e]$_i$ [$_{VP}$ ⋯ t$_i$]] ⋯
     b. ⋯ [$_{AgroP}$ e [$_{VP}$ ⋯ [many/few/two books that you did e]]] ⋯

At LF the VP in (13a) does not contain an object NP: VP-copying can take place without resulting in infinite regress. In (13b), however, the VP contains an object NP, and upon VP-copying, infinite regress would result, leading to

ungrammaticality.[1] This confirms the view that English object movement is overt.

Under his Split VP Hypothesis, Koizumi (1993) independently argues that the verb and its object overtly move to the higher verb and to the Spec of AgroP, respectively. For him, (14a) would have the structure (14b) at the point of SPELL-OUT.

(14) a. Aaron gave the ring secretly to her.

b.
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        VP₂
       /  \
          V₂'
         /   \
       V₂    AgroP
        |    /    \
     gaveⱼ  DP    Agro'
        |        /    \
    the ringᵢ  Agro    VP
               |      /   \
              tⱼ'   Adv    VP₁
                     |     /   \
                 secretly DP    V₁'
                          |    /   \
                         tᵢ   V₁    PP
                               |     |
                              tⱼ   to her
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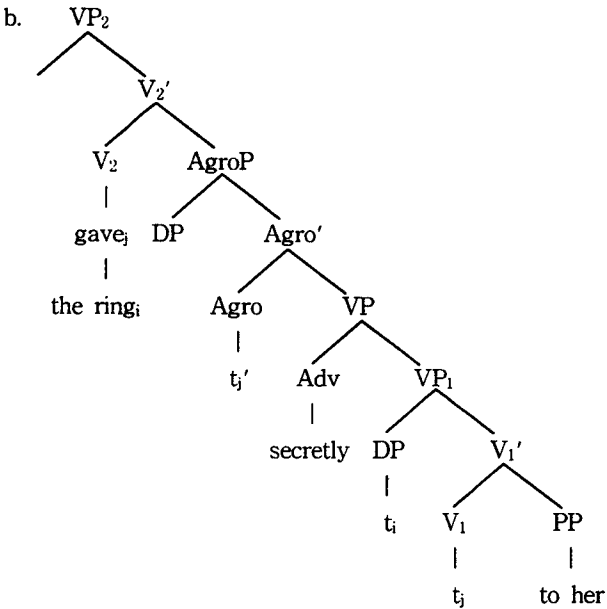
Based on the "strength" of features which is discussed in Chomsky (1991, 1992), he assumes that both the NP-feature of the lower verb and the V-feature of higher verb (= V_2) are strong and that they trigger overt object movement and overt verb movement, respectively.

Among many pieces of the empirical arguments he provides, one concerning particle construction is worth noting. Consider the following sentences:

(15) a. Colleen <u>looked</u> <u>up</u> the reference./Colleen <u>looked</u> the reference <u>up</u>.

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[1] Lasnik (1993) and Hornstein (1994) propose a minimalist account of ACD using object movement to VP-external position.

b. Chad <u>threw</u> <u>away</u> the book./Chad <u>threw</u> the book <u>away</u>.

c. We <u>dusted</u> <u>off</u> every counter./We <u>dusted</u> every counter <u>off</u>.

A particle can either be adjacent to the verb or it can be separated by the intervention of an object. However, when a particle and an adverb come together to the right of the object, the particle should precede the adverb (as in (16)) but not vice versa (as in (17)).

(16) a. Colleen <u>looked</u> the reference <u>up</u> <u>carefully</u>.

b. Chad <u>threw</u> the book <u>away</u> <u>quickly</u>.

c. We <u>dusted</u> the table <u>off</u> <u>completely</u>.

(17) a. *Colleen <u>looked</u> the reference <u>carefully</u> <u>up</u>.

b. *Chad <u>threw</u> the book <u>quickly</u> <u>away</u>.

c. *We <u>dusted</u> the table <u>completely</u> <u>off</u>.

Given the structure (18), in which overt verb movement and overt object movement are assumed and the assumption that VP-adverbs adjoin VP, the fact shown in (16) and (17) can be explained naturally.

(18)

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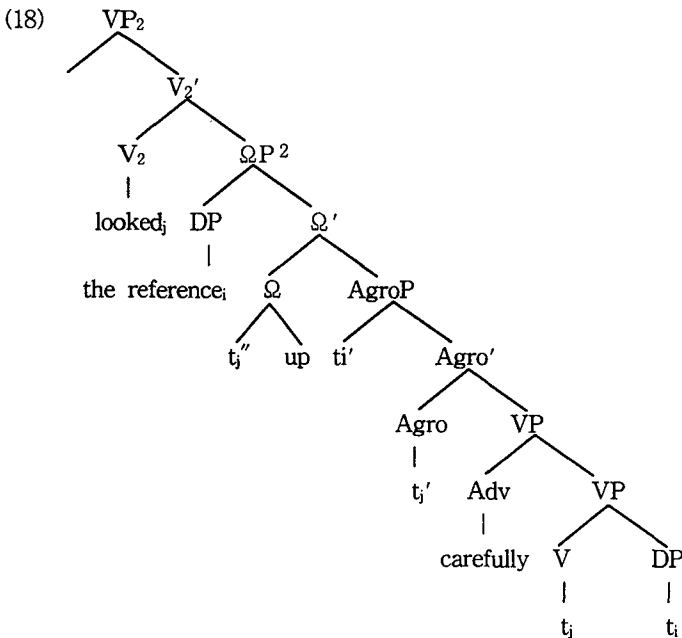
[2] ΩP has no theoretical connotation. It just refers to a projection above AgroP.

There is no position between *the reference* and *up* for *carefully* to be inserted, since there is no VP in-between. The other examples in (17) can be explained in the same vein. The relative linear order between an adverb and a particle renders additional support to the overt object shift hypothesis.

In light of this much argument, Zwart (1997) must be on the wrong track with regard to his claim that there is no object shift in English. What about the sentences in (5) that were presented as evidence against object movement in either rightward or leftward direction? If there is object shift in English, (5a) is wrong since the object remains in situ. As will be introduced in section 3, English v attracts V out of VP (Fukui and Takano 1998). Under this assumption, the example (5b) is easily explained in that the verb *read* remains in situ.³

3. Verb Raising

In an attempt to eliminate ordering parameters in favor of functional parameters,⁴ Kayne (1994) proposes a theory of phrase structure and word order, in which a given phrase structure is mapped into a unique linear order in terms of what he calls LCA (Linear Correspondence Axiom). LCA submits that every language has VO as an underlying order. Under his theory, English and Korean/Japanese have the same VP-internal hierarchical structure but differ only in linear order: English, VO; Korean/Japanese, OV. The English word order derives directly from LCA, but the word order in

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³ Takano (1996) argues against Koizumi (1995) and Runner (1995) with regard to the landing site of shifted object. Instead, he proposes "partial" object shift in English. According to him, for example, the object shift in the English DP-PP frame, as in (ia), is partial (as in (ib)), in the sense that the accusative DP does not move to the Spec of v but moves within VP as an instance of short scrambling:

(i) a. John gave a book to Mary.
b. [$_{TP}$ John$_i$ T [$_{vP}$ t$_i$ [$_{v'}$ gave$_j$-v [$_{VP}$ a book$_k$ to Mary [$_{V'}$ t$_j$ t$_k$]]]]].

However, he is silent about what triggers the partial object shift within VP. From the viewpoint that every movement is morphologically driven, his analysis does not seem to be a desirable move.

⁴ The Minimalist Program (Chomsky 1995, among others) hypothesizes that parameters are reduced to the properties of functional elements, which is a subpart of the lexicon. However, as Takano (1996) points out, ordering parameters like the head parameter remain an exception to this hypothesis.

Korean/Japanese needs a stipulation. He suggests that some functional category in Korean/Japanese forces the object to move overtly to its Spec over the verb as shown below:

(19)
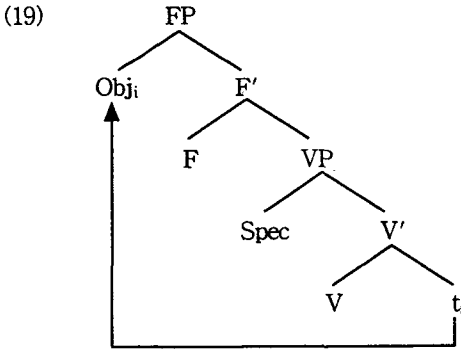
Although Kayne's (1994) theory allows possibility of reducing ordering parameters to functional parameters, it has some problems, as pointed out by Takano (1996). First of all, the exact property of the functional category in (19) is not entirely clear. F must attract all sorts of complements, regardless of their categorial status.

(20) a. Chelswu-ka   chayk-ul   ilkessta. (= nominal complement)
              -nom book-acc   read-past-dec
         'Chelswu read a book.'
      b. Chelswu-ka   hakkyo-e   kassta. (= postpositional complement)
              -nom school-to   go-past-dec
         'Chelswu went to school.'
      c. Chelswu-ka   Yengswu-ka   totwuk-irako saynkakhanta.
              -nom   -nom thief-dec-c   think
         (= clausal CP complement)
         'Chelswu think that Yengswu is a thief.'

If these complements are all raised over the verb from lower positions, it is questionable what the motivation of movement for each case is. Kayne's proposal has empirical problems as well. Contrary to what his functional category F forces, Korean/Japanese have neither overt *Wh*-movement nor NP-movement (nor verb movement, as illustrated below).

(21) a. <u>No *Wh*-movement</u>

   Chelswu-ka Yengswu-ka mwues-ul sass-nunci

      -nom   -nom what-acc buy-past-whether

   alkosipta.

   know-want

   'Chelswu wants to know what Yengswu bought.'

 a'. John wants to know what Bill bought.

 b. <u>No NP-movement</u>

   Chelswu-ekye Yenghi-ka yeppe poynta.

      -to   -nom pretty look

   'Mary looks pretty to John.'

 b'. *Mary seems to John pretty.

On the basis of these observations, Takano (1996) and Fukui and Takano (1998) reject Kayne's (1994) LCA solution to the hierarchy and linear order mapping relationship.[5]

3.1. Fukui and Takano (1998)

Recently Fukui and Takano (1998), based on their previous studies (Fukui 1995 and Takano 1996), propose that the basic word order is cross linguistically SOV. Their claim is based on the following hypothesis about the fundamental difference between English and Japanese with respect to word order.

 (22) v has the property of attracting V in English but not in Japanese.[6]
   (= his [22])

According to them, "the O-V order of Japanese reflects the "base" structure that involves no movement, whereas the V-O order of English reflects the "derived" structure that involves verb raising, triggered by a higher functional head" (Fukui and Takano (1998 : 37)).[7] English SVO order is the

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[5] James Yoon remarked that Kayne might as well assume the base-generation of F.

[6] Fukui and Takano (1998 : 45) comment that (22) is in line with the "traditional" view on the English/Japanese comparative syntax that functional categories in Japanese are not "active", but those is in English are.

[7] Under this approach, Korean/Japanese cannot have verb raising. However, this is in conflict with the most traditional argument in favor of verb raising in various

result of overt verb raising in the manner exemplified below:

(23) vP
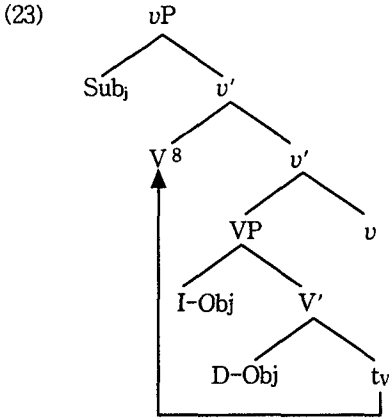
3.2. Korean

The claim that Korean/Japanese cannot have verb raising is contrary to claims made by Whitman (1989), Otani and Whitman (1991), and Koizumi (1995). Otani and Whitman (1991), among others, argue that verbs raise to I to make VP-ellipsis possible in Japanese. Hoji (1995), however, rejects their view, claiming that Otani and Whitman's Japanese VP-ellipsis data is qualitatively different from those found in English. As one of the simplest arguments, Takano (1996) claims that Japanese does not show clear evidence of verb movement in sentences like (24):

(24) a. John-ga   hon-o   yoma-na-katta (koto).
              -nom   -acc   read-neg-past
        'John did not read a book.'
     b. John-ga   hon-o   yoma-na-katta no/ka.
              -nom   -acc   read-neg-past Q
        'Did John not read a book?'

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types of complex predicates like *pokosipta* (Korean) 'want-see' and *yom-ase-ta* (Japanese) 'make-read' (Choe 1988). Given that overt head movement is not an option, they suggest that the complex predicate is created in PF in terms of "morphological merger (or cliticization)."

[8] Fukui and Takano (1998 : 44) propose that the verb raising in (23) takes the form of "substitution into Spec." They further claim that by doing this they can eliminate traditional "adjunction to head" as an unnecessary (and hence undesirable) option. See Fukui and Takano (1998) for detailed discussion about head movement as a substitution.

There is no word order change between a declarative (24a) and its interrogative counterpart (24b), which is different from English as shown in gloss.

One of the recent claims in favor of verb raising in Korean is Koizumi's (1995) analysis of cleft sentences. He proposes that the cleft sentence (25b) is derived from (25a) through overt verb raising as illustrated in (26):

(25) a. Mary-ga   Jonh-i ringo-o   3-tu age-ta (koto)
        Mary-nom John-to apple-acc 3-cl give-past (fact) (cl = classifier)
        'Mary gave three apples to John.'
     b. Mary-ga   age-ta   no-wa [John-ni ringo-o 3-tu] ta.
        Mary-nom give-past nl-top   John-to apple-acc 3-cl be
        (nl = nominalizer)
        [Lit] 'It is three apples to John that Mary gave.'

(26) Subject [vp IO DO tv] V   Tense ___
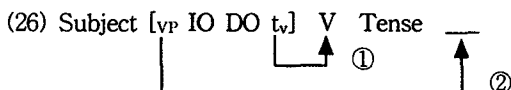
However, his analysis has both technical and empirical problems. First of all, as pointed out by Dong-Whee Yang (personal communication), it is hardly possible to relate the structure of (25b) to (25a).[9] Where, for example, does the nominalizer come from? In Minimalist terms, (25a) and (25b) have different numeration sets. Second, contrary to his prediction that his verb raising analysis holds for the head-initial languages as a whole, Korean cleft sentences show different grammatical status from Japanese.[10] That is, the following Korean cleft sentence (27b) is ungrammatical.

(27) a. Yenghi-ga   Chelswu-ekye sakwa-lul cwu-ess-ta.
        -nom   -to   apple-acc gave
        'Yenghi gave an apple to Chelswu.'

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[9] Koizumi (1995 : 167) himself admits this problem of the analysis, but he does not deal with it directly, without reason, by saying: "We will not be concerned with the exact structure of the cleft construction in Japanese here."

[10] In fact, all Japanese informants do not agree with Koizumi's judgment about cleft sentences (Keun-Won Sohn, personal communication). Furthermore, if numeral quantifiers are omitted, the grammaticality of cleft sentences degrades significantly.

(i) *Mary-ga age-ta no-wa [John-ni 3-tu] ta.
        Mary-nom give-past nl-top John-to 3-cl be-dec (nl=nominalizer)
        Lit. 'It is an apple to John that Mary gave.'

    b. *Yenghi-ga ___ cwukes-un [Chelswu-ekye sakwa] ita.

                -nom   give-thing-top   -to   apple   be-dec

              'It is to Chelswu an apple that Yenghi gave.'

In general, contrary to Koizumi's (1995) prediction, the following variety of cleft sentences are not grammatical to most Koreans.[11]

(28) Clefting + Coordination

    a. *Yenghi-ka ___ cwunkes-un [$_a$[Chelswu-ekye sakwa] kuliko

                -nom   give-thing-top   -to   apple   and

        [Yengswu-ekye pay]]   ita.

                to   pear   be-dec

        [Lit] 'It is an apple to Chelswu and a pear to Yengswu that

             Yenghi gave.'

    b. *___ mekunkes-un [$_a$[Yenghi-ka   sakwa] kuliko

        eat-thing-top   -nom apple   and

        [Swunhi-ka   pay]] ita.

                -nom pear be-dec

        [Lit] 'It is Yenghi an apple and Swunhi a pear that ate.'

    c. *___ cwunkes-un [$_a$[Yenghi-ka Chelswu-ekye sakwa] kuliko

            gave-thing-topic   -nom   -to   apple   and

        [Yengmi-ka   Yengswu-ekye pay]]   ita.

                -nom   to   pear be-dec

        [Lit] 'It is Yenghi an apple to Chelswu and Yengmi a pear to

             Yengswu that gave.'

    d. *___ sakwa-lul cwunkes-un [$_a$[Yenghi-ka   Chelswu-ekye]

        apple-acc gave-thing-top   -nom   -to

        kuliko [Swunhi-ka Yengswu-ekey]]   ita.

        and   -nom   -to   be-dec

        [Lit] 'It is Yenghi to Chelswu and Swunhi to Yengswu that

             gave an apple.'

(29) Relativization + Coordination

    a. *[[Yenghi-ka   cwun] [Chelswu-ekey   sakwa kuliko

              -nom gave-n   -to   apple   and

        Yengswu-ekey pay]]-(lul)

                -to   pear

[Lit] 'To Chelswu an apple and to Yengswu a pear that Yenghi gave.'

b. *[[＿ cwun] [Yenghi-ka   Chelswu-ekey   sakwa   kuliko
        gave-n   -nom   -to   apple   and

   Swunhi-ka   Yengswu-ekey   pay]]-(lul)
        -nom   -to   pear

   [Lit] 'Yenghi to Chelswu an apple and Swunhi to Yengswu a pear that gave.'

c. *[[＿ sakwa-lul   cwun]   [Yenghi-ka   Chelswu   kuliko
        apple-acc   gave-n   -nom   and

   Swunhi-ka   Yengswu]]-(ekey)
        -nom   -to

   [Lit] 'Yenghi to Chelswu and Swunhi to Yengswu that gave an apple'

Sentences in (28) are derived by the clefting of a coordinated expression. According to Koizumi (1995), they are predicted to be grammatical since the phrase node α forms a constituent. The same holds for the relative clauses in (29).[12, 13]

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[12] An anonymous reviewer of *Language Research* mentions the possibility of the gapping analysis for examples (28) and (29). Suppose that gapping applies to the following representation for (28a):

(i) [$_\alpha$[Yenghi-ka   [＿ cwun-kes-un   [Chelswu-ekye   sakwa]] kuliko
                      -nom   give-thing-top   -to   apple   and
      [$_\beta$[Yenghi-ga ＿ cwun-kes-un   [Yengswu-ekye pay]] ita
                     -nom   give-thing-top   -to   pear   be-dec
      [Lit] 'It is an apple to Chelswu and a pear to Yengswu that Yenghi gave.'

There are two problems. One is that the cleft sentences α and β are already ungrammatical. For whatever reason that may be, it is implausible to predict a grammatical output from an ungrammatical input. The other is that gapping in Korean is forward-bound. That is, *Yenghi-ka ＿ awun-kes-un* in is to be gapped rather than in. If it is the case, it would be impossible to derive a desired output from (i).

Another possible candidate for (28a) is the following:

(ii) Yenghi-ka   [＿ cwun-kes-un   [Chelswu-ekye   sakwa]] kuliko
            -nom   give-thing-top   -to   apple   and
     [＿ cwun-kes-un   [Yengswu-ekye pay]] ita
          give-thing-top   -to   pear   be-dec

     [Lit] 'It is an apple to Chelswu and a pear to Yengswu that Yenghi gave.'

From this representation also, the only output would be (iii), which is ungrammatical,

As an anonymous reviewer of *Language Research* points out, the data in (28) and (29) do not, in actuality, render coherent support in favor of verb raising. Most of all, they are ungrammatical even without coordination:

(30) a. *Yenghi-ka ___ cwunkes-un [αChelswu-ekye sakwa]-ita.
            -nom   give-thing-top   -to   apple be-dec
     [Lit] 'It is an apple to Chelswu that Yenghi gave.'
   b. *Yenghi-ka ___ cwun [αChelswu-ekye sakwa]-(lul)
            -nom   give-n   -to   apple -acc
     [Lit] 'To Chelswu an apple that Yenghi gave.'

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since Korean *gapping* is forward-bound:

(iii) *Yenghi-ka [___ ~~cwun-kes-un~~ [Chelswu-ekye sakwa]] kuliko
            -nom   give-thing-top   -to   apple   and
      [___ cwun-kes-un [Yengswu-ekye pay]] ita
            give-thing-top   -to   pear be-dec

In sum, there is no way to derive (28a) (and other data in (28) and (29) as well) through gapping.

[13] Contrast inducing elements, like topic markers, somehow enhance the grammatical status of cleft sentences:

(i) a. Yenghi-ka ___ cwun-kes-un [Chelswu-ekye-**nun** sakwa]-ko
                -nom   give-thing-topic   -to-**topic** apple   and
         [Yengswu-ekye-**nun** pay] ita.
                    -to-**topic** pear be-dec
         [Lit] 'It is to Chelswu an apple and to Yengswu a pear that Yenghi
              gave.'
      b. Cikum ___ mekun-kes-un [Yenghi-**nun**   achim]-iko
         now   eat-thing-topic   -**topic** breakfast
         [Swunhi-**nun** cemshim] ita.
         -be-and -**topic** lunch be-dec
         [Lit] 'It is to Yenghi breakfast and to Swunhi lunch that they ate now.'

Or, just like Japanese examples, numeral quantifiers render another salvaging effect as shown below:

(ii) Onul ___ pan-kes-un   [Yenghi-ga   sakwa **han-sangca** kuliko
     today   sell-thing-topc   -nom apple **one-box**   and
     Swunhi-ga pay **han-sangca** ita.
             -nom pear **one-box**   be-dec
     [Lit] 'It is Yenghi a box of apples and Swunhi a box of pears that they
          sold today.'

I have no explanation why these factors exert influence on grammaticality improve-ment. I'd like to thank an anonymous *Language Research* reviewer for the data in (i) and (ii).

This data shows that α does not form a constituent anyway, contrary to Koizumi's (1995) assumption.

Koizumi (1995) presents arguments in favor of verb raising in Japanese (and Korean also) concerning cleft formation and coordination. Putting aside the problem of correctness in his data judgement, consider the following gapped sentences.

(31) a. [Yenghi-ka Chelswu-ekye sakwa-lul cwu-ess-ta] kuliko
           -nom   -to   apple-acc give-past-dec and
    [Swunhi-ka Yengswu-ekye pay-lul cwu-ess-ta.]
           -nom   to   pear-acc
    'Yenghi gave Chelswu an apple and Swunhi gave a pear to Yengswu.'
   b. Yenghi-ka Chelswu-ekye sakwa-lul kuliko Swunhi-ka
           -nom   -to   apple-acc and   -nom
    Yengswu-ekye pay-lul
             -to   pear-acc
    cwu-ess-ta.
    'Yenghi gave Chelswu an apple and Swunhi gave a pear to Yengswu.'

As was discussed in Kim (1998), (31b) can be analyzed either as involving verb raising (as in (32a)) or as involving no verb raising but gapping as in (32b):

(32) a. [$_\alpha$[Yenghi-ka Chelswu-ekye sakwa-lul t] kuliko [Swunhi-ka
                                          └──────────────┘
              -nom   -to   apple-acc   and   -nom
    Yengswu-ekye pay-lul t]] cwu-ess-ta.
    └────────────────────────┘↑
             -to   pear-acc gave
    'Yenghi gave an apple to Chelswu and Swunhi gave a pear to Yengswu.'
   b. [Yenghi-ka Chelswu-ekye sakwa-lul ~~cwu-ess-ta~~] kuliko
           -nom   -to   apple-acc gave   and
    [Swunhi-ka Yengswu-ekye pay-lul cwu-ess-ta.]
           -nom   to   pear-acc gave
    'Yenghi gave an apple to Chelswu and Swunhi gave a pear to Yengswu.'

Koizumi's (1995) argument in favor of verb raising analysis concerns whether the remnants of verb raising can form a constituent or not. As schematized in (32a), *a* represents a node label that includes *[Yenghi-ka Chelswu-ekye sakwa-lul t] kuliko [Swunhi-ka Yengswu-ekye pay-lul t].* His analysis is allegedly supported by the fact that the constituent *a* can be scrambled as an unit.

(33) [*a*[Yenghi-ka   Chelswu-ekye   sakwa-lul] ·kuliko [Swunhi-ka
                      -nom   -to   apple-acc and   -nom
        Yengswu-ekye pay-lul]] Minswu-ka ___ cwu-ess-ta-ko mitnunta.
                      -to   pear-acc   -nom   give-past-dec-c believe
        'Minswu believes that Yenghi gave an apple to Chelswu and that
        Swunhi gave a pear to Yengswu.'

This sentence, however, can also be analyzed as involving gapping as shown in (34).

(34) [[Yenghi-ka   Chelswu-ekye   sakwa-lul]   ~~Minswu-ka~~
                      -nom   -to   apple-acc   -nom
        ~~cwu-ess-ta-ko   mitnunta]~~ kuliko [[Swunhi-ka   Yengswu-ekye
        give-past-dec-c believe   and   -nom   -to
        pay-lul]   Minswu-ka ___ cwu-ess-ta-ko mitnunta].
        pear-acc   believe
        'Minswu believes that Yenghi gave an apple to Chelswu and that
        Swunhi gave a pear to Yengswu.'

Koizumi's (1995) only argument in favor of verb raising now weakens fatally. In this regard, based on both technical and empirical problems, there can be no movements like verb raising in Korean.

3.3. English: Additional Evidence

Fukui and Takano (1998) claim that there is overt verb raising in English. This section is devoted to empirical evidence in support of their claim. Contrary to Chomsky's (1995) proposal that covert object raising is involved in the derivation of English regular transitive sentences along with covert verb movement and besides arguments relating to object shift presented in section 2.3, many current researchers provide convincing argument showing that English involves overt verb raising. As a starting point, consider the

following sentences:

(35) a. *The policeman arrested quickly the thief.
　　 b. *Becky speaks fluently Chinese.
　　 c. *Joni saw frequently the movie.

For Chomsky (1991), who assumes that there is no verb movement in English due to the θ-opaqueness of its Agr, the ungrammaticality of the sentences in (35) can be accounted for as a violation of the Projection Principle.[14] The Projection Principle requires that only complements can be sisters to the verb. The Projection Principle, however, would wrongly predict that the sentences in (36) are ungrammatical, since adverbials immediately follow the verb.

(36) a. Brynn spoke loudly with everyone.
　　 b. Amber looked carefully at him.
　　 c. Ben relies frequently on it. [requoted from Koizumi (1993)]

Pesetsky (1989) claims that the problem can be avoided if we assume that the sentences in question involve main verb movement as shown in (37) below:

(37) Brynn spoke$_i$ [loudly [t$_i$ with everyone]].

His proposal is further strengthened by the following examples from Pesetsky (1989).

(38) a. John knocked on the door intentionally twice.
　　　 (intentionally < twice)
　　 b. (?)John twice intentionally knocked on the door.
　　　 (twice > intentionally)

(39) a. John knocked on the door twice intentionally.
　　　 (twice < intentionally)
　　 b. (??)John intentionally twice knocked on the door.
　　　 (intentionally > twice)

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[14] Under the GB version of the generative grammar (Chomsky 1981), these sentences violate the Adjacency Condition for case marking. Readers are referred to Pesetsky (1989) for detailed discussion against the Adjacency Condition.

When two or more adverbs come on the right of VP at the same time, the rightmost adverb takes scope over the ones on the left as in (38a) and (39a), and, on the contrary, when they come on the left, the leftmost adverb takes scope over the ones on the right as in (38b) and (39b). Thus (38a) refers to two events of intentional knocking, while (39b) refers to one event of intentionally knocking twice. With this in mind, let us look at (40):

(40) As for Mary, Bill relied <u>intentionally</u> <u>twice</u> on her.
     (intentionally > twice)

Contrary to the prediction that the rightmost adverb would have wide scope over the one on the left, *intentionally* in (40) has scope over *twice*.[15] To account for this unexpected scope interaction, Pesetsky (1989) proposes the following derivation shown in (41) for (40), exploiting overt verb movement out of VP.

(41) As for Mary, Bill relied$_i$ [intentionally twice [t$_i$ on her]].

If the verb originates from the trace position in (41), the wide scope reading .of *intentionally* in (40) will get a nice interpretation.[16]

The claim that there is verb raising in English along with object shift is in good line with the "derived" word order SVO in English.

3.4. An Apparent Problem

If there are indeed both overt verb raising and overt object shift in English, and its basic word order is SOV, then the derivation of English transitive sentences would face a problem with regard to the Extension Condition of Chomsky (1995). Look at the derivation schematized in (42):

(42) S [$_{VP}$ O V] → S   V   O [$_{VP}$ t$_o$ t$_v$]

After the verb raises to v out of VP, the object will also have to move to ensure the observed word order. However, this type of object raising in ② violates the Extension Condition.

(39) Extension Condition

Move and Merge extend K to K*, which includes K as a proper set.

The Extension Condition purports to capture violations of the Strict Cyclicity Condition on derivation. ① → ② order derivation in (42) is a clear violation of the Extension Condition in that the derivation ② does not extend the structure.

Richards (1997) proposal is very suggestive to this problem. His idea is known as the Principle of Minimal Compliance:

(44) Principle of Minimal Compliance (PMC)

For any dependency D that obeys constraint C, any elements that are relevant for determining whether D obeys C can be ignored for the rest of the derivation for purpose of determining whether any other dependency D obeys C.

He proposes that one satisfaction of a condition is sufficient to exempt the whole derivation from later required satisfaction of the same condition. Turning back to our problem with (42), a solution now becomes apparent. Once the Extension Condition is satisfied by merger of a subject at the Spec of vP, subsequent movements like overt object raising would not bring about problems with regard to the Extension Condition any more. In other words, objects can "tuck-in" to the inner Spec of vP as shown in ② without violating the Extension Condition of Chomsky (1995).

4. Conclusion

In this paper, it was argued that both English and Korean have the same basic word order—SOV. To ensure the observed surface word order, Korean verbs do not have to raise out of VP, whereas English verbs do. In this regard, the evidence was presented in favor of both overt verb raising and object shift in English. However, it was demonstrated that Korean verbs do not raise, contrary to Koizumi's (1995) analysis.

We have not discussed the possibility of object shifting in Korean in the main part of this paper. As for this topic, some Korean linguists claim that there is no Agro (or whatever functional category that induces object shift) and hence no object shift in Korean (Park 1994, Kim 1994). On the other hand, some Japanese linguists (Nemoto 1993, Koizumi 1995) claim that there is overt object shift in Japanese. In fact, whether there exists overt object shift or not may depend on whether the basic word order is SOV or SVO. If SOV is the canonical basic word order, as has been argued in this paper, there needs be no overt object shift posited in Korean. An appendix is added against overt object shift in Korean with regard to ECM and binding facts.

If the arguments and conclusions of this paper are on the right track, this will be supporting of Zwart (1997), in that there is a universal base word order, but is also a refutation in that the universal base word order is SOV rather than SVO.

Appendix: No Object Shift in Korean[17]

1. ECM in Korean

With regard to the identification of the ECM construction in Korean, let us take the simplest view that the sentence like (1a) is a non-ECM sentence, while (1b) is an ECM sentence:
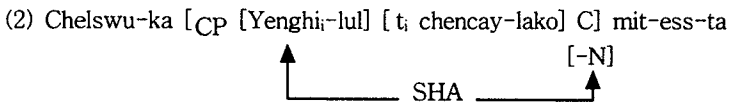
> (1) a. Chelswu-ka [$_{CP}$ Yenghi-ka   chencay-lako] mit-ess-ta.
>   -nom   -nom genius-c   believe-pst-dec
>   'Chelswu believed that Yenghi was a genius.'
>   b. Chelswu-ka [$_\alpha$ Yenghi-lul chencay-lako] mit-ess-ta.
>   -nom   -acc
>   'Chelswu believed Yenghi to be a genius.'

A possible problem of this view is concerned with the identity of α: is it CP or TP/AgrP? If -ko is C in Korean, α should be CP, while that of English is AGRsP (Lasnik 1993). If we assume that Agr is a nominative Case assigner in Korean, the nominative Case of the embedded subject is of no problem. As for (1b), however, a problem arises because there is no

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[17] This is a revised version of part of Kim (1994).

accusative Case assigner inside the embedded CP. CP is a blocking category and a barrier to Case assignment of the verb *mit* and it is impossible for *mit* to assign Case to the embedded subject *Yenghi* directly. Here let us take the view that the matrix verb plays a role via C. Yoon (1993 : 147) proposes that "the COMP in the −*ko* construction does have the feature [−N], allowing Case assignment to the embedded subject by the head of CP, COMP." Now I propose that the embedded accusative subject is licensed at the Spec of CP via SHA.[18]

(2) Chelswu-ka [$_{CP}$ [Yenghi$_i$-lul] [t$_i$ chencay-lako] C] mit-ess-ta
                ↑   [−N]
            └─────── SHA ───────↑

2. No Overt Object Shift in Korean

To demonstrate the non-existence of overt object shift in Korean, there should be positive evidence that argues against its existence. That is, what should be evoked is the data that can be wrongly predicted if there is assumed to be overt object shift. This section is devoted to such data.

First of all, consider the following Korean ECM data.

(3) a. *ku kemsa-nun [Chelswu$_i$-ka iwucoy-lako] caki$_i$-uy caypan-eyse
       the prosecutor-top   −nom guilty-c   self-gen trial-at
       cungmyengha-ass-ta.
       demonstrate-pst-dec
       'The prosecutor demonstrated that Chelswu was guilty in his trial.'
   b. *ku kemsa-nun [Chelswu$_i$-lul iwucoy-lako] caki$_i$-uy caypan-eyse

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[18] Yoo (1993) proposes that the embedded subject is licensed at the Spec of higher VP, based on the following southern dialect of Korean.

(i) a. Yengswu-nun [nwuka yeppu-n-ko/*ka] mwul-ess-?*no/na?
             −top   who   pretty   ask-pst-qst
      'Yengswu asked who was pretty?'

In this dialect, the *o*-type question ending is used in *wh*-question, while the *a*-type question ending is used in yes/no question, but not vice versa. However, it is not certain that *ko/ka* in the embedded subject is a real complementizer in this dialect. I have a strong suspicion that the *ko/ka* are mood markers. If they are mood markers, the data in (i) cannot go against my proposal that the embedded accusative subject of ECM in Korean is licensed at the Spec of embedded CP.

the prosecutor-top   -acc guilty-c   self-gen trial-at
cungmyengha-ass-ta.
demonstrate-pst-dec
'The prosecutor demonstrated Chelswu to be guilty in his trial.'

These examples are in sharp contrast with English data which Lasnik (1993) took as evidence in favor of AgroP in English (and UG). As is shown in (3b), even if the embedded subject *Chelswu* is assumed to get Case (or Case-checked) at the Spec of AgroP, as allegedly claimed in Lasnik (1993), *caki* cannot be interpreted to be bound by *Chelswu*, whereas it is impossible in (3a). If we assume that there is the embedded subject to be raised to the matrix object position at the level in which BT applies, then (3b) would be wrongly predicted to be grammatical.

Negative Polarity Item Licensing renders further evidence that there should not be overt object shift in Korean. It is generally reported that Korean NPIs are subject to a kind of locality requirement that NPI and its antecedent should be in the same clause contrary to English (Choe 1988).

(4) a. Chelswu-ka   *amwukesto* sa-ci *an*-ha-ass-ta.
            -nom anything   buy-n not-do-pst-dec
       (n = nominalizer)
       'Chelswu did not buy anything.'
    b. Yenghi-ka Chelswu-ka *amwukesto* sa-ci *an*-ha-ass-ta-ko]
            -nom   -nom anything buy-n not-do-pst-dec-comp
       mit-ess-ta.
       believe-pst-dec
       'Yenghi believed that Chelswu did not buy anything.'
    c. *Yenghi-ka [Chelswu-ka *amwukesto* sa-ass-ta-ko]
            -nom   -nom anything buy-pst-dec-comp
       mit-ci *an*-ha-ass-ta.
        believe-n not-do-pst-dec
       '(intended reading) Yenghi did not believe that Chelswu bought anything.'

(5) a. *Amwuto* ton-ul   hwumchi-ci *an*-ass-ta.
       anyone   money-acc   steal-n not-pst-dec
       '(intended reading) Anyone did not steal money.'
    b. Chelswu-ka [*amwuto* ton-ul hwumchi-ci *an*-ha-ass-ta-ko]
            -nom anyone money-acc steal-n not-do-pst-dec-comp

mit-ess-ta.
believe-pst-dec
'Chelswu believed that anyone did not steal money.'

 c. *Chelswu-ka   [*amwuto* ton-ul hwumchi-ess-ta-ko] mit-ci
          -nom anyone money-acc steal-pst-dec-comp believe-n
 an-ha-ass-ta.
 not-do-pst-dec
 'Chelswu did not believe that anyone stole money.'

English, on the other hand, does not show such clause-boundedness as shown below:

 (6) a. Mary did *not* buy *anything*.
 b. John believed that Mary did *not* buy *anything*.
 c. John did *not* believe that Mary bought *anything*.

Now, consider the following ECM context:

 (7) a. *Chelswu-nun [amwuna(-ka) Chomsky-lul manna-ass-ta-ko]
          -top anyone(-nom)   -acc meet-pst-dec-c
 mit-ci an-ha-ass-ta.
 believe-n not-do-pst-dec
 'Chelswu did not believe that anyone meet Chomsky.'
 b. *Chelswu-nun [amwuna(-lul) Chomsky-lul manna-ass-ta-ko]
          -top anyone(-acc)   -acc meet-pst-dec-c
 mit-ci an-ha-ass-ta.
 believe-n not-do-pst-dec
 'Chelswu did not believe anyone to meet Chomsky.'

If the embedded subject *amwuna* is raised overtly to the matrix object position, then (7b) should be grammatical, since both an NPI and its antecedent would be in the same matrix clause. (7b), however, is as bad as (7a).

Condition (C) renders additional support to the same conclusion. Let us consider the following examples:

 (8) a. ?Yenghi-nun [ku$_i$ -ka chencay-lako] Chelswu$_i$-uy emeni-pota
          -top he-nom genius-c   -gen mother-than
 kwutkey mit-nun-ta.
 firmly believe-pres-dec

'Yenghi believes that he is a genius more firmly than Chelswu's mother.'

b. ?Yenghi-nun [ku$_i$ -lul chencay-lako] Chelswu$_i$-uy emeni-pota
            -top   he-acc genius-c   -gen mother-than
kwutkey mit-nun-ta.
firmly believe-pres-dec
'Yenghi believes him to be a genius more firmly than Chelswu's mother.'

(8a) is grammatical since *Chelswu* is not c-commanded by *ku*, satisfying Condition (C). On the other hand, in (8b), if *ku* is raised to the matrix object position at which it can c-command *Chelswu*, then the sentence is wrongly predicted to be ungrammatical as a violation of Condition (C).

Condition (B) also provides supporting evidence for the same conclusion. Consider the following sentences:

(9) a. ?Yenghi-nun [Chelswu$_i$-ka chencay-lako] ku$_i$-uy emeni-pota
              -top   -nom genius-   he-gen mother-than
kwutkey mit-nun-ta.
firmly believe-pres-dec
'Yenghi believes that Chelswu is a genius more firmly than his mother.'

b. ?Yenghi-nun [Chelswu$_i$-lul chencay-lako] ku$_i$-uy emeni-pota
              -top   -acc genius-c   his mother-than
kwutkey mit-nun-ta.
firmly believe-pres-dec
'Yenghi believes Chelswu to be a genius more firmly than his mother.'

(9a) is grammatical since the pronoun *ku* is not c-commanded by *Chelswu* in the embedded clause, satisfying Condition (B). However, in (9b), if *Chelswu* is in a position from which it can c-command *ku* then the sentence is wrongly predicted to be ungrammatical.

Dative construction renders additional support to the conclusion that there is no AgroP in Korean (Keun-Won Sohn (pc)). Consider the following example:

(10) Chelswu$_i$-ka Yenghi$_j$-ekey [selo$_{<i,j>}$-uy chinkwu-lul] ponaytta.
         -nom   -dat each other-gen friend-acc sent
'Chelswu sent to Yenghi each other's friend.'

Here *selo* can have both *Chelswu* and *Yenghi* as antecedents. If the object moves to the matrix object position, then *Yenghi* cannot c-command *selo.* This would wrongly predict that *Yenghi* cannot be an antecedent to *selo.*[19]

With absence of no positive evidence to the contrary, it can be concluded that there is no overt object shift, at least out of ECM, in Korean.

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[19] The position of indirect object is in dispute. Based on Miyagawa (class lecture, spring 1994), I assume either IO - DO or DO - IO order can be base-generated.

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Department of English Language and Literature
Kwangwoon University
Walgae-dong 447-1, Nowon-gu
Seoul 139-701, Korea
E-mail : swkim@daisy.kwangwoon.ac.kr