# Deriving SOV from SVO in Korean.*

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**Lee, Jeong-Shik. 2007. Deriving SOV from SVO in Korean.** *The Linguistic Association of Korea Journal*, 15(3), 1-20. In this paper, I first show that free word order variation in Korean cannot be properly dealt with by the SOV hypothesis with a head-final structure which has been uniformly assumed in Korean syntax. Then I demonstrate that it can best be accounted for by the SVO hypothesis with a head-first structure. This result may indicate that SOV is not a basic underlying word order for Korean but that SVO actually is, although it appears true that current Korean by and large exhibits SOV properties. Some positive consequences of the result are also explored: exclusion of the analyses involving suspicious rightward movement, PF stylistic rearrangement, afterthought; elimination of the head-parameter, maintenance of the LCA (Linear Correspondence Axiom, Kayne 1994), thereby capturing the restrictive correlation between syntactic phrase marker and word order in PF. Most of all, the obtained result that languages like Korean regarded as SOV starts with SVO enables us to begin to maintain the basic word order of SVO universally.

**Key Words**: LCA, asymmetric c-command, linearization, head-parameter, SOV, SVO, free word order

## 1. Introduction

It seems true that Korean displays some typical properties of SOV, for example, appearance of postposition, absence of relative pronoun, modification of noun by using a participial before this noun (Greenberg,

Vennemann), and thus it has actually been uniformly assumed in Korean syntax that the word order in Korean is SOV without any doubt. Under the Principles and Parameters (henceforth, P&P) approach of the Government and Binding theory flourished in the eighties (Chomsky 1981 and subsequent works), the SOV order is distinguished from the SVO order in terms of head parameter. Recently, however, Kayne (1994) attempted to dispense with this word order parameter, claiming that the underlying universal order is SVO. To implement this claim he proposed the LCA (Linear Correspondence Axiom) given in (1) to the effect that the surface word order in PF is determined by the asymmetric c-command relation between the two elements in the syntactic structure.[1]

(1) LCA (Linear Correspondence Axiom)

Let X, Y be nonterminals and x, y terminals such that X dominates x and Y dominates y. Then if X asymmetrically c-commands Y, x precedes y.

Thus, different linear orders imply different hierarchical relations. The concept of the LCA was also kept alive in Chomsky's (1995) Bare Phrase Structure. The difference is that for Kayne LCA applies to both PF and LF, but for Chomsky it applies only to PF, or from Morphology to PF (see also Nunes 1999). Chomsky (1995) says that there is no clear evidence that order plays a role at LF or in the computation .... to LF, and that order is fixed at PF by certain mechanisms like LCA which apply to the output of Spell-Out. The previous P&P view is inconsistent with this remark in that in the P&P approach word order is fixed (by a parameter) in the computation and thus plays a role there. Here I follow Chomsky's

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1) In Kayne (1994) c-command is defined in terms of 'the first node up,' not 'the first branching node up.' Another versions of the LCA with the latter notion is also found, for example, in Hornstein, Nunes, and Grohman (2005: 227 (17)):

A lexical item α precedes a lexical item β iff
(i) α asymmetrically c-commands b, or
(ii) an XP dominating α asymmetrically c-commands β.

Adoption of a particular version of the LCA is not an issue here, though.

position without much discussion.

Some positive results from incorporating the LCA into the grammar are then readily available: elimination of the head-parameter, maintenance of the universal word order of SVO, restrictive relation between syntax and PF, and so on. In addition, as a consequence, rightward movement is not to be allowed. If x is placed after y via rightward movement and thereby x c-commands y, then x must precede y, contrary to fact. Chomsky (1995), with the LCA operating on the Bare Phrase Structure system, thus implies that SVO is a basic word order across languages. To my knowledge, however, few Korean minimalists have entertained the idea that the known word order SOV for Korean is derived from the basic SVO order. Our psychological ego might also say that Korean SOV should not be a derivative from SVO in other languages. Actually, deriving SOV properties from SVO might appear to be unnatural and complicated (see Kim 1999 for some illustrations).

Despite this, assuming the LCA, I will try to take a preliminary step toward deriving SOV from SVO in Korean. In doing so, I will confine myself to some basic sentences as given in (2, 3) below. (In (3) the object *Yenghi* is associated with its zero accusative Case marker.)

(2) a. na-n    sukceyha-ess-e.
       I-Top  homework.do-Past-Dec
       'I did the homework.'
    b. sukceyha-ess-e          na-n.
       homework.do-Past-Dec  I-Top
(3) a. na-n    Yenghi       po-ass-e.
       I-Top  Yenghi-Acc  see-Past-Dec
       'I saw Yenghi.'
    b. Yenghi       na-n    po-ass-e.
       Yenghi-Acc  I-Top   see-Past-Dec
    c. na-n    po-ass-e          Yenghi.
       I-Top   see-Past-Dec   Yenghi-Acc
    d. Yenghi       po-ass-e          na-n.
       Yenghi-Acc  see-Past-Dec   I-Top

e. po-ass-e        na-n      Yenghi.
   see-Past-Dec  I-Top   Yenghi-Acc
f. po-ass-e        Yenghi        na-n.
   see-Past-Dec  Yenghi-Acc  I-Top

These examples show that Korean displays free word order variation, as
has been observed in the literature (e.g., Nam and Ko 1986: 23, 251; Jo
1986: 3). Previous studies uniformly with the head-final structure under
the SOV hypothesis, however, considered only the neutral order in (2a, 3a)
and the scrambled order in (3b) as the main object of syntactic discussion.
Other examples somehow fell outside the main arena of syntax. In reality,
however, they were shunned off.

   Postposed subject or object was often vaguely regarded as being
generated by afterthought; other orders were relegated into non-syntactic
component, being treated as resulting from PF stylistic rearrangement
(e.g., Jo 1986: 6, 7) or some pragmatic reasons. It is not clear, however,
what constitutes a stylistic or pragmatic operation and what not in
speaking of free word order variation. Interestingly, recall that scrambling
had been regraded as a PF stylistic operation, but now it is widely
admitted that it is indeed syntactic (since Saito 1985 for Japanese).

   One might claim that head movement occurs in PF in Korean (e.g., Kim
1999), indicating that word order change can occur in PF. For this,
offering alternatives, Choi (2003) extensively goes over cases where
inflectional morphology in Korean should not belong to PF.[2] The PF

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2) Choi (2003: 135 (46)) analyzes VP-focus constructions involving predicate repetition in
terms of the copy theory of movement assumed in the recent minimalist framework:

  (i) Park-sensayngnim-kkeyse  Yengmi-lul    manna(-si)(-ess)-ki-nun
      Park-teacher-Nom(Hon)       Yenghi-Acc   meet(-Hon)(-Past)-KI-Top
      manna-si-ess-ta.
      meet-Hon-Past-Dec
      'Mr. Park MET Yenghi.' (=Mr. Park met Yenghi, but he didn't ......')

That is, in (i) the verb *manna-* 'meet' overtly moves through Agr to T, and thus, copies
of V, [V-Agr], and [[V-Agr]-T] can each be realized phonetically, resulting in
*manna-ki-nun*, *manna-si-ki-nun*, *manna-si-ess-ki-nun*, respectively. If Choi's analysis is
correct, it is not clear how this predicate repetition can be captured under the PF view on

stylistic rearrangement analysis may allow PF head movement to operate on a PF linear string. If so, the matrix verb in (4a) may wrongly precede the embedded verb, as seen in (4b).

(4) a. na-nun  ney-ka      sukceyha-ess-ta-ko
       I-Top   you-Nom    homework.do-Past-Dec-Comp
       mit-ess-ta.
       believe-Past-Dec
       'I believed that you did the homework.'
    b. *na-nun  ney-ka     mit-ess-ta
        I-Top    you-Nom   believe-Past-Dec
        sukceyha-ess-ta-ko.
        homework.do-Past-Dec-Comp
        '*I that you believed did the homework.'

The afterthought analysis may also allow (4b) by putting the embedded verbal complex at the end of the sentence as an afterthought unit.

   In some studies (e.g., Kim 1999), similar examples like those in (2, 3) are regarded as unmarked or even ungrammatical except those like (2a, 3a) involving neutral order and those like (3b) involving typical scrambling. But they rather seem to have looked to some extreme cases with somewhat less acceptability. Following my intuition, I treat the data under consideration as basically grammatical, which is also reported in the existing literature (e.g., Nam and Ko 1986). Given that word order

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inflectional morphology. The latter view must prove that PF movement leaves a copy behind it, which is doubtful. Lee (1995) also argues for the same syntactic verb movement analysis in similar predicate cleft constructions:

(ii) Manna-ki-nun  Cheli-ka    Yenghi-lul    manna-ess-ta
     meet-KI-Top   Cheli-Nom Yenghi-Acc meet-Past-Dec
     'It is MEET that Chelswu met Yenghi.'

Assuming that this construction has basically the same structure as the English cleft construction, Lee suggests that the null VP operator moves to Spec CP in syntax to have a proper relation with the base-generated focused antecedent [$_{VP}$ *manna-ki-nun*] in the sentence initial position. This analysis thus requires syntactic verb movement out of VP. See Choi (2003) for further evidence and related references cited therein.

difference is usually determined in syntax, it would be desirable that we treat free word order variation under consideration as syntactic (see also Nam and Ko 1986, among others, for its syntactic nature).

In this paper, I will show that the previous approach, namely, the SOV hypothesis with a head-final structure, is not sufficient to embrace all the data in (2, 3), correctly lifting these data onto a syntactic discussion table, and eventually offer an account for the word order variation in question under the SVO hypothesis with a head-first structure. It should be kept in mind, however, that I do not mean to say that Korean should be classified as an SVO language, but rather that free word order in Korean can best be derived from the basic underlying SVO order, not from the commonly believed SOV.[3]

## 2. SOV: Head-final structure

In this section, I discuss word order variation introduced in (2, 3) under the basic SOV hypothesis in conjunction with the head final structure, which has been traditionally assumed in Korean syntax. It will be revealed in the end that the SOV hypothesis has difficulties in dealing with this variation, which is surprising. This then will point to another direction toward the SVO hypothesis for Korean.

### 2.1 Word order variation under verbal inflection with lexicalism

For the purpose of discussion in this subsection, I adopt the lexicalist hypothesis in which a verbal complex comprising a verbal root and its affixes is directly withdrawn from the lexicon as is (e.g., Cho and Sells 1995 for Korean). Of initial interest here is the derivation of (2b) and (3e,f), repeated below.

(2) b. sukceyha-ess-e        na-n.
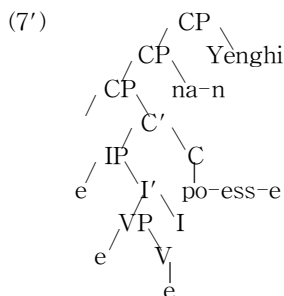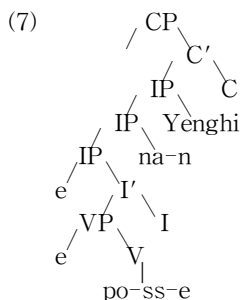        homework.do-Past-Dec   I-Top

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3) Some other languages also display both head-initial and head-final structures, for example, Hungarian, P NP / NP P; Chinese, VO / OV; Basque, V CP / CP V.

(3) e. po-ass-e      na-n    Yenghi.
     see-Past-Dec   I-Top   Yenghi-Acc
   f. po-ass-e      Yenghi      na-n.
     see-Past-Dec   Yenghi-Acc   I-Top

Under the SOV hypothesis with a head-final structure, as seen in (5, 6) and (5′, 6′), the verbal complex *sukceyha-ess-e* 'homework.do-Past-Dec' and the one *po-ass-e* 'see-Past-Dec' have to raise to the sentence intial position via V-to-I-to-C movement to derive the examples.

(5)



(5′)



(6)



(6′)
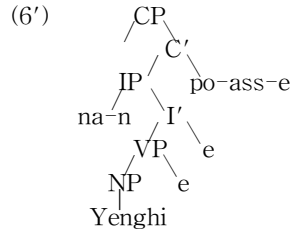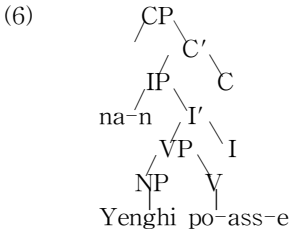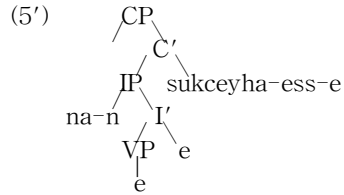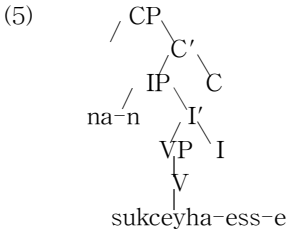


There is, however, no head to host those complexes in the sentence initial position because the head comes last. It might be said that examples like (3e), for instance, can be derived by the rightward adjunction of the subject *na* 'I' out of Spec IP to IP (if the verbal complex stays under V in syntax and raises up to C in LF for relevant feature checking), as seen in (7), or to CP (if the verbal complex has raised up to C via I), as seen in (7′); and by the subsequent rightward adjunction of the object *Yenghi* to IP/CP, as seen in (7, 7′), respectively.

(7) [tree diagram:]
CP
├ C′
│  ├ IP
│  │  ├ IP
│  │  │  ├ IP
│  │  │  │  ├ e
│  │  │  │  └ I′
│  │  │  │     ├ VP
│  │  │  │     │  ├ e
│  │  │  │     │  └ V — po-ss-e
│  │  │  │     └ I
│  │  │  └ na-n
│  │  └ Yenghi
│  └ C

(7′) [tree diagram:]
CP
├ CP
│  ├ CP
│  │  └ C′
│  │     ├ IP
│  │     │  ├ e
│  │     │  └ I′
│  │     │     ├ VP
│  │     │     │  ├ e
│  │     │     │  └ V — e
│  │     │     └ I
│  │     └ C — po-ess-e
│  │  na-n
│  └ Yenghi

Considering that landing sites, namely, Specs or adjunction positions, are normally located on the left side, there must be a reason for this rightward IP/CP adjunction. It appears that a relatively heavy material may move to the end of the sentence, where it is focalized, as illustrated by the underlined part in (8).

(8) sukceyha-ess-e        <u>ku    kin   meli-ey    ccalpun chima ipun</u>
    homework.do-Past-Dec  that  long hair-with   short    skirt  wore
    <u>yecaay</u>.
    girl
    'Did the homework, that girl who wore a short skirt with long hair.'

This is somewhat similar to cases of Heavy NP Shift in (9b) and Locative Inversion in (9c) in English, where only the heavy material has been postposed in contrast with (9a).

(9) a. *I saw yesterday <u>the girl</u>.
    b. I saw yesterday <u>the girl who wore a short skirt with long hair</u>.
    c. From behind detail of courses and qualifications emerges <u>the progressive conviction that no one can ever learn enough</u>.
       (Haegeman 2006: 59 (4a))

Here note that the above underlined heavy parts cannot be replaced by the pronoun *it*:

(10) a. *I saw yesterday <u>it</u>.
  b. *From behind detail of courses and qualifications emerges <u>it</u>.

The ill-formedness of (10a,b) can be attributed to the fact that rightward-moved heavy items tend to be focused and contain new information. But pronouns are relatively light and represent old information, and therefore, they cannot be focused by way of Heavy NP Shift. In this connection, it is not likely that postposd pronouns in Korean in examples like (11a,b) below are shifted by rightward movement. And *na* 'I' and *Yenghi* in (2b) and (3c,e,f) are not heavy, and thus, they are not likely to be postposed by rightward movement, either.

(11) a. sukceyha-ess-e   ku-nun.
   homework.do-Past-Dec he-Top
  b. po-ass-e  ku-nun kunye-lul.
   see-Past-Dec he-Top she-Acc

In short, the rightward movement analysis in question is not tenable. (Notice also that rightward movement is not compatible with the LCA.)
 As another view, the rightmost subject *na* 'I' and the object *Yenghi* in (2b) and (3e,f) may be treated as something like an afterthought generated at the end of the sentence. If this afterthought analysis holds, the structure for (3e), for example, will look like (7, 7'). But then it is unclear how both nominative and accusative Case are assigned/checked on the afterthought subject *na-n* and the object *Yenghi*. This problem stands out more clearly when overt Case markers are suffixed, as seen in (12).

(12) po-ass-e  nay-ka Yenghi-lul.
  see-Past-Dec I-Nom Yenghi-Acc
  'I saw Yenghi.'

It might be said that if the verbal complex raised through I to C either in syntax or LF, it can separately check both Cases on the subject and the object. This might not be impossible in that both the subject and the

object may be in the domain of the verbal complex in the course of derivation (see (7, 7′)). If so, however, unwanted Case licensing may also be allowed: in (12) the subject may get accusative Case and the object nominative Case: *Po-ass-e na-lul Yenghi-ka* 'Yenghi saw me,' which results in an entirely different interpretation. This afterthought analysis creates even more serious problem in the area of anaphor binding. That is, *Miwoha-ess-e Yenghi$_i$-nun caki$_i$-lul* 'Yenghi$_i$ hated herself$_i$' is wrongly predicted to be bad since as seen in (7, 7′), the anaphor *caki* is higher than its antecedent *Yenghi*, and thus, it cannot be bound.[4)]

I will point out another potential problem with the approach in question. Under the head-final structure, examples like (2b, 3d), repeated as (13a,b) below, can be derived in two possible ways.

(13) a. sukceyha-ess-e        na-n.
         homework.do-Past-Dec  I-Top
      b. Yenghi      po-ass-e        na-n.
         Yenghi-Acc see-Past-Dec  I-Top

First, they can be derived by raising the whole VP containing *sukceyha-ess-e* (see (5)) and *Yenghi po-ass-e* (see (6)) to Spec CP, respectively. If so, however, the ill-formedness of (14b, 15b) will be left unaccounted for unless there is a device to prohibit the same VP raising here while allowing it in (13a,b).

(14) a.  na-nun [ney-ka     sukceyha-ess-ta-ko]
          I-Top   you-Nom   homework.do-Past-Dec-Comp
          mit-ess-ta.
          believe-Past-Dec
          'I believe [that you did the homework].'
       b. *na-nun [sukceyha-ess-ta-ko              ney-ka]
          I-Top    homework.do-Past-Dec-Comp you-Nom

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4) Even if *caki* can be c-commanded by *Yenghi* under a different definition of 'c-command,' it can also c-command *Yenghi*, thus undesirably producing Condition C violation.

       mit-ess-ta.
       believe-Past-Dec
       '*I believe [that did the homework you].'

(15) a.  na-nun [ney-ka    Yenghi-lul  poa-ess-ta-ko]
        I-Top    you-Nom Yenghi-Acc see-Past-Dec-Comp
        mit-ess-ta.
        believe-Past-Dec
        'I believe [that you saw Yenghi].'

     b. *na-nun [Yenghi-lul    poa-ess-ta-ko      ney-ka]
        I-Top    Yenghi-Acc see-Past-Dec-Comp you-Nom
        mit-ess-ta.
        believe-Past-Dec
        '*I believe [that saw Yenghi you].'

To remedy the problem, after the VP movement to Spec CP, additional left-adjunction of the remaining IP to CP must take place only in the embedded clauses in (14b, 15b) for whatever reasons. For the purpose of discussion, this obligatory movement may provisionally be attributed to the following descriptive condition:

(16) The subordinate complementizer -ko 'that' must be positioned at the end of its clause to close it off.

Second, if the verbal complex in (5, 6) raises to C in syntax, as seen in (5′, 6′), the sequences in (13a,b) may have to be obtained by adjoining the subject na-n 'I-Top' to CP via rightward movement. So (17) can also be obtained by additional rightward movement of the object Yenghi in the embedded clause. The result is bad, however.

(17) *na-nun [po-ass-ta-ko      ney-ka    Yenghi-lul]
      I-Top   see-Past-Dec-Comp you-Nom Yenghi-Acc
      mit-ess-ta.
      believe-Past-Dec

To remedy the problem, after the rightward movement of the subject and the object, the lower CP containing the complex predicate in C must right-adjoin again to CP above *Yenghi-lul* perhaps to satisfy the condition (16). Recall, however, that it turned out that the rightward movement in question cannot be maintained.

Other previous approaches, for example, afterthought analysis and PF stylistic rearrangement, can hardly be maintained for the same reason found in handling the contrast between (13a) and (14b) and that between (13b) and (15b). It is not clear why afterthought or stylistic rearrangement should not be allowed in embedded contexts. In this case, to satisfy the condition (16), the remnant VP/IP/CP, as seen in (7, 7′), must right-adjoin to CP, which sounds quite *ad hoc*.

## 2.2 Word order variation under verbal inflection by head movement

There is another way to get the verbal complex in Korean; that is, verbal affixes are placed under the relevant functional categories, and then a verbal root under V moves up to C via I by head-movement in syntax. Thus, the verbal complex in question ends up being located in C, thereby containing its head movement history, which is roughly what Baker (1988) says with his Mirror Principle. Notice that the result is the same as that obtained by raising of the verbal complex up to C under the lexicalist hypothesis, as seen in (5′, 6′) in the previous subsection. The verbal complex in C is not likely to move leftward over the subject since there is no head that can host it. So the same problems noted there fully carry over to this approach as well.

One difference between the head movement option and the lexicalist option where the verbal complex stays in V in syntax, as in (5, 6) is that in deriving (13a,b), the former option involves only rightward movement of the subject and the object with no possibility of moving VP to Spec CP, which is available in the latter option and in fact more plausible.

In sum, it turns out that the SOV hypothesis is not able to deal with the free word order variation in Korean properly. This surprising result then indicates that SOV may not be a basic underlying word order for

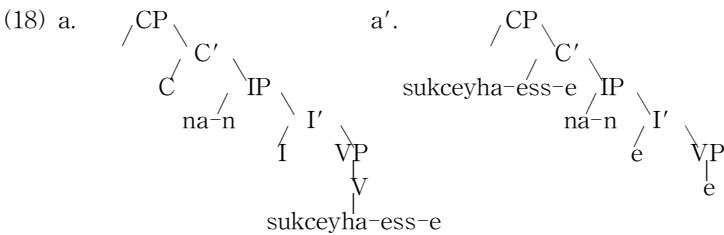Korean, contrary to our common recognition.

# 3. SVO: Head-initial structure

The result obtained in section 2 then calls for an alternative. In this section, I will show that the SVO hypothesis can do so. If this is right, Kayne's LCA can be maintained in Korean, thereby keeping the positive effects that it brings into the grammar, as mentioned in section 1.
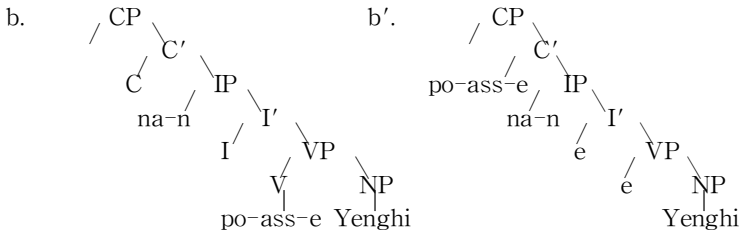
### 3.1 Word order variation under verbal inflection with lexicalism

Let us again discuss the derivation of sample examples from (2b) and (3e,f), repeated below again.

(2) b. sukceyha-ess-e            na-n.
        homework.do-Past-Dec   I-Top
(3) e. po-ass-e          na-n    Yenghi.
        see-Past-Dec   I-Top   Yenghi-Acc
    f. po-ass-e        Yenghi        na-n.
        see-Past-Dec Yenghi-Acc   I-Top

The discussion in this subsection will include a couple of possible derivations for given sentences, and be based on the SVO hypothesis with the head-initial structure, as given in (18a,b), under the lexicalist hypothesis.

(18) a.

b.

```
              CP
           /      \
                   C'
                 /    \
              C        IP
            na-n     /    \
                   I'
                 I'
               I/    \
              I        VP
                     /    \
                   V       NP
              po-ass-e   Yenghi
```

b'.

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              CP
           /      \
                   C'
                 /    \
           po-ass-e    IP
            na-n     /    \
                   I'
                 e        VP
                        /    \
                      e       NP
                             Yenghi
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To derive (2b), the whole VP containing the verbal complex *sukceyha-ess-e* 'homework.do-Past-Dec' can raise to Spec CP in (18a); or the verbal complex in question can alone raise to C in syntax via V-to-I-to-C as seen in (18a'). (In the former option, the relevant feature checking for the verbal complex will take place at LF plausibly in the CP area in conjunction with I-to-C raising. In the latter option, this raising will be for checking a certain feature in C.) Next, (3e) can be derived by adjoining *Yenghi* to VP, more specifically, vP, and then by moving the whole VP containing the verbal complex and the trace of *Yenghi* to Spec CP, in (18b) (recall that VP movement to Spec CP is also necessary under the SOV structure with a lexicalist hypothesis); or it can simply be derived by verbal complex raising to C as seen in (18b'). Finally, (3f) can be derived by raising the whole VP containing *po-ass-e Yenghi* 'see-Past-Dec Yenghi-Acc' to Spec CP in (18b); or by scrambling *Yenghi* to IP and then by moving the remaining VP containing the verbal complex and the trace of *Yenghi* to Spec CP in (18b) or simply raising the verbal complex alone to C as seen in (18b'). Specific theoretical committment aside, it may be that the movements here are associated with a sort of focus, producing some interpretive effect in the sense of Chomsky (2000).

   Notice that to derive the word orders in examples like (2b, 3e, 3f), this approach does not have to resort to the suspicious rightward movement or the afterthought analysis needed under the SOV hypothesis.

   Under the head-first structure, then, a question arises as to how the neutral order in (2a, 3a), repeated as (19a,b) below, can be derived.

(19) a. na-n    sukceyha-ess-e.
      I-Top   homework.do-Past-Dec
      'I did the homework.'
   b. na-n    Yenghi       po-ass-e.
      I-Top   Yenghi-Acc see-Past-Dec
      'I saw Yenghi.'

As for (19a), discussion is needed only when the verbal complex raises to C, as seen in (18a'). For this case, what I suggest is offered in (20).

(20) a. $[_{IP}$ na-n $[_{VP}$ sukceyha-ess-e]]
   b. $[_C$ [sukceyha-ess-e]$_i$ $[_{IP}$ na-n $[_{VP}$ t$_i$]]]  (=18a')
   c. $[_{CP}$ $[_{IP}$ na-n $[_{VP}$ t$_i$]]$_j$ $[_C$ [sukceyha-ess-e]$_i$ t$_j$]]

Raising the verbal complex to C as in (20b) results in (2b). Then the raising of the remaining IP containing the subject *na-n* to Spec CP as in (20c) derives (19a). Here IP raising to Spec CP may be taken to be a case of Topicalization triggered for focus purpose. Interestingly, Kim (2006) suggests an analysis of IP movement to Spec CP, attributed to Abels (2003) to explain the distribution of null C (Comp) in Korean as well as in English.[5]

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5) Yang (2006) offers a similar analysis for a Chinese sentence like (i).

  (i) Zhangsan  mai-le    shenme  ne?
    Zhangsan  buy-Asp  what     Comp
    'What did Zhangsan buy?'

For Yang, (i) is derived from (ii) by CP movement to another Spec CP as in (iii).

  (ii) [ne $[_{CP}$ Zhangsan  mai-le    shenme]]
     Comp    Zhangsan  buy-Asp  what
  (iii) $[_{CP}$ $[_{CP}$ Zhangsan  mai-le    shenme]$_i$ $[_{C'}$ ne t$_i$]]  (=(i))
       Zhangsan  buy-Asp  what         Comp

Under the current approach, (i) is derived by IP movement to Spec CP, as in (iv).

  (iv) $[_{CP}$ $[_{IP}$ Zhangsan  mai-le    shenme]$_i$ $[_{C'}$ ne t$_i$]]  (=(i))
      Zhangsan  buy-Asp  what         Comp

As for (19b), two possible derivations can be considered. The first possibility is to raise the verbal complex to C first, as seen in (21b) and then move the remaining IP to Spec CP, as shown in (21c).

(21) a. [$_{IP}$ na-n [$_{VP}$ poa-ess-e  Yenghi]]
     b. [$_C$ [po-ass-e]$_i$ [$_{IP}$ na-n [$_{VP}$ t$_i$ Yenghi]]]  (=18b′)
     c. [$_{CP}$ [$_{IP}$ na-n [$_{VP}$ t$_i$ Yenghi]]$_j$ [$_C$ [po-ass-e]$_i$ t$_j$]]

Another possibility is that when the verbal complex does not raise in syntax, as seen in (22a), the object *Yenghi* moves to a VP periphery, more specifically, Spec vP, thereby deriving the word order in question, as shown in (22b).

(22) a. [$_{IP}$ na-n [$_{VP}$ po-ass-e  Yenghi]]  (=18b)
     b. [$_{IP}$ na-n [$_{vP}$ Yenghi$_i$ po-ass-e t$_i$]]

The relevant feature that draws the movement of the object *Yeonghi* in question, I suggest, is a Case-related focus feature or an edge feature (Chomsky 2000, 2001).[6]

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6) On the other hand, in English there is no movement corresponding to (22b), *I Yenghi saw*, which indicates that this derivation has no purely grammatical justification in this language; that is, English lacks such focus feature or an edge feature.
   The movement in (22b) also produces an interesting consequence in long distance anaphor binding in Korean:

(i) a. Yenghi$_i$-nun caki$_i$-lul cohaha-n-ta.
       Yenghi-Top herself  love-Pres-Dec
       'Yenghi$_i$ loves herself$_i$.'
    b. Chelswu$_i$-nun [caki$_i$-ka     Yenghi-lul   cohaha-n-ta-ko]     malha-ess-ta.
       Chelswu-Top himself-Nom Yenghi-Acc loves-Pres-Dec-Comp say-Past-Dec
       '*Chelswu$_i$ said that himself$_i$ loves Yenghi.'

If the embedded clause in (ib) has moved from the complement position, which is on the right of the verb *malha-* 'say,' to the Spec vP, the anaphor *caki* 'himself' comes closer to its antecedent *Chelswu* for binding, an option unavailable in English (see also Uriagereka 1998: 210-213 for this discussion with Japanese data).

The current approach, however, also appears to allow ill-formed sentences like (14b, 15b), repeated below.

(14) b. *na-nun [sukceyha-ess-ta-ko            ney-ka]
        I-Top    homework.do-Past-Dec-Comp  you-Nom
        mit-ess-ta.
        believe-Past-Dec
        '*I believe [that did the homework you].'
(15) b. *na-nun [Yenghi-lul  poa-ess-ta-ko        ney-ka]
        I-Top    Yenghi-Acc  see-Past-Dec-Comp  you-Nom
        mit-ess-ta.
        believe-Past-Dec
        '*I believe [that saw Yenghi you].'

A possible way out of this trouble seems to be available in the approach under consideration. In the embedded clause, the remaining IP (containing the subject *na-n* 'I-Top' and the VP trace) can move to Spec CP in the name of Topicalization in satisfaction of the condition (16). Notice that compared to the current analysis, this IP movement possibility survives only in a far more complicated and less convincing way under the SOV hypothesis with a head-final structure, namely, (right) adjunction of IP/CP to CP, as pointed out in subsection 2.1.

## 3.2 Word order variation under verbal inflection by head movement

As discussed in subsection 2.2, there is another way to get the verbal complex in Korean; that is, verbal affixes are placed under the relevant functional categories, and then a verbal root under V moves up to C via I by head-movement in syntax. Thus, the verbal complex in question ends up being located in C, as seen in (18a', b'). Notice again that the result is the same as that obtained by raising the verbal complex up to C under the lexicalist hypothesis, as seen in (18a', b') in the previous subsection. So further discussion need not be repeated.

## 4. Conclusion

In this paper, I showed that the SOV hypothesis does not deal with free word order variation in Korean properly. I then showed that the SVO hypothesis with a head-first structure makes the desirable prediction for this variation. This surprising result indicates that SOV is not a basic underlying word order for Korean, but SVO actually is. Consequently, the derivations under the SVO hypothesis does not have to resort to suspicious rightward movement, PF stylistic rearrangement, afterthought, and so on. It was also surprising to see that the SOV hypothesis has more difficulties and complexities than the SVO hypothesis in deriving free word order in Korean. Most of all, the result obtained enables us to maintain the LCA, thereby allowing us to embrace some positive results; that is, elimination of the head-parameter, maintenance of the universal word order of SVO, restrictive relation between syntax and PF, and so on. In short, free word order variation in Korean, which is considered syntactic in this paper, opts for the SVO hypothesis. The surface SOV is therefore derived from the basic underlying SVO order, not from the commonly believed SOV order. Another remaining matter yet to be elaborated is concerned with identifying the cause of a variety of movements involved in deriving the free word order in Korean. In other words, the movements in question need to be justified in terms of satisfying some morphological requirement via checking. I hinted that focus is a relevant property here, a topic for my next research in depth.

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