

# Negation, Focus, and *do*-support in Korean

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Summer 1995  
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[Work still in progress—Comments appreciated!]

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## **0. Background**

### **0.0. Introduction<sup>1</sup>**

The appearance of *do* in English when the verb is separated from the inflectional elements of a sentence is a phenomenon which has always received a fair amount of attention in the syntactic literature. In a simple sentence such as (1a), the inflectional elements and the verb combine in some way to yield the past tense form *ate*. However, in

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<sup>1</sup>At the outset, I wish to thankfully acknowledge the great patience of Judy Yoo-Kyung Baek and Young-Sik Choi, who have tirelessly provided judgments and discussion of the data discussed here. The paper itself grew out of coursework done at MIT in the Spring 1995 courses *Topics in a Language Less Familiar* and the *Syntax/Semantics Generals Workshop*. Thanks in particular to Judy Yoo-Kyung Baek, Jonathan Bobaljik, Young-Sik Choi, Ken Hale, Michael Kenstowicz, Shigeru Miyagawa, David Pesetsky, Norvin Richards, and Ken Wexler for extremely useful commentary on earlier drafts of this work; of course, none of these people are responsible for any errors contained herein.

a negated sentence such as (1b), *not* separates the inflectional elements from the verb, and *do* appears bearing the tense that the verb could not. Similarly, in clefts like (1c), where the verb is elided, *do* realizes the “stranded” inflection.

- (1) a. Chelswu **ate** the bread.  
 b. Chelswu **did** not **eat** the bread.  
 c. It is eat the bread that Chelswu **did**.

This phenomenon of *do*-support has received various explanations, most of which involve some sort of interruption of the sequence Tense-Verb. Some interpret this interruption to be one in which a functional head prevents verb movement to Tense (*e.g.*, Chomsky (1993)), while others suggest that the interruption is one in which some element disrupts simple phonological adjacency (*e.g.*, Chomsky (1957), Halle & Marantz (1993), Bobaljik (1994), Lasnik (1994)). Here, we will adopt the latter proposal and suppose that *do*-insertion is a “PF process” which simply causes the pronunciation of a semantically contentless “default verb” (*do*) if a verbal affix must be pronounced without a verb phonologically adjacent.<sup>2</sup> This stance is supported by results concerning *do*-support in multiple negation structures discussed later in sections I.5 - I.7.

Korean shows *do*-support in circumstances very parallel to those just discussed for English, as is illustrated by the examples below. In (2a), a simple declarative is shown for comparison to the examples which follow. The negated sentence in (2b) shows the appearance of *ha* ‘do’ where the negative morpheme *ani* separates the inflectional elements from the verb stem, and (2c) shows the same phenomenon where focus particles block adjacency.

- (2) a. Chelswu-ka chayk-ul ilk-ess-ta  
*Chelswu-nom book-acc read-past-decl*  
 ‘Chelswu read the book’
- b. Chelswu-ka chayk-ul ilk-ci ani **ha**-ess-ta<sup>3</sup>  
*Chelswu-nom book-acc read-ci neg do-past-decl*  
 ‘Chelswu did not read the book.’

<sup>2</sup>This idea is basically the one discussed in Bobaljik (1994), which includes the stipulation that adverbs (or perhaps adjuncts generally) do not block “phonological adjacency.”

<sup>3</sup>This is the uncontracted form of the “long form negation” construction; it is generally also possible (in fact often preferred) to express *ani ha-* as *anh-* both phonetically and orthographically, but we will assume here that this is simply a phonological contraction of *ani ha*. Note that this contracted *anh-* form never appears in short-form negation situations, even when *ha* is functioning as a main verb, in sentences like (i):

(i) Chelswu-ka suwkcey-ul an-hayss-ta (\*anh-ass-ta)  
*Chelswu-nom homework-acc neg-do-past-decl*  
 ‘Chelswu did not do the homework.’

In the analysis which will be adopted, *ha* in (2) is present only to serve as a verbal support for the tense affix at PF, while *ani* occurs lower, as part of NegP. This presents potentially interesting questions about what the phonological and syntactic domains of this contraction are, which I will nevertheless need to set aside for future investigation. (Thanks to Jonathan Bobaljik for pointing this out to me).

- c. Chelswu-ka chayk-ul ilk-ki-nun **ha**-ess-ta  
*Chelswu-nom book-acc read-ki-focus do-past-decl*  
 ‘Read the book, Chelswu does.’

The terminology used in the literature for these constructions has not been entirely consistent, but here we will follow Kang (1988) (among others) in using the terms “Long Form Negation” (2b) and “VP-Focus” (2c).<sup>4</sup>

### 0.1. *do*-support structures are not biclausal

In this section, we sketch one commonly used argument that the long-form negation and VP-focus constructions in (2b-c) are not biclausal structures. This argument appears, among other places, in Kang (1988).

Before turning to the clausal structure of the negation and focus constructions, we will first review a useful diagnostic which will be valuable later in the discussion. Korean has two classes of predicates: nonstative verbs and stative verbs (the latter sometimes referred to as “adjectives”). For clarity of presentation, we will hereafter refer to stative verbs simply as “statives,” and nonstative verbs as “verbs” where a distinction is relevant. One way in which the two types of predicates differ is in the Case which they assign to their object; a verb will assign accusative case to its object, while a stative will assign nominative. Another difference, the one which concerns us here, is that statives are incompatible with the imperfective marker *-n(un)-*.<sup>5,6</sup>

Examples (3) and (4) below illustrate this incompatibility. In (3), we have the past and present forms of the verb *ilk* ‘read,’ both of which are perfectly grammatical. In (4), we have parallel examples for the stative *yeyppu* ‘pretty.’ We see that (4b) is ungrammatical, a result of the incompatibility between the imperfective marker and the stative.

- (3) a. Yenghi-ka chayk-ul ilk-**ess**-ta  
*Yenghi-nom book-acc read-past-decl*  
 ‘Yenghi read the book.’
- b. Yenghi-ka chayk-ul ilk-**nun**-ta  
*Yenghi-nom book-acc read-imp-decl*  
 ‘Yenghi reads the book.’

<sup>4</sup>The other negation construction, “short form negation,” is discussed in some detail in section I.

<sup>5</sup>Note that although the focus particle *-nun*, which appears in the focus constructions like (2c), is homophonous with the imperfective/present tense marker *-n(un)* discussed later, they are unrelated.

<sup>6</sup>The status of *-n(un)-* is not uncontroversial; it has traditionally been considered a “present tense” marker, although Kang (1988) and others suppose that it is an imperfective marker. Y.-S. Lee (1995) cites H.-S. Lee (1991), Martin (1992), and H.-K. Yang (1993) for discussion of this issue. I will use the term “imperfective marker” in the discussion that follows, though the status of this morpheme is basically irrelevant to the points made in this paper.

- (4) a. Yenghi-ka yeyppu-ess-ta  
*Yenghi-nom pretty-past-decl*  
 ‘Yenghi was pretty.’
- b. \*Yenghi-ka yeyppu-n-ta  
*Yenghi-nom pretty-imp-decl*  
 (‘Yenghi is pretty.’)

Incidentally, it is not the case that the present tense form of a stative verb does not exist; the intended meaning of (4b) is conveyed as in (5) below, where the offending imperfectivity morpheme is simply dropped.

- (5) Yenghi-ka yeyppu-ta  
*Yenghi-nom pretty-decl*  
 ‘Yenghi is pretty.’

This incompatibility between statives and *-nun-* does not cross clause boundaries, as the clearly biclausal examples in (6) are intended to show. In (6a), the matrix clause is past tense and the embedded stative is marked with the imperfective morpheme. As expected, (6a) is ungrammatical due to the stative-imperfective incompatibility. In (6b), the imperfective marker is on the matrix verb, separated from the stative by a clause boundary, and the sentence is grammatical.

- (6) a. \*Chelswu-nun [Sunhi-ka **yeyppu-n-ta-ko**] malha-**ess**-ta  
*Chelswu-topic [Sunhi-nom pretty-imp-decl-comp] say-past-decl*  
 (‘Chelswu said that Sunhi is pretty’)
- b. Chelswu-nun [Sunhi-ka **yeyppu-ess-ta-ko**] malha-**n**-ta  
*Chelswu-topic [Sunhi-nom pretty-past-decl-comp] say-imp-decl*  
 ‘Chelswu says that Sunhi was pretty’

Shifting gears now, consider sentences (7) below. As Kang (1988) notes, (7a) is uncontroversially biclausal, yet its similarity to the long-form negation construction in (7b) and particularly the VP Focus construction in (7c) is suggestive. In each case, the verb stem is followed by a particle (*ki* or *ci*), and then by a Case particle *-lul* or focus particle *-nun*.<sup>7</sup> By analogy to (7a), in which the lower clause appears to be nominalized and taken as the argument of the matrix verb *pala* ‘hope,’ it might be suggested that (7b-c) also exemplify biclausal structures in which *ha* ‘do’ takes a nominalized complement.

<sup>7</sup>In fact, even the “Case marker” which appears in (7b) seems to be serving as a focus particle, according to native speaker intuitions. The *-lul* morpheme in (7b) can be present or dropped, but when present there is a distinct focusing effect. The status of the Case marker in (7a) is less clear, although Judy Yoo-Kyung Baek (p.c.) suggests that if a focused meaning is intended, the *-lul* marker will not be dropped (although the presence of *-lul* does not imply focus). The focus function of Case marking particles has also been studied in recent work on “Case-stacking” by Carson Schütze (p.c.), who suggests that cases in Korean where nominal elements appear to be doubly Case-marked actually involve a focus particle in the shape of a Case marker.

- (7) a. Chelswu-nun Sunhi-ka **ttena-ki-lul** pala-n-ta  
*Chelswu-topic Sunhi-nom leave-ki-acc hope-imp-decl*  
 ‘Chelswu hopes that Sunhi leaves.’
- b. Chelswu-ka chayk-ul **ilk-ci-lul** ani ha-ess-ta  
*Chelswu-nom book-acc read-ci-acc neg do-past-decl*  
 ‘Chelswu did not read the book.’
- c. Chelswu-ka chayk-ul **ilk-ki-nun** ha-ess-ta  
*Chelswu-nom book-acc read-ki-focus do-past-decl*  
 ‘Read the book, Chelswu does.’ (=2c)

The hypothesis (which we will argue against) is that the structure of a *do*-support sentence like (7b) or (7c) is actually something like the diagram in (8), by analogy to truly biclausal structures like (7a).

- (8) [ $\emptyset$  *expletive*] [<sub>CP</sub> *Subject Object Verb*] (*Neg do*)

Recall that we started this section by discussing the incompatibility of the imperfective marker *-n(un)* and statives within the same clause, and we can now extend this result to probe the structure of the negation and focus constructions. First, we note that (9a), the long-form negation of a verb with the imperfective morpheme *-n(un)* on *ha* ‘do’, is acceptable, as expected. Notice that in (9b), however, a stative is not allowed. That this is not simple morphological incompatibility between statives and *ci* is shown in (9c), which differs from (9b) in the lack of a imperfective marker on *ha* ‘do.’ Parallel examples of the VP Focus construction are given in (10).

- (9) a. Yenghi-ka chayk-ul **ilk-ci** ani ha-n-ta  
*Yenghi-nom book-acc read-ci neg do-imp-decl*  
 ‘Yenghi does not read the book.’
- b. \*Yenghi-ka **yeyppu-ci** ani ha-n-ta  
*Yenghi-nom pretty-ci neg do-imp-decl*  
 (‘Yenghi is not pretty.’)
- c. Yenghi-ka **yeyppu-ci** ani ha-ta  
*Yenghi-nom pretty-ci neg do-decl*  
 ‘Yenghi is not pretty.’
- (10) a. Yenghi-ka chayk-ul **ilk-ki-nun** ha-n-ta  
*Yenghi-nom book-acc read-ki-topic do-imp-decl*  
 ‘Read the book, Yenghi does.’
- b. \*Yenghi-ka **yeyppu-ki-nun** ha-n-ta  
*Yenghi-nom pretty-ki-focus do-imp-decl*  
 (‘Be pretty, Yenghi does.’)

- c. Yenghi-ka **yeyppu**-ki-nun ha-ta  
*Yenghi-nom pretty-ki-focus do-decl*  
 ‘Be pretty, Yenghi does.’

The results in (9b) and (10b) are unexpected on the view that these constructions are biclausal, since the stative would be separated from the imperfective marker by a clause boundary and thus should not show the observed incompatibility.

The conclusion which several authors in the Korean syntax literature have drawn—and which we shall draw here—is that long-form negation and VP Focus constructions are monoclausal structures, suggesting that the appearance of the verb *ha* ‘do’ is indeed due to a morphological “support” effect.

## I. Korean negation—unification and analysis

There are two separate negation constructions in Korean, one often called “short form negation” and the other “long form negation.” Short-form negation involves the negative prefix *an-* placed before the verb, as shown in (11a). Long-form negation, as we have seen in the preceding section, involves the verbal suffix *-ci*, a post-verbal negator *ani*, and *do*-support. The long-form negation construction is shown in (11b) (=2b).

- (11) a. Chelswu-ka chayk-ul **an**-ilk-ess-ta  
*Chelswu-nom book-acc neg-read-past-decl*  
 ‘Chelswu did not read the book.’
- b. Chelswu-ka chayk-ul ilk-ci **ani** **ha**-ess-ta  
*Chelswu-nom book-acc read-ci neg do-past-decl*  
 ‘Chelswu did not read the book.’

Opinions in the literature as to the underlying forms of (11a) and (11b) have been mixed; in fact, there is a fairly long-standing debate over just how similar the underlying forms should be.<sup>8</sup> One stance on the issue holds that long-form negation and short-form negation have distinct underlying structures. For example, Cho (1994) and Yoon (1994) assume that short-form negation is formed by lexically affixing *an-* to the verb, while long-form negation is formed in the syntax. Kim (1992) tentatively suggests that the short-form negator *an* is a right-adjoined adverb over which the verb moves, without suggesting an analysis of long-form negation. On the other side of the issue, Yi (1994) and Choi (1985) propose that long- and short-form negation originate from the same deep structure; Choi argues for this view on mainly phonological and semantic grounds, and

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<sup>8</sup>In addition to the sources cited in the text, see also Choi (1985) for a more comprehensive collection of references to discussions of the issue of the underlying forms of long- and short-form negation dating back to 1967.

Yi proposes an analysis where *an* is the head of NegP, short-form negation involves verb-movement through Neg°, and long-form negation is a sort of participle construction, drawing an analogy between English *-ing* and Korean *-ci*.

Here, an attempt is made to unify long- and short-form negation in a new and somewhat different way, taking some evidence from Korean acquisition as our starting point.

### I.1. Some interesting negation data from child Korean

Cho & Hong (1988) report an investigation of child acquisition of Korean, with particular focus on the development of negation. Their study indicates that children use short-form negation much earlier than long-form negation, although the children do understand long-form negation. In fact, during an elicited repetition task, Cho & Hong found that children, when given a sentence containing long-form negation, would repeat the sentence back, converted into short-form negation. During the time period of interest, then, the children were using only short-form negation.<sup>9</sup>

Cho & Hong (1988) also report a very interesting error that young children make when using short-form negation. In adult Korean, the short-form negation prefix *an-* is strictly a verbal prefix, never appearing anywhere except before a verb. The children (around age 2), however, were observed to place *an-* before the object, as shown in the examples below (representative examples, adapted mainly from Cho & Hong's (10)). Note that these examples, although marked with an asterisk to indicate their ungrammaticality in adult Korean, were actually recorded in child speech.

- (12) a. \*na    **an**    pap    mek-e  
           I        **neg**    rice    eat-decl  
           ('I do not eat rice')
- b. \*Hoyeni-nun **an**    son    takk-ko        siphkuna  
       Hoyeni-top **neg**    hand    wash            want-to  
       ('Hoyen does not want to wash hands.')
- c. \***an**    phikul coa-hay  
       **neg**    pickle like-decl  
       ('I do not like pickles')
- d. \***an**    manhi kuly-ess-e  
       **neg**    many draw-past-decl  
       ('I did not draw many (pictures)')

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<sup>9</sup>David Pesetsky (p.c.) notes that this seems to be exactly counter to data from the acquisition of English, where the overuse of *do* is fairly well documented.

- e.     \***an**   mak   ule  
           **neg**  much cry  
           ('I) do not cry much')
- f.     \***an**   Gemco       ka  
           **neg**  Gemco       go  
           ('I) do not go to Gemco')
- g.     \***an**   kyelan       mek-e  
           **neg**  egg    eat-decl  
           ('I) won't eat (my) eggs.' [from Kim (1992)]

Cho & Hong (1988) report that their younger subjects “predominantly place the negative particle before the whole verb phrase,” although Kim (1992), discussing the same phenomenon, suggests that it actually occurs relatively rarely compared to the correct *Object an-Verb* order. Whether predominant or not, the phenomenon nevertheless appears to be real.

One possible explanation, briefly discussed in Kim (1992), is to suppose that the *verb-object* complex has been misanalyzed by the children as a single verb. However, most of the examples in (12) are unlikely candidates for such an analysis; for example, is it probable that the child who uttered (12c) has a lexicalized verb specifically for liking pickles?

A second possibility is that the children have simply overextended the availability of incorporation in their language.<sup>10</sup> There are a couple of reasons to reject this hypothesis, however. First, adult Korean does not seem to have a real object-incorporation process. There exist predicates which consist of a verbal noun and the verb *ha* ‘do’ (such as *kongpwu ha* ‘study’), but these pattern as if the verbal noun were really an object.<sup>11</sup> Under this interpretation of the facts, children must actually go out of their way to contradict the input data; if *an-* in adult Korean is simply a verbal prefix (perhaps attached by verb movement through a functional head), the *an-Object Verb* order could

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<sup>10</sup>One bit of potentially supporting evidence for the incorporation hypothesis is that the misplacement of *an-* may correlate with a lack of a case marker on the object, as suggested in Baek (1995). The claim is that although children often drop the accusative case marker in all contexts, accusative case never appears on the object when *an-* is misplaced. (Judy Baek, p.c.). In this connection, though, it is worth pointing out that in the studies cited in Baek (1995), namely Cho & Hong (1988) and Kim (1992), only a very few examples of negative sentences were actually presented. In fact, all of the negative child utterances in both papers lacked accusative case marking on the object regardless of whether *an-* was misplaced or not. Moreover, neither paper mentions such a correlation specifically. Although Kim (1992) discusses the occurrence of accusative case marking in child utterances generally, it would be particularly useful to know how often (and where) the accusative case marker is used in negative contexts by children in the relevant age range.

<sup>11</sup>These constructions are also discussed briefly in section II.4. As an example, when short-form negating the verb *kongpwu ha* ‘study’ in adult Korean, the negative prefix *an-* appears before *ha* and not before *kongpwu* (that is, *kongpwu an-ha*). Incidentally, Kim (1992) reports that one of the children she discusses negated this predicate as \**an kongpwu-hay*.

only be produced if the children (counter to their environmental evidence) spontaneously perform object incorporation.<sup>12</sup>

The second reason to think that an overgeneralization of incorporation seems implausible is that there is at least a slight indication that children also can place *an-* before specific/definite objects, as shown in (12f-g), as well as complex elements such as in (12b). These facts seem to point away from an incorporation analysis, in the sense of Baker (1988). However, much more careful study of actual child transcripts will be required before this point can be made with any certainty.

A third possible explanation for the children's errors in (12) is that *an-* is an adverb, as suggested in Kim (1992). She proposes that in adult Korean, *an-* is right-adjoined to VP, and that the verb moves up over *an-* to a higher inflectional node. What the child learners of Korean do incorrectly, she suggests, is freely allow both left- and right- adjunction of adverbial *an-* to VP. Once they learn that only right-adjunction is available in the adult language, the adult word order is achieved, but until this is learned, sentences like those in (12) are possible. However, Baek (1995) argues that this is problematic from the point of view of the child learning the language, as it is not clear how a language learner would re-set this parameter. Under the assumption that learning is error-driven (see, *e.g.*, Gibson & Wexler (1994)), there would be no need for the child to alter his/her grammar once s/he can parse sentences containing either left- or right-adjoined adverbial *an-*. That is, even though the only order the child ever hears results from having *an-* right-adjoined, there is nothing which indicates that it is wrong also to allow *an-* to be left-adjoined. We accept this argument here, and move forward with a different analysis of the misplacement of *an-* in child Korean.

The analysis proposed and discussed in the next section is that utterances like those in (12) are evidence that adult Korean obligatorily (at least in negative contexts) shifts the object out to a position above NegP, preceding the negation *an-*. It is this movement which child speakers of Korean at least occasionally fail to execute.

## **I.2. Acquisition evidence: negative object shift<sup>13</sup>**

Korean is a strictly head-final language, so the fact that *an-* can precede the object in children's production poses an interesting problem. If we were to suppose that *an-* heads NegP, and that NegP dominates VP, we would expect *an-* to be to the right of the

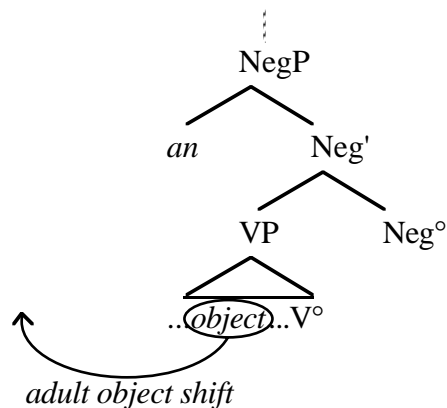
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<sup>12</sup>Thanks to Ken Wexler (p.c.) for helping me see a concise way to say this.

<sup>13</sup>The ideas here were hatched during an incredibly useful conversation between Ken Wexler, Judy Baek, and myself. From the same starting point, these ideas have been expanded in a slightly different way in Baek (1995), although the present analysis shares several common details to the analysis presented there.

verbal head in their respective base positions; on these assumptions, it is difficult to derive the *an-Object Verb* word order in child speech.<sup>14</sup> Here, I propose that we can more elegantly capture the facts by supposing that *an-* occupies the specifier of NegP and that the direct object shifts to a position left of it, as shown in (13).

(13)



Notice that by supposing that *an-* occurs in SpecNegP, we ensure that *an-* precedes the object in their respective base positions. We then explain the adult order of short-form negation by supposing that the object shifts leftward to some position above negation. The children's occasional failure to perform this movement derives the observed word-order facts in (12). Looking ahead a bit, putting *an-* in SpecNegP also allows for both the long- and short-form negation structures to share the same morpheme and structure.

The placement of the overt negative element in SpecNegP is not an unusual claim, crosslinguistically. Pollock (1989) presents arguments for placing English *not* and French *pas* in SpecNegP, primarily based on implications of the Head Movement Constraint. Jung (1991) uses arguments from the available interpretations of extraposed *wh*-adjuncts to argue that *ani* is in SpecNegP in Korean specifically.<sup>15</sup>

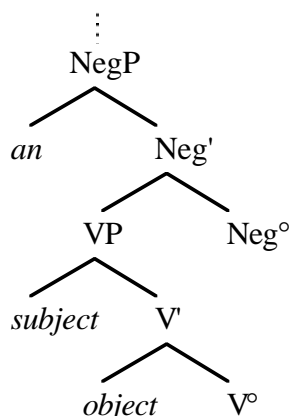
<sup>14</sup>There are certainly possibilities, but none are very attractive. For example, one might propose that NegP is head-initial in an otherwise entirely head-final language, and rely on the same mechanism of object shift which plays a part in the proposal here. Or, one might suggest that the verbal head moves up through the functional categories, adjoining to the Neg° head in the process (a fairly common view in the literature on adult Korean syntax), and that children are somehow able to move the verb over the Neg° head in violation of the Head Movement Constraint (Travis (1984)), a proposal which is against the spirit of the "Continuity Principle" of Pinker (1984) stating that children's grammars do not violate any principles of UG.

<sup>15</sup>Note that the proposal here is not compatible with Jung's analysis, but the specific arguments concerning SpecNegP are unaffected.

### I.3. The Split-VP Hypothesis, and the placement of NegP.

It is interesting to juxtapose the commonly assumed “VP-internal subject” hypothesis (Kuroda (1988), Sportiche (1988)), which supposes that the subject’s initial position is in the specifier of VP, with the fact that, as Cho & Hong (1988) report, children do not ever produce *an-Subject Verb* order with unergative or transitive verbs.<sup>16</sup> If we assume the “VP-internal subject” hypothesis to be true, we must likewise assume that NegP originates in a structural position higher than the base-position of the subject, as shown in the tree in (14) below.

(14)



Because children do not produce *an-Subject Verb* or *an-Subject Object Verb* sentences, we are forced to suppose that the subject moves out of the VP to a position higher than NegP, even for children who may nevertheless sometimes fail to move the object. Conceptually, this presents a problem: what is the deficiency that children have which does not affect subject-raising, while at the same time sometimes causes them to fail to shift the object? If these movements are as fundamentally similar as they appear to be, can they be differentiated in some non-stipulative way such that one might plausibly say 2-year-old learners of Korean have control of one movement and not the other? This looks to be a difficult task, at best.<sup>17</sup>

There is, however, an alternative to the “VP-internal subject” structure which has recently been gaining support in the literature, namely the “Split-VP” structure of

<sup>16</sup>They do, however, produce *an-Subject Verb* order with unaccusative verbs, according to Kim (1992).

<sup>17</sup>Baek (1995) addresses this point, suggesting that (according to Kim (1992)) there is already a clear distinction between subject and object with respect to the acquisition of case marking. Children acquiring Korean control the subject (nominative) marker significantly earlier than they control the object (accusative) marker. She concludes that it is not unreasonable to say that acquisition of the two movements is independent. On this view, it is somewhat coincidental that no *an-Subject Verb* or *an-Subject Object Verb* sentences occur; they are not seen because the children were sampled too late, after they had already acquired the nominative case marking.

Koizumi (1993, 1995).<sup>18</sup> The essence of the proposal is that the object occupies a position in a lower verbal projection, while the subject occupies the specifier of a higher verbal projection. Some of these proposals also suggest that object agreement-related positions (such as AgrOP) are occur between the two VPs (Bobaljik (1995), Koizumi (1995)), with the result that, even when an object raises to its agreement position, it has not raised above the base-position of the subject.<sup>19</sup>

What is important about the “Split-VP” structure for the present discussion is that it introduces a location between the subject and object VPs where NegP can plausibly occur. If we assume NegP is between the subject and the object VP, we no longer need to imagine that children who can fail to shift an object must nevertheless always shift the subject; because the subject is already outside SpecNegP in base-position, the fact that children do not produce *an-Subject Verb* sentences need not depend on subject movement. The (obligatory) adult object shift is then a movement to a position above SpecNegP, for example, into the Spec of an Agr phrase above NegP but below the subject.<sup>20</sup>

The particular version of the “Split VP” hypothesis we adopt here is that proposed in Chomsky (1995), where a “light verb” takes the subject in its specifier. The object VP is then a complement to the upper “light” VP (notated *vP*).<sup>21</sup> In the framework of Chomsky (1995), there are no agreement (“Agr”) phrases intervening between *vP* and VP because Agr phrases become superfluous under the feature-attraction system outlined there; the syntactic positions which they afforded in previous analyses are instead made available by admitting multiple specifiers (*e.g.*, to VP and *vP*). As we will see later when discussing multiple negation structures, this view also allows a simplification of some issues of categorial selection.

Pursuant to the discussion above, the basic structure which I propose here for the lower part of the tree (of example (11a), short form negation) is that shown below in

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<sup>18</sup>This proposal has appeared under several names in recent literature. Among them are the “Split-VP” hypothesis of Koizumi (1993, 1995), the “Stacking” hypothesis in Bobaljik (1995), the light-verb structures presented in Chomsky (1995), the “Event Phrase” of Harley (1995), the “Predication Phrase” constructions of Bowers (1993), and the “Inner Aspect” of Travis (1992). Kratzer (1994) also makes use of this structure, discussing the semantics of the “Voice Phrase.”

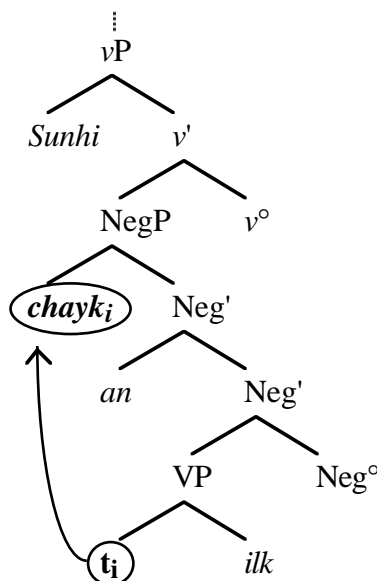
<sup>19</sup>This point is discussed extensively in Bobaljik (1995).

<sup>20</sup>Note that this poses obvious questions regarding the distribution of Negative Polarity Items, a topic to which we return in section I.8.

<sup>21</sup>Several of the “Split-VP” proposals do not consider the subject XP to be a VP; for example, Kratzer calls it VoiceP, Harley argues it is EventP, and Bowers suggests that it is PredP. I remain basically neutral, but I will call it *vP* following the notation of Chomsky (1995).

(15).<sup>22</sup> The subject  $vP$  and the object VP are separated by a NegP. In order to remain neutral among the related proposals, the movements involved in Case checking of the object and of the subject to satisfy the Extended Projection Principle (“EPP”) are not shown.<sup>23</sup>

(15)



The hypothesis which drives the syntactic analysis in (15) is that NegP has a strong nominal feature which must be checked overtly.<sup>24</sup> Thus, we assume that the object moves from VP into a second (outer) SpecNegP, checking the nominal features of Neg°.<sup>25</sup> This movement is very similar in character to the movement of the subject out of

<sup>22</sup>Note that the “bar-notation” used in (15) and subsequent trees simply differentiates “maximal” (XP), “nonmaximal” (X°), and other (X'). The repeating occurrences of X' nodes indicate multiple specifiers, not adjunctions.

<sup>23</sup>In particular, the “Split-VP” proposals vary as to whether objective Case checking occurs with  $v^\circ$  or with  $V^\circ$ , and whether nominative Case checking occurs with  $v^\circ$  or  $T^\circ$ . Because nothing discussed here relies on these decisions, I see no reason to favor one over the other in the present context.

<sup>24</sup>Note that in adult Korean, under the analysis being proposed, all objects must shift up to SpecNegP regardless of whether they are actually DPs; in particular, PP objects must shift. However, following a discussion in Chomsky (1995) concerning the similar phenomenon of pied-piping *whose* along with a moved [+wh] feature, I suggest that in cases with a PP object, it is actually the object of the preposition which is being attracted to SpecNegP. Because Korean does not allow preposition stranding, the entire PP must shift for phonological convergence. (Thanks to Ken Wexler (p.c.) for pointing this out.)

<sup>25</sup>One initially attractive derivational motivation for the placement of *an* in SpecNegP is to assume that Neg° (here phonologically null) has a strong feature, [F], which is checked by lexical element *an*. Thus, once Neg° and VP have been merged, a strong feature remains to be checked, and can only be checked by merging *an*. This idea, in a slightly different form, was also proposed in Jung (1991). A potential problem with this analysis is that it appears to equally allow a derivation in which the object moves first before *an* is Merged, which would yield an *an-Object-V* word order. This might be taken as evidence that the computational system will Merge rather than Move when both are options. For the present purposes, I simply consider the Merging of NegP to be a two-step process by lexical stipulation. Notice that this same

vP into SpecTP to satisfy the EPP, under the interpretation of the EPP suggested in Chomsky (1995), namely that it is driven by a strong nominal feature of T°.

We will assume that T° (*e.g.* *-ess*) is a verbal suffix, which ends up phonologically adjacent to the verb, since only phonetically null heads intervene.

To quickly recap the discussion of short-form negation to this point, we have analyzed short-form negation as involving a NegP placed between vP and VP which obligatorily attracts an object into its outer specifier. The negative morpheme *an-* occurs in (the inner) SpecNegP.

#### I.4. Unifying Long-Form Negation and Short-Form Negation

Now that we have examined short-form negation, we turn to the derivation of long-form negation. Recall that long-form negation involves several elements: the verbal nominalizing suffix *-ci*, the negation morpheme *ani*, and the dummy verb *ha* ‘do,’ as shown in (11b), repeated below.

- (11) b. Chelswu-ka chayk-ul ilk-ci **ani** ha-ess-ta  
*Chelswu-nom book-acc read-ci neg do-past-decl*  
 ‘Chelswu did not read the book.’

In the preceding discussion, we concluded that adult Korean negation has an obligatory object shift operation, and we supposed that this shift is driven by some strong nominal feature of the Neg° head. The goal of this section is to show that long-form negation can be derived from essentially the same structure as that proposed for short-form negation above.

The centerpoint of long-form negation under this view is the *-ci* morpheme. This morpheme is often called a “nominalizer” in descriptions of Korean negation, and so we might reasonably suppose that it carries some sort of nominal feature.<sup>26</sup> Let us suppose that *-ci* is a head which selects a VP complement, and *-ci* itself is selected by a Neg° head.<sup>27</sup>

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problem is faced by any analysis of negation (*e.g.*, French negation) which supposes the base-generation of a negative element (like *pas*) in SpecNegP.

<sup>26</sup>Note that if this analysis is cast in terms of Agr phrases (counter to Chomsky (1995), who suggests that Agr phrases are superfluous), *ci* can be considered to be a nominal Agr°. This is more or less the analysis of *ci* suggested by Yi (1994), who makes an analogy to English *-ing* (itself an analogy to an analysis of participles attributed to Kayne), although the mechanism she suggests for deriving long-form negation differs from those of the present analysis.

<sup>27</sup>It should be pointed out that it is not entirely clear what role “selection” plays in a minimalist framework such as that explored in Chomsky (1993, *et seq.*). In the present work, I assume that a lexical item can “select” another, where the penalty for failure is an LF crash. In this sense, selection is assumed to be basically semantic in nature, reminiscent of “s-selection” as discussed in Grimshaw (1981), Pesetsky (1982), Woolford (1981).

Before continuing, let us briefly move onto a slight tangent. Notice that in long-form negation, (11b), the morpheme expressing negation is not *an-* (as in short-form negation), but *ani*. Generally, *ani* is considered to be a freestanding word, while *an-* is considered to be a verbally bound morpheme. For example, *ani* standing alone expresses ‘no,’ while *an-* cannot occur alone. There are two possibilities for the origin of *ani* under this analysis of negation: either (i) *ani* is lexically generated in SpecNegP in place of the short-form negation *an-*, or (ii) the same *an-* morpheme occupies SpecNegP in both forms of negation, while *-i* occupies a different position which ends up phonologically right-adjacent to *an-*. Although there is no compelling evidence choosing between them, option (ii) seems to provide the most elegant account, and it is this option we will assume in the structures ahead; that is, we assume that the Neg° head can be either *-i* (for long-form negation) or  $\emptyset$  (for short form negation). The syntax of long-form negation to be discussed immediately below ensures that Neg° ends up phonologically adjacent to the *an-* in SpecNegP. Because the Neg° head in long- and short-form negation has differing selectional properties, we can already conclude that they are different lexical items; thus, supposing they have differing phonological realizations involves no further complications. Further, this view allows us to consider *an* to be the single lexical item which appears in SpecNegP, avoiding the need to postulate another lexical item *ani* to occupy SpecNegP just in case the long-form negation Neg° head is chosen.

Returning to the main discussion, we left off by supposing that *-ci* in long-form negation is nominal in character, selected by the long-form Neg° head (*-i*), and selecting a VP. Notice that such a phrase, having nominal features, will be capable of satisfying the requirements which drove the object shift of short-form negation. Further, under the assumption that movement must be the shortest which is able to check an uninterpretable feature (a target with an uninterpretable feature attracts the closest feature with which it can check, in the system outlined in Chomsky (1995)), it follows that the phrase headed by *ci* will be attracted into the outer SpecNegP to check the strong nominal feature of Neg°. <sup>28</sup> This occurs because the XP headed by *ci* (I will call it *ciP* here, but it might be simply a DP) is structurally closer to Neg° than the XP (the object) contained within it, in the specifier of *ciP*. <sup>29</sup> Taking this *ciP*-shift into account, the correct word order for long-

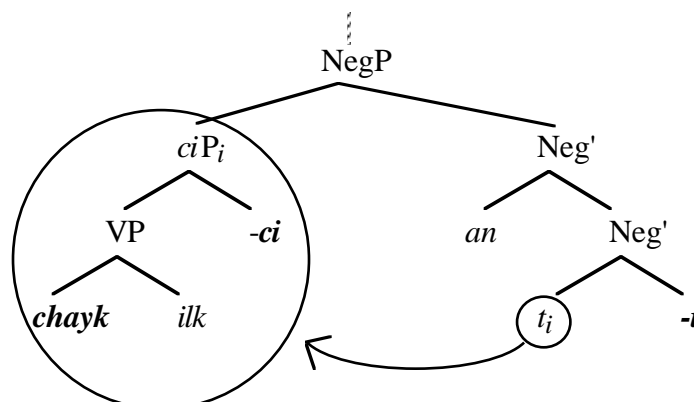
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<sup>28</sup>David Pesetsky (p.c.) points out that, since both the Neg° head and the *ci* marking on the verb distinguish long-form negation from short-form negation, it isn’t necessary to consider the feature checked between the *ci* head and the Neg° head to be a nominal feature. It could as easily be an arbitrary [CI] feature, for example. However, one reason for thinking that *ci* is indeed a nominal element is that accusative case morphology, which generally can only attach to nominals, can be found following *ci* in long form negation constructions. For simplicity, I will therefore continue to assume that both “long-form” and “short-form” Neg° require checking of a nominal feature.

<sup>29</sup>Notice that this appears to be an instance of the “A-over-A Principle” investigated in Ross (1967) although rarely discussed in more recent syntactic literature. (Thanks to David Pesetsky for bringing this to my attention).

form negation is derived. Below in (16) is a subtree illustrating the suggested structure for long-form negation.<sup>30</sup>

(16)



Quickly touching base with issues of child acquisition of Korean, it should be noted that although we have an answer for why children can produce short form negation sentences where *an-* precedes the object, we do not have an answer to the separate question of what causes long-form negation to appear about a year later in child speech than short-form negation. If the analysis above is correct, the two constructions differ in which nominal phrase moves into SpecNegP, but not in the fact that something moves there. That is to say, we cannot suggest that it is some difficulty with movement which causes the delay, since both forms require movement of basically the same character. It is interesting to notice that the age at which children learning Korean make negation misplacement errors is about the same as that at which children learning other languages are in the Optional Infinitives stage (Wexler (1994)), and that the late emergence of long-form negation for Korean children may correlate with the later emergence of the English passive constructions.<sup>31</sup> It is difficult to pinpoint what exactly the trouble is with long-

<sup>30</sup>Notice that this also requires the verb to remain in place inside the VP at SPELLOUT, at least in these long-form negation structures where the VP is nominalized. Whether the verb moves overtly in non-negative contexts is not clear from this data, although I am not familiar with compelling reasons to think that it does. Ura (1995) assumes that the verb does move, based on an analysis in Park (1991), but Park does not directly argue the issue.

<sup>31</sup>Ken Wexler (p.c.) notes that there could be a distinction between simple movement of a nominal (in short-form negation) and a complex movement of an entire phrase headed by *ci* and containing the entire predicate. One might propose that children are able to do simple movements before complex ones, possibly explaining both the delay in Korean long form negation constructions and, for example, English passive constructions. A difference between the English passive and Korean long-form negation with respect to child language acquisition is that, while English-speaking children have trouble interpreting passive structure until a quite advanced age, Korean-speaking children understand long-form negation long before they are able to produce such structures. This might simply be due to the fact that, while Korean long-form negation contains the negative morpheme to give the children a clue to the negative force of the utterance, English passive involves an exchange of roles which is much easier to misinterpret. A suggestion was made by Baek (1995), who analyzed *-ci* as a complementizer, that children use long-form negation only when they control the grammar of embedded clauses (although note that considering *-ci* to be a

form negation, but it is a question which needs consideration. Further discussion of this issue is left for future research.

### I.5 Multiple negation: a more general *do*-support.

A common interpretation of English *do*-support is that *do* “supports” a stranded Tense morpheme, but even in English it has been suggested (*e.g.*, by Mitchell (1994)) that *do* can support other verbal morphology as well.<sup>32</sup> Korean also seems to have a fairly general mechanism for *do*-support, as can be seen in the following two examples of multiple negation adapted from Kang (1994). In each of the two examples, we see multiple occurrences of *do*-support in places where there is no stranded Tense head.

- (17) a. Chelswu-nun chayk-ul ilk-**ci ani ha-ci ani** ha-ess-ta  
*Chelswu-top book-acc read-ci neg do-ci neg do-past-decl*  
 ‘Chelswu didn’t not read the book’ (=‘Chelswu read the book’)
- b. Chelswu-nun chayk-ul ilk-**ci ani ha-ci ani ha-ci ani** ha-ess-ta  
*Chelswu-top book-acc read-ci neg do-ci neg do-ci neg do-past-decl*  
 ‘Chelswu didn’t not not read the book’ (=‘Chelswu didn’t read the book’)

It appears that *ha* ‘do’ in Korean supports all types of stranded verbal affixes. In long-form negation, I suggest that *-ci* is a verbal affix of the sort which requires support where not right-adjacent to a verb. Thus *ha* ‘do’ is inserted to support this negative nominalizer (rather than Tense) in the contexts shown in (17).

Note that the interpretation of *ha* ‘do’ insertion which I assume here is a strictly PF-oriented one; when the syntax completes a structure for Spell-Out in which there is a verbal affix not next to a verb, the default verb *ha* ‘do’ is simply pronounced along with the affix. Thus, I assume that *ha* ‘do’ never exists in the syntax (in its role as a supporting verb), but is simply a PF-artifact. This view is supported by the examples in (17) where *ha* ‘do’ appears where no plausible head would be, in conjunction with the earlier results from section 0.1 indicating that these structures are monoclausal.

### I.6. Multiple short-form negation—NegP selection and *do*-inducing affixes

Unlike long-form negation, short-form negation cannot be iterated, as is indicated by the ill-formedness of (18) below.

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complementizer does not fit with the analysis being presented here, and particularly not with the results from section 0.1).

<sup>32</sup>Her particular suggestion was that *do* can support a [+Neg] feature in the head of NegP, but for reasons more complicated than are explicable in a footnote.

- (18) \*Chelswu-nun chayk-ul **an-an**-ilk-ess-ta  
*Chelswu-top book-acc neg-neg-read-past-decl*  
 ('Chelswu didn't not read the book.')

The explanation of this fact could be as simple as a morphological restriction of the kind suggested in Yoon (1994), who offers a principle of Korean morphology that simply says “no syntactic affix is duplicated.”<sup>33</sup> However, besides being very stipulative, this approach also seems incorrect in light of the fact that Korean “great past” constructions are formed by reduplicating the past tense morpheme, as shown in (19) below.<sup>34</sup>

- (19) Chelswu-nun chayk-ul ilk-**ess-ess**-ta  
*Chelswu-top book-acc read-past-past-decl*  
 ‘Chelswu had read the book’

A more revealing way to view the impossibility of double short-form negation is through the selectional properties of the Neg<sup>o</sup> heads, which provides a fairly straightforward explanation.

There are two Neg<sup>o</sup> heads available in the lexicon, under the story proposed so far. One has phonological realization *-i* and one has no phonological realization; each is associated with a different form of negation. If we suppose that the “long form” Neg<sup>o</sup> *-i* obligatorily selects for a *ci*P, while the “short form” Neg<sup>o</sup>  $\emptyset$  obligatorily selects for a VP, we are well on our way to deducing the observed pattern. The last lexical supposition needed is that *ci* can take either a VP or a NegP complement.<sup>35</sup>

Now, let us see how this actually ends up giving us the appropriate results. First, we consider the case of double long-form negation, as in (17a) below.

- (17) a. Chelswu-nun chayk-ul ilk-**ci** **ani ha-ci ani** ha-ess-ta  
*Chelswu-top book-acc read-ci neg do-ci neg do-past-decl*  
 ‘Chelswu didn't not read the book’ (=‘Chelswu read the book.’)

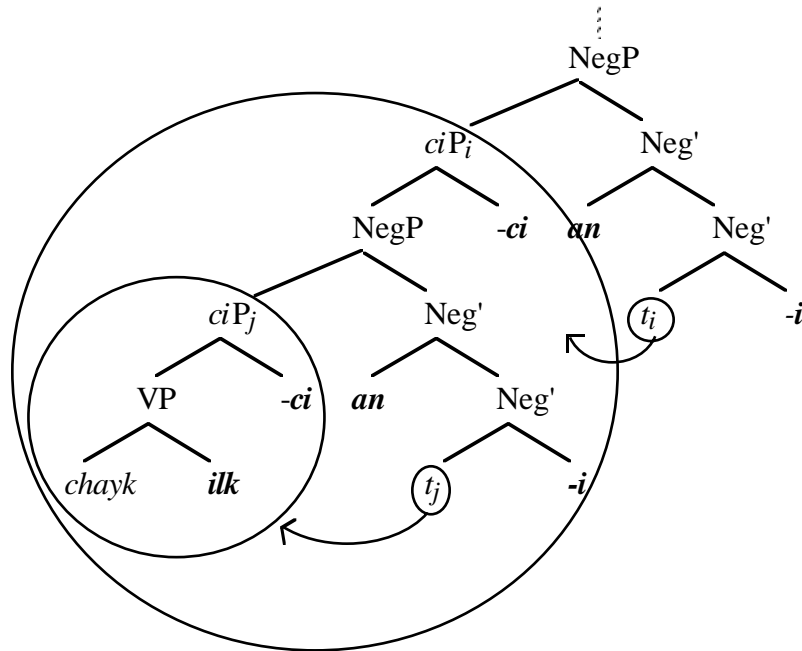
The structure of this construction is shown in (20). Notice that in both instances, *-i* takes *ci*P complements, while *ci* takes either VP or NegP complements.

<sup>33</sup>A similar but even more stipulative (yet, more empirically accurate) constraint was suggested by Choi (1985), who simply proposes the constraint that “a sentence already short-form negated cannot be short-form negated again.”

<sup>34</sup>Though, to be fair, given the fairly pervasive homophony among Korean function morphemes (like *-nun*), it is not entirely certain that both instances of *-ess-* in (19) are the same morpheme.

<sup>35</sup>Jonathan Bobaljik (p.c.) points out that this pattern of selection is the same as that for  $\nu$ P; this might in fact be evidence for considering NegP and  $\nu$ P to be of the same categorial type.

(20)



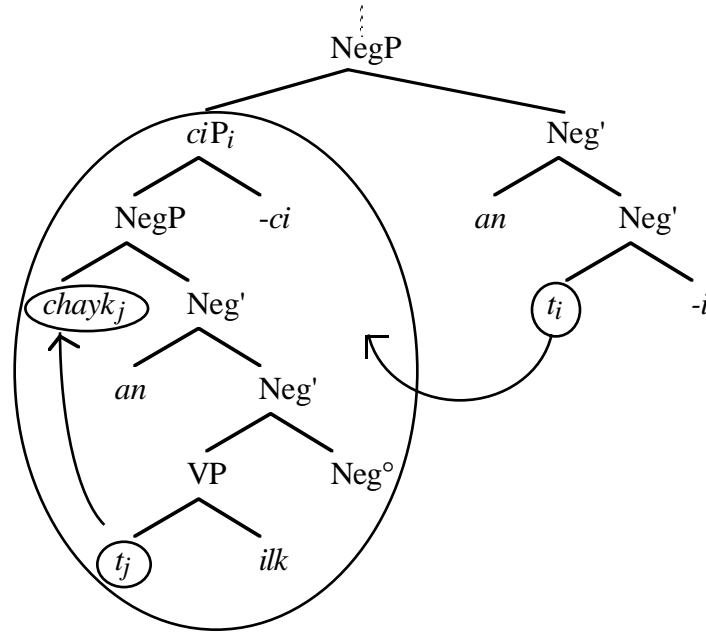
The observed surface string in (17a) comes about after *do*-support applies to the verbal affixes Tense (not shown, but just off to the right) and *-ci*.

The impossibility of double short-form negation forms like (18), follows from the fact that short-form negation involves the  $\emptyset$  Neg<sup>o</sup> head, which selects for a VP complement. To derive *an-an-V* would require the top Neg<sup>o</sup> head to take a NegP as its complement, which is not allowed.

However, there is an intermediate structure which is both predicted and observed, a “mixed case” of long-form and short-form negations. The structure involves an upper long-form negation (again, the only kind of negation that can take NegP complements)<sup>36</sup> with a lower short-form negation. The structure is shown in (21a) and the sentence is shown in (21b).

<sup>36</sup>Incidentally, this fact leads to the theorem that in any case of multiple negation in Korean, there can be at most one short-form negation, which will surface first in the phonological output and originate lowest in the structure.

(21) a.



b. Chelswu-ka chayk-ul **an-ilk-ci** **ani** ha-ess-ta  
*Chelswu-nom book-acc neg-read-ci neg do-past-decl*  
 ‘Chelswu didn’t not read the book.’ (=‘Chelswu read the book’)

Thus, given our lexical assumption about the differing properties of the two negation heads *-i* and  $\emptyset$ , namely that *-i* must take *ciP* complements while  $\emptyset$  must take *VP* complements, we have derived the pattern of possible multiple negations. This is summarized in the table below.

(22) <u>Morpheme</u>	<u>Category</u>	<u>Selects for</u>
<i>-i</i>	Neg <sup>o</sup>	<i>ciP</i>
$\emptyset$	Neg <sup>o</sup>	<i>VP</i>
<i>-ci</i>	<i>ci</i>	NegP or VP

Notice that no Neg<sup>o</sup> head can take another NegP directly as its complement, which is why a verb cannot be short-form negated twice.<sup>37</sup>

Lastly, it is worth pointing out that most of the points of this analysis can be translated into a theory in which movement targets specifiers of functional Agr phrases, and in which multiple specifiers (*e.g.*, of *vP* and NegP) are disallowed. However, by including Agr phrases, the selectional arguments become more contrived; for example, the  $\emptyset$  Neg<sup>o</sup> head would select not *VP*, but actually *AgrP*, with the stipulation that it dominates a *VP*. In other words,  $\emptyset$  must still be prevented from selecting an *AgrP* whose

<sup>37</sup>Choi (1985) also observes that it is not possible to use short-form negation with an inherently negative verb, for example *\*an-silh-ta* (‘not dislike’), so this incompatibility may be a feature incompatibility rather than a simple category incompatibility. However, my own consultations with native speakers did not seem to bear this out, so this aspect of negation will require further investigation.

complement is a NegP, but to do so would require “looking into” the complement.<sup>38</sup> In this respect, the move away from Agr phrases suggested in Chomsky (1995) allows for a certain simplification in the present analysis.

### I.7. Tense doubling

An interesting question arises when sentences like (23) are considered, which are judged to be acceptable by some speakers.<sup>39</sup>

- (23) Chelswu-ka chayk-ul ilk-**ess**-ci ani ha-**ess**-ta  
*Chelswu-nom book-acc read-past-ci neg do-past-decl*  
 ‘Chelswu did not read the book’

Notice that here, the Tense morpheme *-ess* is appearing in a position where we do not expect to have Tense in the structure. The interpretation of (23) is identical to the version of the sentence without tense doubling (*i.e.* (11b)), rather than to the “great past” structure (which, recalling (19), also involves two past tense morphemes).

What I suggest is happening in these cases is that the phrasal complex containing the verbal head raises to SpecTP, putting it in the checking domain of  $T^\circ$  and allowing the tense morphology to be checked. Implementationally, this will require a second SpecTP, one for the subject and one for the *ci*P. In the system of Chomsky (1995) this can be done by “violating Procrastinate” with respect to the EPP feature of TP, which allows a strong feature when checked to nevertheless avoid being erased, thereby forcing another raising movement to check the strong feature a second time. A basically equivalent way of thinking about this iteration is to suppose that TP has actually two strong EPP features to check, one checked per raising.<sup>40</sup> The derivation proceeds by first raising the subject up to SpecTP to check the EPP feature of  $T^\circ$ . The option to leave the feature unerased is taken, and thus another nominal feature must be raised into a checking relation with  $T^\circ$ . At this point, the *ci*P is the next closest element to  $T^\circ$  which can satisfy the EPP feature,

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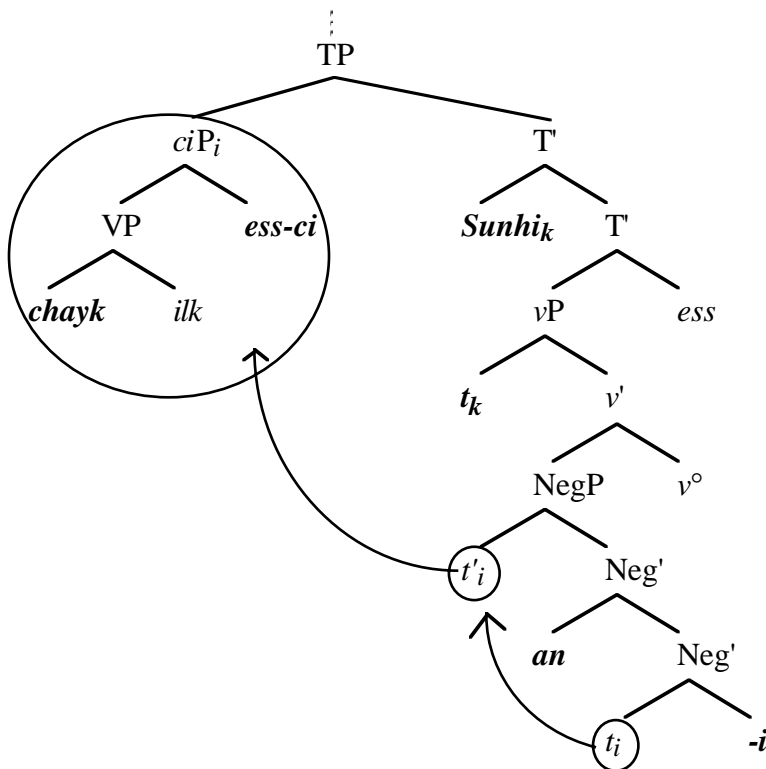
<sup>38</sup>Although see also Abney (1987) for a discussion of how the related issue of selection of NPs within DPs can be resolved. His suggestion is essentially that the  $N^\circ$  head within the DP is considered to be the “semantic” head (the DP being considered the “s-projection” of the  $N^\circ$ ), while the  $D^\circ$  within the DP is the “categorical” head of DP. A similar explanation might be pursued to account for selection of AgrP differentiating between VP-type Agr and Neg-type Agr, although we of course avoid the issue entirely by supposing no Agr phrases exist.

<sup>39</sup>Some speakers, however, strongly reject such sentences; this seems to be a point of variation among speakers and/or dialects. The suggestions of this section are an easily separable part of the analysis, so for speakers who reject this construction, the following discussion is inapplicable.

<sup>40</sup>This way of looking at it is only intended to give an intuitive idea of what is supposed to be happening, although it is not unlike the system proposed in Ura (1994). In the system of Chomsky (1995), all features in a checking relation which can be checked will be checked, so having three strong identical features would never have any consequences different from having only one. In Chomsky’s system, the iterative process must be expressed as (perhaps repeatedly) “taking the option” not to erase a checked feature, or “allowing a violation of Procrastinate.”

and so it will raise into the outer SpecTP as shown in (24). I assume that the tense morpheme *-ess* appears on *ci* rather than on the verb because, as we will see shortly, tense doubling can occur even within multiple negations in places where there are no underlying verbs. This *ess* in the *ciP* is probably obligatory Spec-Head agreement between the *ci* in SpecTP and T°.

(24)



I should point out that the word order derived in (24) is not quite that of (23); I must assume that the word order of (23) is actually derived by scrambling the subject to the front after the derivation shown in (24) takes place.<sup>41</sup>

Tense doubling interacts with multiple negation in an interesting way. As shown in (25), it is not the case that any combination of tense doubling is grammatical.

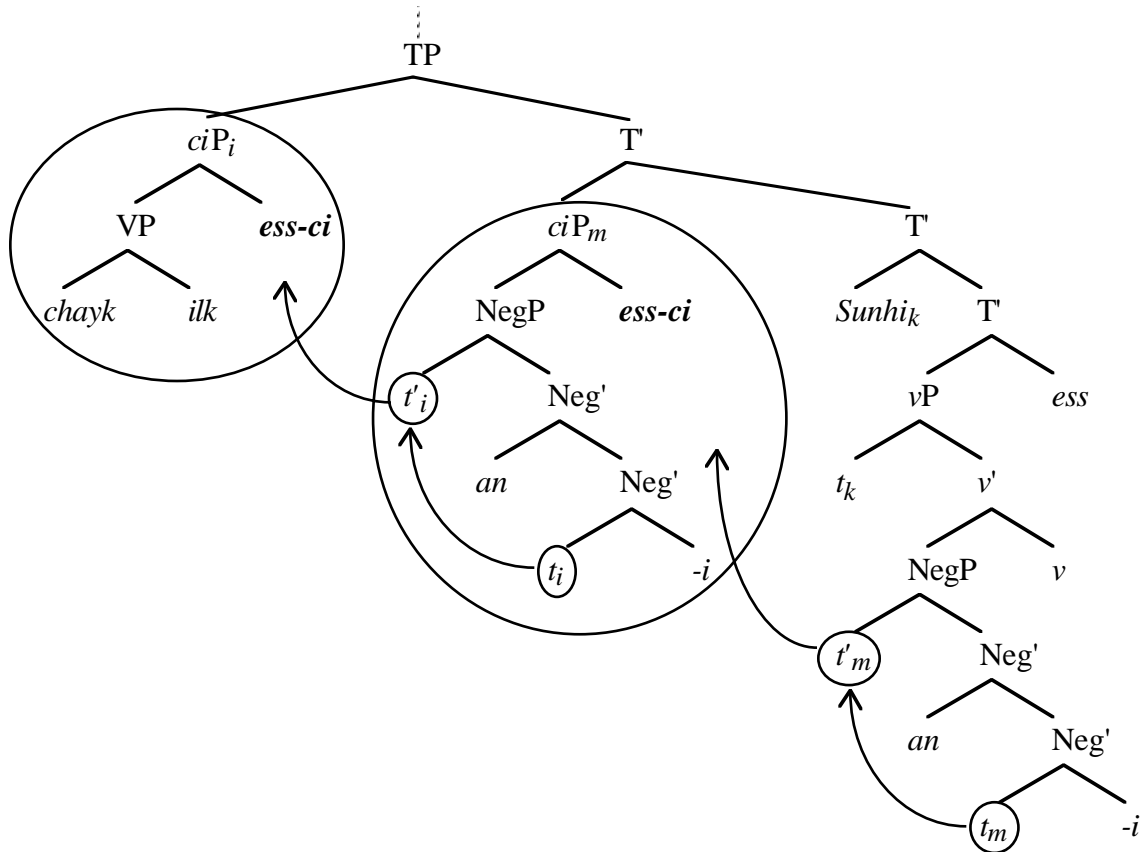
- (25) a. Chelswu-nun chayk-ul ilk-**ess**-ci ani ha-**ess**-ci ani ha-ess-ta  
*Chelswu-top book-acc read-past-ci neg do-past-ci neg do-past-decl*  
 'Chelswu didn't not read the book'

<sup>41</sup>In fact, the word order which appears in (24) is not grammatical. At this point, this remains unexplained, although the explanation may lie in a reconsideration of how attraction works, given the initial results of some further investigations of similar movement phenomena. Although discussion of these issues lie outside the scope of the present work, it is hoped that future research will be able to tie in some of the issues of multiple object shift (discussed later in section I.9) and multiple movement of *wh*-phrases in some Slavic languages (as discussed in Rudin (1988)).

- b. Chelswu-nun chayk-ul ilk-ci ani ha-ess-ci ani ha-ess-ta  
*Chelswu-top book-acc read-ci neg do-past-ci neg do-past-decl*
- c. \*Chelswu-nun chayk-ul ilk-ess-ci ani ha-ci ani ha-ess-ta  
*Chelswu-top book-acc read-past-ci neg do-ci neg do-past-decl*

In particular, the generalization appears to be that any of the multiple negations can carry tense doubling, so long as all to the right of the first to show tense doubling also show it. These facts have a very close structural correlate under this interpretation of tense doubling.<sup>42</sup> To derive (25a), we suppose that the EPP feature twice takes the option to avoid erasure (“violating Procrastinate”). The first movement will be the attraction of the subject, and the second will be the attraction of the highest *ci*P, just as before in (24). In a double negation structure, however, this higher *ci*P just attracted will itself have a *ci*P in its specifier, and thus on the third iteration of the EPP feature, the internal *ci*P will raise up to a highest specifier of TP. The process just described is shown in (26).

(26)



It is important to notice that because we assume that this movement is driven by the “iteration” of the EPP feature of TP, rather than by some feature on the *-ci* head itself,

<sup>42</sup>Thanks are due to David Pesetsky for pointing this out to me.

there is no way that the internal *ci*P can be extracted to SpecTP without first extracting the higher *ci*P (which follows simply either from Shortest Move or from the definition of Attract in the system of Chomsky (1995)). The facts listed in (25) then follow, under the assumption that *-ess-ci* reflects obligatory Spec-Head agreement when and only when *-ci* is in SpecTP.<sup>43</sup>

## I.8. Negative Polarity Items

One point that has not yet received any comment is the implications of the proposal that NegP occurs between *v*P and VP. In particular, there are several implications for the treatment of Negative Polarity Items, which will be discussed at some length in this section.<sup>44</sup>

### I.8.1. NPI data

A point of potential difficulty concerning the analysis being outlined above concerns negative polarity items (NPIs). In English, NPIs are generally allowed only if they are c-commanded by a negative element.<sup>45</sup> Consequently, in English, there is a subject/object asymmetry with respect to NPIs, as displayed in (27). (27a,b) show that NPIs are allowed in object position only when a negative element is present, and (27c,d) show that NPIs are not allowed in subject position regardless of whether a negative element is present. (27e,f) show that the c-command of a negative element may cross clause boundaries (at least with “bridge verbs” like *say*, and *think*). (27g) shows that some verbs, like *doubt*, are inherently negative and able to license NPIs.

- (27)
- a. \*I ate **anything**.
  - b. I did **not** eat **anything**.
  - c. \***Anyone** ate the cheese.
  - d. \***Anyone** did **not** eat the cheese.
  - e. \*John said that **anyone** did not eat the cheese.
  - f. John did **not** say that **anyone** ate the cheese.
  - g. John **doubted** that **anyone** ate the cheese.

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<sup>43</sup>That is, it must not be possible for a *ci*P to be in SpecTP and not show *-ess* agreement, or else the pattern in (25) would no longer follow.

<sup>44</sup>This placement of NegP also brings up questions about the existence of sentential negation in Korean, but further investigation is required on this point. Supporting this possibility, it has been suggested in the literature (*e.g.* Suh (1989)) that long-form negation in Korean is not sentential negation, but I leave this as an area for future research.

<sup>45</sup>Of course, saying it this way is a huge simplification; many complications arise and a whole literature exists concerning the distribution of (Negative) Polarity Items. For example, Uribe-Echevarria (1994) provides many examples, arguing that NPI's must be c-commanded at LF by Neg, while the popular opinion in prior literature was that NPI's must be c-commanded by Neg in the surface form. It is, however, true in all accounts of NPI licensing of which I am aware that c-command by a negative (licensing) element is required at some (specified) point.

Korean NPIs act differently from English NPIs in a couple of important respects. First, subject NPIs are allowed, as indicated by the examples in (28). Subject NPIs are good both with long- (28a) and short-form (28b) negation. (28c) establishes that *amwuto* ‘anybody’ is ungrammatical when a negative licenser is not present.

- (28) a. **amwuto** chayk-ul ilk-ci **ani** ha-ess-ta  
*anybody* book-acc read-ci **neg** do-past-decl  
 ‘\*Anybody didn’t read the book.’ (‘Nobody read the book’)
- b. **amwuto** chayk-ul **an**-ilk-ess-ta  
*anybody* book-acc **neg**-read-past-decl  
 ‘\*Anybody didn’t read the book.’ (‘Nobody read the book’)
- c. \***amwuto** chayk-ul ilk-ess-ta  
*anybody* book-acc read-past-decl  
 (‘\*Anybody read the book.’)

Second, Korean NPI licensing is clause-bound, meaning that a negative element in a matrix clause cannot license an NPI in an embedded clause, as indicated by the examples in (29).<sup>46</sup>

- (29) a. \*?na-nun [Chelswu-ka **amwuto** ttaly-ess-ta-ko] malha-ci **ani** ha-ess-ta  
*I-top C.-nom anybody hit-pst-dcl-cmp say-ci neg do-pst-dcl*  
 (‘I did not say that Chelswu hit anybody.’)
- b. na-nun [Chelswu-ka **amwuto** ttaly-ci **ani** ha-ess-ta-ko] malha-ess-ta  
*I-top Chelswu-nom anybody hit-ci neg do-pst-dcl-cmp say-pst-dcl*  
 ‘I said that Chelswu did not hit anybody.’

A striking fact, which is discussed in Sohn (1994) citing work by Rhanghyeyoon-Kim Lee, is that (29a) can be improved if the NPI is scrambled out of the embedded clause, as shown in (30).

- (30) **amwuto**<sub>i</sub> na-nun [Chelswu-ka *t<sub>i</sub>* ttaly-ess-ta-ko] malha-ci **ani** ha-ess-ta  
*Anybody<sub>i</sub> I-top C.-nom t<sub>i</sub> hit-pst-dcl-cmp say-ci neg do-pst-dcl*  
 ‘I did not say that Chelswu hit anybody.’

Sohn (1994) proposes an analysis in which NPIs have a [Neg] feature which must be checked with a Neg<sup>o</sup> head. Sohn suggests that this checking operation is overt in Korean, due to a strong [Neg] feature, while the same checking occurs covertly in English, where the [Neg] feature is weak. In English, if during the course of a derivation, an NPI gets to a position above NegP overtly (*e.g.*, in order to satisfy the EPP), this [Neg]

<sup>46</sup>As noted in Sohn (1994), some speakers accept NPIs in an embedded clause when there is a negative element in the matrix clause, but no speakers will accept NPIs embedded twice below a negative element (which is different from English, where an NPI can be indefinitely embedded).

feature can no longer be checked before reaching LF. In Korean, on the other hand, once the NPI checks its [Neg] feature with the Neg<sup>o</sup> head, the NPI may continue to be moved for other reasons (*e.g.*, scrambling), explaining why NPIs can grammatically be found hierarchically above negative elements.

*Prima facie*, the checking interpretation of NPI phenomena and this data indicating that subject NPIs are licensed could cause severe problems for an analysis (such as that being pursued here) where NegP is base-generated in a position which is below the base position of the subject. Our task in this section is to explore an alternative explanation of the distribution of NPIs in Korean.

### *1.8.2. Strong features and checking; comparing wh-phrases to NPIs.*

First, let us go on a slight tangent to discuss properties of strong features and checking, which will be relevant to the idea that NPIs involve feature checking with a Neg<sup>o</sup> head. If we follow Chomsky (1995), a strong feature “triggers a rule that eliminates it,” and the structure will crash if the derivation “terminates” with a strong feature remaining. That is, as a phrase marker is built from the bottom by repeatedly applying Merge,<sup>47</sup> if a strong feature is introduced into the computation, it must be eliminated at some point before the head containing that strong feature stops projecting; the derivation cannot leave the maximal projection of a head containing a strong feature without checking it off.<sup>48</sup> The implication of this interpretation of strong features is that all movement is “driven from above” in the sense that all strong features, which drive movement, must be contained in the *heads* introduced at the root, and not part of the phrases or heads which move up to be in a checking relation with them.

It is clear that if we accept this interpretation of strong features, regardless of the structural location of NegP in Korean specifically, the strong [NPI] feature cannot be contained in the NPI itself (as Sohn (1994) suggests) because this would require a strong feature to persist through the derivation all the way until the Neg<sup>o</sup> head is Merged. If NPIs are to be analyzed in terms of strong features under these assumptions, then the strong feature must instead be on the Neg<sup>o</sup> head and not on the NPI.

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<sup>47</sup>Merge is an operation proposed in Chomsky (1994) which takes two linguistic objects (such as lexical items or phrase markers) and combines them in such a way that one “projects” its label to become the label of the merged structure. As an example, a verb and its object would undergo Merge, resulting in a VP, since the verb projects its label to the top node.

<sup>48</sup>Allowing “before leaving the maximal projection” to be soon enough to check a strong feature allows for base-adjunction to a maximal projection of a head containing a strong feature (*e.g.*, adverbs).

If we accept this approach, the NPI system begins to look very analogous to the English *wh*-movement system.<sup>49</sup> Because multiple *wh*-questions can (and must) be formed in English with only the first raising to SpecCP, the strong feature which drives this *wh*-movement rests not on the *wh*-phrases themselves, but rather on the [+*wh*] complementizer. This follows from the approach to strong features outlined above, but it is also the simplest and most elegant solution, since if the [+*wh*] feature to be checked resided on the *wh*-phrases themselves, we would need to ensure that exactly one of the arbitrarily many *wh*-phrases had a strong [+*wh*] feature.

We also assume that, like the free choice between [+*wh*] and non-[+*wh*] complementizers, [NPI] and non-[NPI] Neg<sup>o</sup> can be chosen freely, but a derivation based a numeration containing both NPIs and a non-[NPI] Neg<sup>o</sup> derivation will be uninterpretable (or “converge as gibberish”).

### 1.8.3. Clause-bounded NPIs and Subject NPIs

First, let us look at the implications of this approach to the Korean “clause-boundedness” of NPI constructions. Recall that the data seems to show that a matrix negation will not license an embedded NPI *in situ*, as shown in (29a) repeated below.

- (29) a. \*?na-nun [Chelswu-ka **amwuto** ttaly-ess-ta-ko] malha-ci **ani** ha-ess-ta  
*I-top C.-nom anybody hit-pst-dcl-cmp say-ci neg do-pst-dcl*  
 (‘I did not say that Chelswu hit anybody.’)

This effect is straightforwardly explained by the fact that if a Neg<sup>o</sup> with a strong [NPI] feature is introduced in the matrix clause, there is no convergent derivation in which the NPI is not raised. The unmarked situation in such a case will be the sentence in (31), where the NPI *amwuto* ‘anybody’ raises to an outer SpecNegP, while (30) would be derived by further scrambling *amwuto* to sentence-initial position.

- (31) na-nun **amwuto**<sub>i</sub> [Chelswu-ka *t<sub>i</sub>* ttaly-ess-ta-ko] malha-ci **ani** ha-ess-ta  
*I-top Anybody<sub>i</sub> C.-nom t<sub>i</sub> hit-pst-dcl-cmp say-ci neg do-pst-dcl*  
 ‘I did not say that Chelswu hit anybody.’

- (30) **amwuto**<sub>i</sub> na-nun [Chelswu-ka *t<sub>i</sub>* ttaly-ess-ta-ko] malha-ci **ani** ha-ess-ta  
*Anybody<sub>i</sub> I-top C.-nom t<sub>i</sub> hit-pst-dcl-cmp say-ci neg do-pst-dcl*  
 ‘I did not say that Chelswu hit anybody.’

Turning to the availability of subject NPI’s, we come against some technical obstacles. Recall the example in (28a), repeated below, which shows the NPI *amwuto* ‘anybody’ occupying subject position.

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<sup>49</sup>This parallel was brought to my attention by Norvin Richards, and the present analysis has several points which were inspired by useful conversations with him on this topic.

- (28) a. **amwuto** chayk-ul ilk-ci **ani** ha-ess-ta  
*anybody* book-acc read-ci **neg** do-past-decl  
 ‘\*Anybody didn’t read the book.’ (‘Nobody read the book’)

We have a near paradox given the two assumptions made so far that (i) a Neg<sup>o</sup> head which co-occurs with an NPI in a numeration has a strong [NPI] feature, and (ii) a strong feature must be checked before leaving the maximal projection of the head containing that strong feature. Although a full exploration of the problem must be left for further research, we might suppose that NPIs, like expletives, may be merged into a Spec position to check features. In the framework of Chomsky (1995),  $\theta$ -relations and checking relations are mutually exclusive, but we would not expect Neg<sup>o</sup> to be a  $\theta$ -assignor. Therefore, an NPI is allowed to Merge into an outer SpecNegP to check the strong [NPI] feature of Neg<sup>o</sup>. At this point, the subject NPI would occupy an outer specifier of NegP, rather than its canonical  $\theta$ -position, namely SpecvP. There seem to be only a small number of positions we can take at this point; either (a)  $v^o$  is capable of assigning its external  $\theta$ -role to the subject NPI in SpecNegP, the specifier of its complement, (b) once  $v^o$  and NegP merge to form vP, the subject NPI raises into SpecvP and gets its external  $\theta$ -role, or (c) a null operator is Merged into SpecvP which binds the NPI in SpecNegP. There are disadvantages to each position; with (a), the external  $\theta$ -role is (exceptionally) being assigned to a member of the complement, while with (b), we find an argument moving into a  $\theta$ -position, a movement which many including Chomsky (1995) wish to rule out,<sup>50</sup> and with (c) we introduce a null element which must co-occur in a given numeration with a NPI argument and a [NPI] Neg<sup>o</sup> head, making the requirements on the numeration in NPI constructions fairly cumbersome.

In conclusion, the existence of subject NPIs remains an unsolved problem, although I have provided some speculative suggestions about how we might proceed.

#### 1.8.4. NPI-in-situ—evidence for the analogy

There is a striking piece of evidence for the analogy between *wh*-phrases and Korean NPIs which has not been discussed in the literature to my knowledge. Recall that scrambling an NPI out of an affirmative embedded clause will render a sentence with a negated matrix clause grammatical, as is shown in the following examples (repeated from above).

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<sup>50</sup>Though some recent research suggests that arguments can sometimes move from one theta position into another theta position (Boskovic (1994), Akira Watanabe (p.c.)), the idea suggested here involves a further weakening of the prohibition against moving into theta position, since it allows an argument to move from a non-theta position into a theta-position (which probably requires that the outer SpecNegP be an A-position).

- (29) a. \*?na-nun [Chelswu-ka **amwuto** ttaly-ess-ta-ko] malha-ci **ani** ha-ess-ta  
*I-top C.-nom anybody hit-pst-dcl-cmp say-ci neg do-pst-dcl*  
 ('I did not say that Chelswu hit anybody.')
- (30) **amwuto<sub>i</sub>**; na-nun [Chelswu-ka *t<sub>i</sub>* ttaly-ess-ta-ko] malha-ci **ani** ha-ess-ta  
**Anybody<sub>i</sub>**; *I-top C.-nom t<sub>i</sub> hit-pst-dcl-cmp say-ci neg do-pst-dcl*  
 'I did not say that Chelswu hit anybody.'

However, it is also the case that in sentences with multiple NPIs, scrambling even one out of the embedded clause will improve their grammatical status, as shown below.

- (32) a. \*?na-nun [**amwuto amwukesto** po-ass-ta-ko] malha-ci **ani** ha-ess-ta  
*I-top anybody anything see-pst-dcl-cmp say-ci neg do-pst-dcl*  
 ('I did not say that anybody saw anything.')
- b. **amwuto<sub>i</sub>**; na-nun [*t<sub>i</sub>* **amwukesto** po-ass-ta-ko] malha-ci **ani** ha-ess-ta  
**Anybody<sub>i</sub>**; *I-top t<sub>i</sub> anything see-pst-dcl-cmp say-ci neg do-pst-dcl*  
 'I did not say that anybody saw anything.'<sup>51</sup>

This supports the view that the strong feature involved in NPI constructions resides on the Neg<sup>o</sup> head rather than on the NPIs themselves, since it is sufficient for only one NPI to raise into (and, then, perhaps beyond) a position where it can check with Neg<sup>o</sup>. Again, this behavior of Korean NPIs looks very similar to that of English *wh*-phrases.

## I.9. Non-transitive clause structures

So far, we have only been considering simple transitive sentences with nominal objects, suggesting that negation occurs structurally between the subject *v*P and the object VP and that the object shifts to an outer SpecNegP. However, a host of issues arise when we consider other sentence types, such as intransitives or double-object constructions.

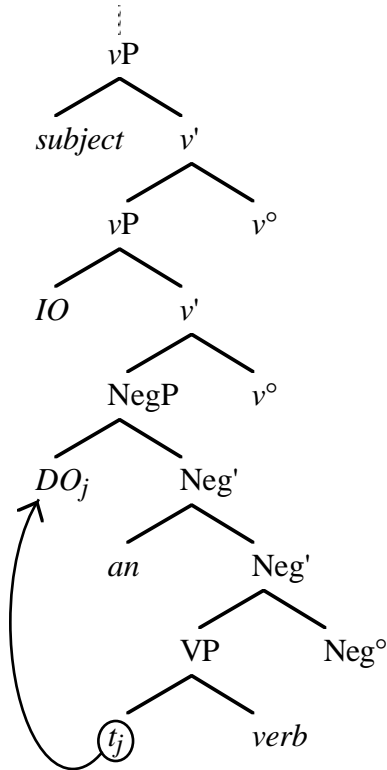
Under this analysis, it is somewhat of a coincidence that the verbal prefix *an-* ends up phonologically left-adjacent to the verb. That is, syntactic operations are not *driven* by a requirement to have *an-* connected to the verb, but are driven by other things which “conspire” to yield the result that *an-* is always left-adjacent to a verb.<sup>52</sup> This presents a problem when a second object is involved, as it requires either (a) that NegP is always structurally located just above the VP containing the direct object, or (b) that NegP attracts both the direct and indirect object into its specifiers. Option (a) requires a

<sup>51</sup>One of my informants rated this sentence as “??” while the other thought it was fine. In any event, there does appear to be an improvement.

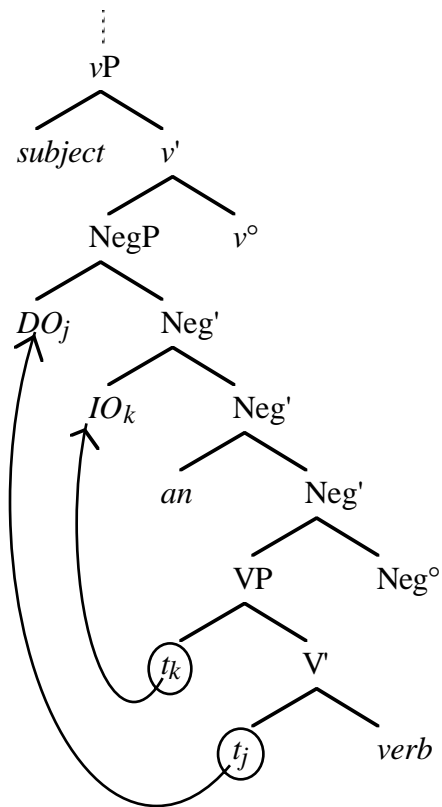
<sup>52</sup>In fact, if *an-* were lexically specified as a verbal prefix, and if it occurred non-adjacent to a verb, we’d expect *an-ha* to surface under the interpretation of *do*-support adopted here.

tripartite shell structure for the three arguments (as in Bobaljik (1995)), although (b) allows for the indirect object and object to both occupy positions within the lower VP (as in Chomsky (1995)). These two options are exemplified in (33) below.

(33) a.



b.



So far, there is very little empirical evidence to decide between the two options, although one might appeal to scope or coordination facts in negative contexts. Having presented these options, the choice between them must be left for future research.<sup>53</sup>

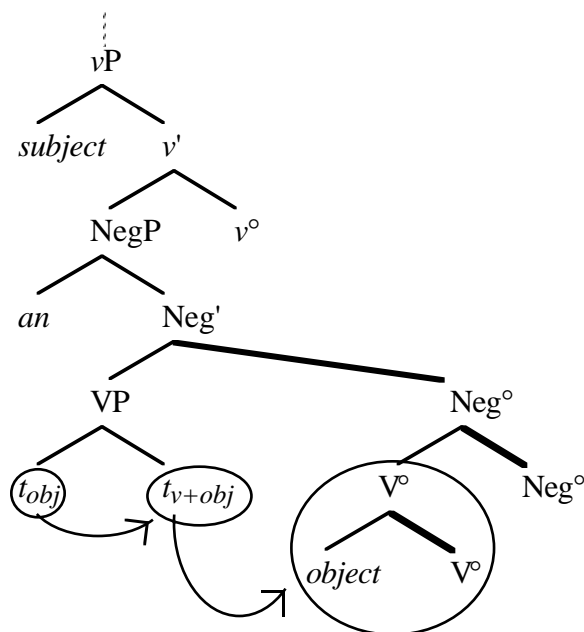
Another type of sentence which has not been discussed here are intransitives, either unaccusative or unergative. Following Chomsky (1995) and Hale & Keyser (1993), we suppose that unergatives are “concealed transitives,” meaning that a direct object actually incorporates, “becoming” the lexical verb. Unaccusatives, on the other hand, are quite possibly a bare VP without an upper *vP* shell structure. Under these assumptions, we have no particular problem accounting for unaccusatives; the object in a negative clause will shift into SpecNegP, and then shift on into SpecTP to satisfy the EPP.

<sup>53</sup>As it happens the “unmarked” word order (to the extent that one can tell) for such constructions is reported to be IO DO *an*-V, which is the reverse of what we see in (33b). In future research, I hope to tie this in with the behavior of multiple *wh*-phrases in Slavic languages which also appear to all raise (see Rudin (1988)) and which remain in the same order on the surface as they were underlyingly (which is not expected under a Shortest-Move based analysis). So, in fact, it is my guess that while (33b) is closer, neither of the options in (33) is quite correct, although the complete discussion must wait for future work.

More difficult is the task of accounting for the behavior of negative unergative clauses, where no object is available to shift into SpecNegP. We might expect, in such circumstances, an expletive object to be inserted into SpecNegP in order to check the strong nominal feature which is drives object shift elsewhere. Yet, Korean does not show expletives here (or, in fact anywhere so far as I know). There seem to be two analytical options available at this juncture: (i) the  $Neg^{\circ}$  in unergative numerations does not have a strong nominal feature to check, although it is required to have this feature in all other numerations, or (ii) the nominal feature of  $Neg^{\circ}$  can be checked in some way other than object shift. Clearly, (i) is not a desirable solution, so let us pursue (ii).<sup>54</sup>

First, we assume that unergatives are indeed derived by object incorporation into the verb. At this point, then, the verbal complex, while no longer strictly nominal, nevertheless contains the nominal features which were present on the incorporated object. Once the  $Neg^{\circ}$  head is Merged, a strong nominal feature is introduced into the derivation which must be checked before leaving NegP. No object is available to shift into SpecNegP, but the verbal head,  $V^{\circ}$ , can be head-raised to  $Neg^{\circ}$ , which should allow the nominal features of the incorporated object to check the strong nominal feature contained in  $Neg^{\circ}$ . I propose that this is what happens in unergative sentences, as diagrammed in the tree below in (34) (where bold branches indicate adjunction structures).

(34)



<sup>54</sup>In light of the investigations alluded to in the preceding footnote, it is possible that unergatives will become a non-problem if the nature of the attraction operation is revised. For the purposes of this paper, however, we will still consider unergatives to be a difficulty requiring explanation.

Of course, all of the discussion in this section is highly speculative, and further research will be required to test the predictions which these structures make. However, what I hope to have shown is that the system being outlined is at least capable of being coherent even beyond the simple transitive structures which motivated it.

## II. VP Focus—Dissolution and a solution.

### II.1. VP Focus and Predicate Cleft constructions are different

We now turn our attention from long-form negation to another construction which involves *do*-support: the VP Focus construction, shown in (35a). Frequently in the literature which discusses the VP Focus construction, another construction has been presented as a variant, shown in (35b), where the verb stem appears a second time. However, here I suggest that (35a) and (35b) are examples of two entirely separate constructions. We will call (35b) a “predicate cleft construction,” and limit the reference of the term “VP Focus construction” to examples like (35a) which involve *ha* ‘do.’

- (35) a. Chelswu-ka chayk-ul ilk-ki-nun **ha**-ess-ta  
*Chelswu-nom book-acc read-ki-topic do-past-decl*  
 ‘Read the book, Chelswu does.’
- b. Chelswu-ka chayk-ul ilk-ki-nun **ilk**-ess-ta  
*Chelswu-nom book-acc read-ki-topic ilk-past-decl*  
 ‘Read the book, Chelswu does.’

As preliminary evidence that the two constructions differ, we note that they differ in their word order permutation possibilities. The VP Focus construction has very limited word-order possibilities, allowing only the subject and the object to permute, while the predicate cleft construction can be freely reordered (up to the language-wide requirement that the verb be final). In (36), we see a representative pattern of possible reorderings for the predicate cleft construction, and in (37), we see the analog of these examples for the VP Focus construction, most of which are ungrammatical.

- (36) a. Chelswu-ka chayk-ul **ilk**-ki-nun **ilk**-ess-ta  
*Chelswu-nom book-acc read-ki-topic ilk-past-decl*  
 ‘Read the book, Chelswu does.’
- b. Chelswu-ka **ilk**-ki-nun chayk-ul **ilk**-ess-ta  
*Chelswu-nom read-ki-topic book-acc ilk-past-decl*  
 ‘Read the book, Chelswu does.’
- c. **ilk**-ki-nun Chelswu-ka chayk-ul **ilk**-ess-ta  
*read-ki-topic Chelswu-nom book-acc ilk-past-decl*  
 ‘Read the book, Chelswu does.’

- (37) a. Chelswu-ka ppang-ul **mek-ki-nun** **ha-ess-ta**  
*Chelswu-nom bread-acc eat-ki-topic do-past-decl*  
 ‘Eat bread, Chelswu did.’
- b. \*Chelswu-ka **mek-ki-nun** ppang-ul **ha-ess-ta**  
*Chelswu-nom eat-ki-topic bread-acc do-past-decl*  
 (‘Eat bread, Chelswu did.’)
- c. \***mek-ki-nun** Chelswu-ka ppang-ul **ha-ess-ta**  
 \**eat-ki-topic Chelswu-nom bread-acc do-past-decl*  
 ‘Eat the bread, Chelswu does.’

The intuition of native speakers with respect to the examples in (37) is that the verb stem marked with *ki* and the *ha* ‘do’ morpheme must be adjacent.<sup>55</sup> When interrupted by an argument (as in 37b) or even by an adverb (as in (38) below), the sentence is ungrammatical. We saw earlier in (36) that this condition does not hold of the predicate cleft construction.

- (38) \*Chelswu-ka ppang-ul mek-**ki-nun** **ecey** **ha-ess-ta**  
*Chelswu-nom bread-acc eat-ki-topic yest. do-past-decl*  
 (‘Eat bread, Chelswu did yesterday.’)

The two constructions also differ with respect to which element receives primary focus. In the VP Focus construction, the preferred focus is on the object, but can also be on the whole VP. By contrast, the predicate cleft construction can only be used to focus on the verb itself, and not to focus on either the object or the entire VP.

One last datum which suggests that VP Focus and predicate cleft constructions constitute different structures is that, if we assume long-form negation has a similar structure to VP Focus, it is surprising that an analogous “verb copy” construction is not available with long-form negation, as demonstrated in (39).

- (39) a. Chelswu-ka chayk-ul ilk-ci **ani** **ha-ess-ta**  
*Chelswu-nom book-acc read-ci neg do-past-decl*  
 ‘Chelswu did not read the book.’
- b. \*Chelswu-ka chayk-ul ilk-ci **ani** **ilk-ess-ta**  
*Chelswu-nom book-acc read-ci neg read-past-decl*  
 (‘Chelswu did not read the book.’)

<sup>55</sup>Lee (1992) cites the example in (i). Although I have not checked this with other native speakers, this fact is a nice support for the current proposal, which suggests that [Object V-*ki-lul*] form a constituent.

(i) chayk-ul ilk-ki-lul John-i ha-ess-ta  
*book-acc read-ki-acc John-nom do-past-decl*  
 ‘Read the book, John did’

Having amply distinguished the two constructions, we will now focus on the first of them, the VP Focus construction, returning briefly in a later section to the predicate cleft construction.

## II.2. VP Focus—an analysis

The analysis of VP Focus closely parallels the analysis for long-form negation put forth in earlier sections. Although there have been differing opinions in the literature as to whether the *ci* morpheme which appears in long-form negation is the same sort of morpheme as *ki*, which appears in VP Focus constructions, *ki* is undisputably a nominalizer of some sort, as evidenced by the fact that it surfaces in N-V compounds like *cul nem-ki* (rope jump-*ki* ‘rope-jumping’) and *pomul chac-ki* (treasure hunt-*ki* ‘treasure hunting’)<sup>56</sup> as well as in several other nominalizing contexts. Here, I assume (with about half of the literature) that *ci* is the negative allomorph of *ki*, and that *ci* is selected by the long-form negation Neg<sup>o</sup> head (*-i*).<sup>57</sup>

At a metalinguistic level, I suppose that the VP Focus construction comes about through the speaker’s desire to place the semantic effect of the contrastive focus morpheme *-nun* on the verb stem. Because *-nun* is of a class of objects which may only attach to nouns, the speaker must nominalize the verb using *ki* in order to attach *-nun*. From there, the syntax follows much in the same way as it did for the long-form negation construction.

The proposed structure of the VP Focus construction is shown in (40), a very close analog to the long-form negation structure shown earlier in (16). Directly analogous to Neg<sup>o</sup>, we assume that Foc<sup>o</sup> has a strong nominal feature that causes object shift into SpecFocP, which attracts the entire *ki*-nominalized VP. Note that I am assuming that *-nun* is in SpecFocP by analogy to the very similarly behaving NegP.<sup>58</sup>

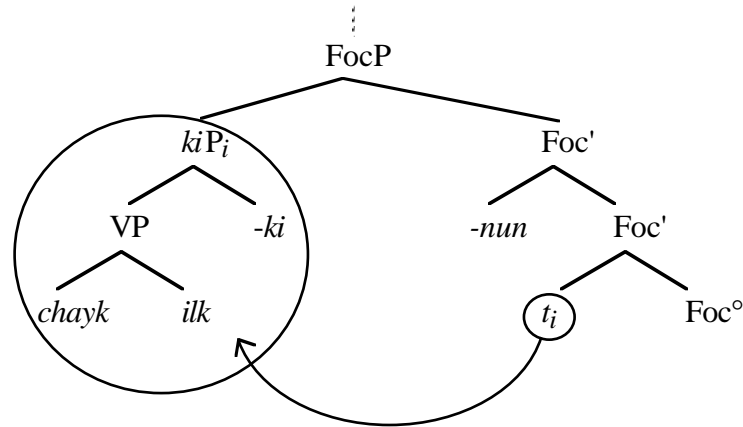
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<sup>56</sup>These examples are taken from Kang (1988).

<sup>57</sup>Kang (1988) indicates that it is a “long observed fact” that *-ci* is historically derived from *-ki*, which lends support to the idea that they are basically the same kind of element. Park (1992), to give a representative example, is on the other side of the issue, suggesting that *ki* and *ci* are unrelated.

<sup>58</sup>Alec Marantz (p.c.) points out that there seems to be no real reason for supposing that FocP has a structure analogous to the structure of NegP. In particular, although we have evidence from Romance languages that negation often occurs in two parts, there does not seem to be similar crosslinguistic evidence that focus should work this way. However, in defense of the structure presented in the text, I note that the striking similarity between long-form negation and VP Focus construction almost forces some form of raising analysis, given the analysis already presented for long-form negation. There is an alternative analysis available which supposes that FocP occurs below NegP, and that *-nun* heads FocP; however, this requires a mechanism for causing the whole FocP to shift when it dominates a phrase which would otherwise shift (perhaps motivated by phonological convergence, perhaps by some form of “feature percolation”), as well as requiring FocP to be admitted among the phrases for which the two Neg<sup>o</sup> heads can select for. Of course, this alternative analysis could also be the correct one, so further investigation is needed.

(40)



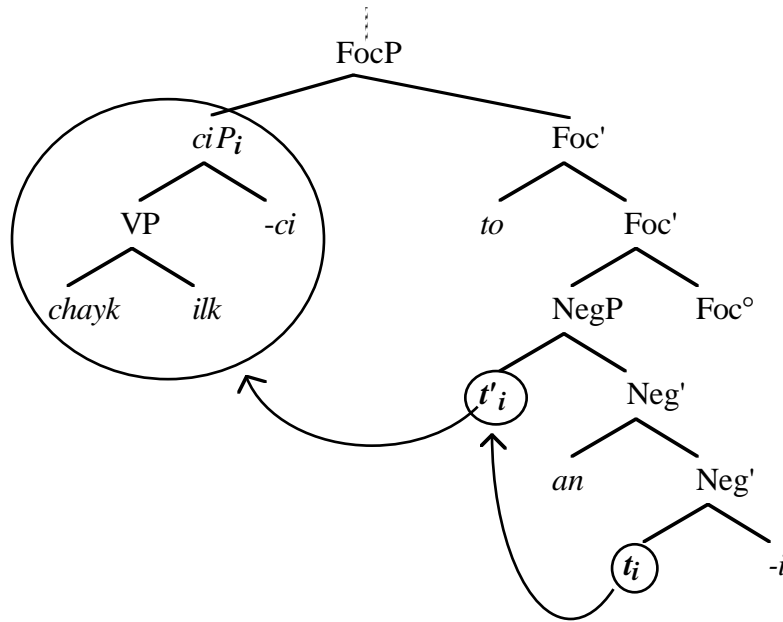
Notice that in (40), the focusable elements occupy the specifier of FocP. The fact that the default interpretation of the VP Focus construction is with focus on the object might be simply attributable to the fact that the object comes first in linear order.

Park (1992) notes that the VP Focus construction requires the presence of a focus particle like *-nun*, which is only optionally present in long-form negation, and suggests that this argues for a fundamental distinction between *ci* and *ki*. In the present analysis, I suggest that *ci* is only allowed when explicitly selected for (by the Neg° head *-i*), and that it is not otherwise an option to nominalize the predicate VP without reason (where legitimate reasons for nominalizing the VP include attaching a focus interpretation to the verb or long-form negating using the *-i* Neg° head).

Incidentally, the analysis of constructions like (41) which contain a focus particle (here we use *-to* ‘also’) following the *-ci* in a long-form negation structure are readily explicable with almost no further discussion. The tree in (42) shows the derivation of the example in (41), where the nominalized *ci*P is first attracted into SpecNegP and then into SpecFocP.

- (41) Chelswu-ka chayk-ul ilk-ci-to ani ha-ess-ta  
*Chelswu-nom book-acc read-ci-also neg do-past-decl*  
 ‘Chelswu did not also read the book.’

(42)



Selectionally, this indicates that  $\text{Foc}^\circ$  can take a  $\text{NegP}$  complement as well as a nominalized  $kiP$  complement.<sup>59</sup>

### II.3. Predicate clefts

Now, let us briefly return to the predicate cleft constructions, which we earlier distinguished from VP focus constructions.

I would like to suggest, along with Lee (1994), that these constructions are predicate clefts of the sort which have been studied in Vata by Koopman (1984) and in Haitian and Fongbe by Lefebvre (1993). Although Lee (1994) provides a different analysis (and, in fact, would not call the example (36a) discussed here a predicate cleft), the intuition seems appropriate.<sup>60</sup>

Although I will not offer an analysis here of the predicate cleft construction in Korean, I will briefly comment on the possibility of applying to Korean an analysis put forth in Lefebvre (1993) for predicate cleft construction in Haitian and Fongbe. The basic idea of Lefebvre's analysis is that the predicate copy which is fronted actually begins as a cognate object, in the sense of Hale & Keyser (1993). This idea is supported by two striking facts from Haitian and Fongbe. The first is that cognate object constructions are in complementary distribution with predicate clefts; for verbs which

<sup>59</sup>The focus morphemes like *-nun* and *-man* can attach in a very wide variety of locations, and further exploration is needed in order to determine how far the  $\text{FocP}$  suggested in this section can go toward explaining this very free distribution. The suggestions I make here are only relevant to the VP Focus construction.

<sup>60</sup>Thanks also to David Pesetsky (p.c.) for suggesting that these constructions looked like predicate clefts, and to Young-Sik Choi, for pointing me to Lee's (1994) paper.

require cognate objects, the predicate cleft operation cannot occur. The second suggestive fact is that fronting a cognate object in these obligatory cognate object contexts yields an interpretation which matches that of the predicate cleft construction. Here, we will investigate parallel examples in Korean.

In Korean, fortunately, there do exist both obligatory and optional cognate object constructions, which allows us to proceed with the tests. In (43) below, we see that the verb *kku* ‘dream’ requires a cognate object, while in (44) the verb *ca* ‘sleep’ can optionally take a cognate object.

- (43) Sunhi-ka      \*(**kkum**-ul)      **kku**-ess-ta  
*Sunhi-nom*      *dream(N)-acc*      *dream-past-decl*  
 ‘Sunhi dreamed.’
- (44) Sunhi-ka      (**cam**-ul)      **ca**-ess-ta  
*Sunhi-nom*      *sleep(N)-acc*      *sleep-past-decl*  
 ‘Sunhi slept/took a nap.’

However, unlike in Haitian and Fongbe, cognate objects in Korean are not incompatible with the predicate cleft constructions, as we can see in (45).<sup>61,62</sup>

- (45) a. **kku**-ki-nun    [Yenghi-ka    \*(hengpokhan) **kkum**-al    **kku**-ess-ta]  
*dream-ki-cont*    *Yenghi-nom*    *happy*    *dream(N)-acc*    *dream-past-decl*  
 ‘It is DREAM that Yenghi dreamed a happy dream.’
- b. **ca**-ki-nun    [Sunhi-ka    \*(nat) **cam**-ul    **ca**-ess-ta]  
*sleep-ki-nun*    *Sunhi-nom*    *nap*    *sleep(N)-acc*    *sleep-past-decl*  
 ‘It is NAP that Sunhi took a nap.’

The upshot of this is that it seems unlikely that these predicate cleft constructions are actually derived from movement of the cognate object; in fact, it seems to be rather good evidence that predicate clefting and cognate object formation are two distinct processes, at least in Korean.

However, there does appear to be some slight evidence that predicate clefting in Korean involves the same sort of movement as scrambling, based on the fact that the grammaticality of the following sets of sentences are judged to be on a par by native speaker intuitions.<sup>63</sup>

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<sup>61</sup>Note that the modifiers *hengpokhan* ‘happy’ and *nat* ‘nap’ are necessary just as in English, where it is not possible to say \**He died a death*, but yet it is fine to say *He died a painful death*.

<sup>62</sup>The examples in (45) are presented with the word order that makes them most transparently predicate clefts. My suggestion is that this word order is just a scrambled version of the word order called a “predicate cleft” earlier in the text, although on this point I differ from Lee (1994).

<sup>63</sup>The examples below are taken from Lee (1994).

- (46) a. \***ku chayk-ul** Chelswu-ka [*t* ssu-n] ceca-lul manna-ass-ta  
*this book Chelswu-nom [t write-rel] author-acc meet-pst-dcl*  
 ('Chelswu met the author who wrote this book')
- b. \***ssu-ki-nun** Chelswu-ka [ku chayk-ul ssu-n] ceca-lul manna-ass-ta  
*write-ki-foc C.-nom [this book-acc write-rel] author-acc meet-pst-dcl*  
 ('It is WRITE that Chelswu met the author who wrote this book')
- (47) a. \***?ku yenghwa-lul** Chelswu-ka [Yenghi-ka *t* po-ass-ta-nun]  
*this movie-acc Chelswu-nom [Yenghi-nom t see-pst-dcl-rel]*  
 cwucang-ul mit-ess-ta  
*claim-acc believe-pst-dcl*  
 ('Chelswu believed the claim that Yenghi saw this movie')
- b. \***?po-ki-nun** Chelswu-ka [Yenghi-ka ku yenghwa-lul po-ass-ta-nun]  
*see-ki-foc Chelswu-nom [Yenghi-nom this movie-acc see-pst-dcl-rel]*  
 cwucang-ul mit-ess-ta  
*claim-acc believe-pst-dcl*  
 ('It is SEE that Chelswu believed the claim that Yenghi saw this movie')

Based on the data above, it seems a reasonable assumption that the “fronted” version of the predicate cleft is related to the “unfronted” predicate cleft construction by simple scrambling. Recalling the examples from (36), the suggestion is that (36a) is basic, and (36b,c) are derived by scrambling of the *V-ki-nun* complex.

- (36) a. Chelswu-ka chayk-ul **ilk-ki-nun** **ilk-ess-ta**  
*Chelswu-nom book-acc read-ki-topic ilk-past-decl*  
 'Read the book, Chelswu does.'
- b. Chelswu-ka **ilk-ki-nun** chayk-ul **ilk-ess-ta**  
*Chelswu-nom read-ki-topic book-acc ilk-past-decl*  
 'Read the book, Chelswu does.'
- c. **ilk-ki-nun** Chelswu-ka chayk-ul **ilk-ess-ta**  
*read-ki-topic Chelswu-nom book-acc ilk-past-decl*  
 'Read the book, Chelswu does.'

There are many questions left open concerning this construction, but we will leave these for future research, on the grounds that this construction does not involve *do*-support.

#### II.4. *do*-support in light verb constructions

Park (1992) discusses a context which also seems to be an instance of *do*-support in Korean, namely the “light verb constructions” of the sort shown in (48) below. As he notes, these are generally verbs of Chinese origin which seem to have a status somewhere between nominal and verbal. Notice that alongside the verbal properties of assigning Case and theta roles, the predicate *cosa* ‘investigate’ also has the nominal property of optionally appearing with an accusative case marker.

- (48) John-ka        ku saken-ul    cosa-(lul)        ha-ess-ta  
*John-nom      the affair-acc investigate-(acc)    do-past-decl*  
 ‘John investigated the affair’

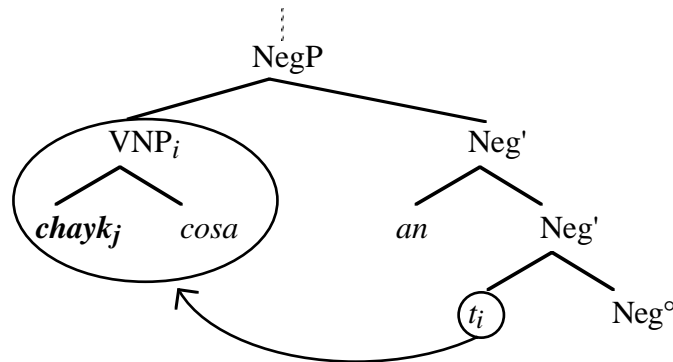
The analysis which Park (1992) suggests is that lexical items like *cosa* ‘investigate’ are listed as [-V] in the lexicon, and are thereby not able to support verbal affixes. The insertion of *ha* ‘do’ follows straightforwardly. Although Park has a more syntactic account of *do*-support in mind than the present “PF Merger” account, the facts still follow under the present framework.

One fact about these constructions warrants discussion in the present context, however, which is that when short-form negating these predicates, the negator *an-* intervenes between the “content predicate” and *ha* as shown in (49), and cannot precede the content predicate.

- (49) a.    John-ka        ku saken-ul    cosa-(ul)        **an-ha**-ess-ta  
           *John-nom      the affair-acc investigate-(acc)    neg-do-past-decl*  
           ‘John did not investigate the affair’
- b.    \*John-ka        ku saken-ul    **an-cosa**-(ul)        ha-ess-ta  
           *John-nom      the affair-acc neg-investigate-(acc) do-past-decl*  
           (‘John did not investigate the affair’)

These data in fact support the current analysis. If we consider these predicates to be just like VP predicates except for their nominal character, we predict them to act in a manner very similar to the nominalized verbal predicates in long-form negation. Specifically, we expect that the object shift operation in examples like (49a) will pull the entire predicate (including the direct object) into SpecNegP. A subtree for the sentence in (49a) is shown below in (50), where the “verbal noun” is marked as a VNP to avoid commitment to a particular internal analysis.

(50)



### III. Concluding remarks

There are clearly many issues left open for exploration in the area of Korean *do*-support, negation and focus constructions, but some progress has been made herein to unify the various phenomena in a way which seems to support and bring together several current lines of thinking, such as the Agr-free, feature-based attraction system of Chomsky (1995), the “Split-VP” hypotheses of Koizumi (1995) (and others, see fn. 18), and the idea that *do*-support is a purely phonological process, separate from the syntax (Bobaljik (1994, 1995), Lasnik (1994), Halle & Marantz (1993), Chomsky (1957)).

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