

Negation Formation without NegP in Korean*

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The main purpose of this paper is to examine the literature that has dealt with the categorial status of the Korean negator *ani* and the sentence negation utilizing the negator, and to claim that *ani* is a verbal prefix attached to a verb in morphology before the verb is selected into syntax and it free-rides on the covert verb movement to C at LF. It will be shown that the necessity of NegP in Korean assumed in the literature can be unjustifiable. It will also be discussed that there is no asymmetry of neg-scope interpretation between Neg1 and Neg2¹, and that the neg-scope ambiguity involved in both Neg1 and Neg2, and licensing of negative polarity item can possibly be accounted for without NegP projection.

Key words: ambiguity, asymmetry, NegP, negation, negative polarity item, neg-scope, verbal prefix

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0. These terminologies are from Choe (2001). Neg1 is the sentence negation formed by putting *ani* before the so-called light verb *ha*, and Neg2 is the one formed by putting the negator before other ordinary verbs. Song (1988) employs the terms 'simplex' and 'complex' sentence negations for Neg2 and Neg1, respectively. Some others use various terms like 'postverbal' and 'preverbal' negations, or 'verb' and 'sentence' negations.

1. Introduction

Negation formation and various aspects of sentence negation in Korean have been discussed in a huge amount of literature: Song (1966, 88), Kim (1967), Lee (1970a & b), Oh (1971a & b), Cho (1975), Kim (1975), Yang (1976), Kuno (1980), Han (1987), No (1988), Kang (1988), Yoon (1990), Ahn (1991), Jung (1992), Kim (1996), Hong (1998), most recently Choe (2000, 2001), and many others. All the linguists have indifferently recognized that Korean has two kinds of sentence negation: One is the negation in which the negator *ani* appears in front of the main verb as in (1a), and the other is that in which *ani* appears in front of the verb *ha* in the complex sentences where the complimentizer *-ci* is used as in (1b).¹ I will call the first one Neg2, and the second Neg1, following the most recent discussion provided by Choe (2000 and 2001).

- (1) a. pi-ka **ani** o-ess-ta.
 rain-Nom **not** come-Pst-Dec²
 ‘It didn't rain.’
- b. pi-ka o ci **ani** ha-ess-ta.
 rain-Nom come Comp **not** do-Pst-Dec
 ‘It didn't rain.’

1. There have been various arguments about the morpheme *ci*: nominalizer for Yang (1976), aspectual morpheme for Ahn (1991), and complementizer for Song (1988). As far as the identification of the morpheme is not a crucial concern of this paper, I will just treat it as complementizer.

2. Abbreviations used in this study are as follows;

Nom: Nominative Marker	Acc: Accusative Marker	Imp: Imperative ending
Dec: Declarative ending	Int: Interrogative ending	Hon: Honorific Marker
Prs: Present Tense	Pst: Past Tense	Prg: Progressive Marker
Top: Topic Marker	Neg: Negator	C(omp): Complementizer

For the sake of space, largely irrelevant morphemes are sometimes just glossed with capital letters.

The major topics regarding the Korean sentence negation include the underlying structures of these two kinds of sentence negation, presence of NegP, interpretation of neg-scope, and licensing of negative polarity items (NPI hereafter). In the early period, the discussions had mainly been focussed on the formation process of these two kinds of negation from a single underlying structure with the argument that the two types of negation are synonymous (Lee 1970a & b, Oh 1971a & b, Yang 1976, Song 1988, and many others). The discussions of the next generation have mainly been devoted to the arguments regarding the independent projection of NegP in trials to provide adequate explanations to interpretation of neg-scope and distribution of NPIs (Ahn 1991, Jung 1992, Kim 1996, and many others). The discussions on the formation and scope of negation are still going on and most recently Choe (2000 & 2001) has put forward a series of discussion on the Korean sentence negation.

In this paper, I will survey the early discussions on the sentence negation formation in various aspects, and insist, following Kim's (1996) proposal, that *ani* is a verbal prefix attached to verbal elements in the lexicon adding the feature [+Neg] to its hosts, and that there is no independent projection of NegP to license its appearance in the Syntax. In §2, the early discussions criticized by Song (1988) will briefly be summarized. In §3, Ahn's (1991) and Jung's (1992) arguments in favor of the independent projection of NegP will be examined, and the following section will discuss Choe's (2000 & 2001) claims regarding the asymmetry between Neg1 and Neg2. Section 5 will be devoted to justification of my proposal, and a conclusion will be presented in the last section.

2. The Early Discussions

The hypotheses of single underlying structure that had been assumed in the

early discussions like Lee (1970a & b), Oh (1971a & b), and Yang (1976) had been criticized by Song's (1988) and his earlier studies. Even though the underlying structures of the early discussions were more or less slightly different from each other, many scholars had invariably argued that the two types of negation in Korean be derived from a single underlying structure, insisting on their synonymy. To derive both types of negation from a single underlying structure, they had to postulate several transformational rules.

Presenting counter evidence against the single underlying hypothesis and pointing out its fallacies, Song (1988) repeated his argument, presented in Song (1966) for the first time, that “the rule of negation applies uniformly to both simplex and complex sentences” (p. 86). His claim, in short, is “that Korean, like all other languages, has only one negative sentence corresponding to each affirmative one” (p. 92), and the sentences (2a) and (2c) are not two negative counterparts of sentence (2b) but rather negations of sentences (2b) and (2d), respectively.

- (2) a. pi-ka ani o-n-ta
 rain-Nom Neg come-Prs-Dec
 ‘It is not raining.’
- b. pi-ka o-n-ta
 rain-Nom come-Prs-Dec
 ‘It is raining.’
- c. pi-ka o ci-(lul) ani ha-n-ta
 rain-Nom come Comp-(Acc) Neg do-Prs-Dec
 ‘It is the case that it is not raining.’
- d. pi-ka o ki-*(lul) ha-n-ta
 rain-Nom come Comp-(Acc) do-Prs-Dec
 ‘It is the case that it is raining.’

It is noticeable that most of the early discussions had been begun with the hypothesis that the two types of negation are derived from a single underlying structure. Nobody can deny the fact that the two types of negation are partially overlapped in meaning, but it is not the case that everyone agrees on the argument of complete synonymity. In addition, the transformational rules involved in the derivation processes are, however, too complex and expensive to have explanatory adequacy.

Song's negation formation rule is simple: Put the negator *ani* before the verb. Even though he is burdened with the explanation why the complementizer *ki* is reshaped into *ci* in the negative counterpart and the accusative marker *-lul* is obligatory in the affirmative sentence, I believe that his analysis of Korean negation formation is more plausible and acceptable than any others ever presented. Modifying and developing his analysis, I will propose that *ani* attaches to verbs in the lexicon before selected into the syntax, regardless of ordinary verbs or the so-called light verb *ha*.

3. Arguments for Independent Projection of NegP

This section discusses arguments in favor of the independent projection of negative phrase (NegP hereafter) which had been presented more recently in the framework of GB theory than those mentioned in the previous section.

Ahn (1991) analyzes that *ani* is a bound inflectional affix and claims that it has an independent projection like other inflectional affixes. He proposes that NegP projects between TP and MoodP, and the verb moves overtly to NegP to get affixation with *ani* and finally to MoodP.

The first evidence supporting his claim is related to licensing of negative polarity items. He argues that in order to meet the Negative Polarity Licensing

Condition (3), NegP in Korean projects above TP whose Spec position is occupied by the subject.³ The contrast in (4) is accounted for with the NegP projection above TP, as he wishes. It will be shown that this phenomenon, however, can be captured without postulating NegP.

(3) Negative Polarity Licensing Condition (NPLC hereafter)

A NPI must be c-commanded by a negator at S-structure.

(4) a. **amwuto ani** o-ass-ta.

anyone **not** come-Pst-Dec

‘No one came.’

b. ***amwuto** o-ass-ta.

anyone come-Pst-Dec

‘Anyone came.’ (intended reading)

Secondly, he argues that *ani* > *ta* reading of the sentence (5) supports the independent NegP projection above TP. He explains that this reading is obtained

4. More precisely, Ahn (1991) postulates another NPLC to account for the contrast in (i) as in (ii):

(i) a. *na-nun [_{CP} Yenghi-ka ppang-pakkey mek-ess-ta-ko] ani mit-nun-ta
I-Top Yenghi-Nom bread-only eat-Pst-Dec-C not believe-Prg-Dec.
‘I dont believe that Yenghi ate anything but bread.’ (Intended reading)

b. na-nun [_{CP} Yenghi-ka ppang-pakkey ani mek-ess-ta-ko] mit-nun-ta
I-Top Yenghi-Nom bread-only not eat-Pst-Dec-C believe-Prg-Dec.
‘I dont believe that Yenghi ate anything but bread.’

(ii) NPIs must co-exist with their licensors at LF in their Local domains.

Unlike Korean, in English the subject is located above NegP. Therefore, in (iii) Neg cannot c-command the negative polarity item *anyone*, hence the sentence is ungrammatical.

(iii) *Anyone didn't come to the party.

when *ani* has the wider scope than the quantifier *ta* ‘all’. For $ta > ani$ reading, he postulates an emphatic *AN*. *AN* must be generated below the quantifier *ta* and it does not move along with the verb, hence its scope is narrower than *ta*, inducing $ta > ani$ reading.⁴

4. To support his argument that NegP projects immediately above TP, Ahn (1991) postulates Neg Selectional Requirement (i).

(i) Neg Selectional Requirement

Neg⁰ must select TP.

With this postulation, he analyzes that (iib) is ungrammatical because the verb following *ani* is tenseless. He accepts that the judgment is subtle. In my intuition, though, (iib) is perfectly grammatical. And if (iib) is marginal, (iic) in which *ani* does not appear is also marginal. That is, the marginality of (iib), if it is, is not because of tenselessness. In addition, there are many instances which are grammatical with tense unexpressed, as illustrated in (iii).

(ii) a. ku salam-i tampay-lul **ani** kkunh-ess-ki-ka ship-ta.
 that person-Nom cigarette-Acc **not** quit-Pst-Comp-Nom easy-Dec.

‘It is easy for that person not to have quit smoking.’

b. *?ku salam-i tampay-lul **ani** kkunh-ki-ka ship-ta.
 that person-Nom cigarette-Acc **not** quit-Comp-Nom easy-Dec.

‘It is easy for that person not to quit smoking.’

c. ku salam-i tampay-lul kkunh-ki-ka ship-ta.
 that person-Nom cigarette-Acc quit-Comp-Nom easy-Dec.

‘It is easy for that person to quit smoking.’

(iii) a. chencay-ka nolyek-ul **ani** ha-ki-ka swip-ta
 genius-Nom effort-Acc **not** do-C-Nom easy-Dec

‘It is usual that a genius does not make efforts.’

b. mikwuk-eyse-nun yenge-lul **ani** ha-ki-ka elyep-ta
 America-at-Top English-Acc **not** do-C-Nom hard-Dec

‘It is hard to live in America without using English.’

c. ku-ka **ani** o-ki-ka swip-ta (Song 1988: 340)
 he-Nom **not** come-C-Nom easy-Dec

‘He is not likely to come.’

(5) *ta ani ka-ess-ta*

all not go-Pst-Dec

‘Not all went. (*ani* > *ta*) or No one went. (*ta* > *ani*)’

I agree with him on the analysis that Neg is a verbal affix, but do not accept that it is inflectional rather than derivational. Its appearance is neither syntactically motivated nor obligatory unlike other inflectional affixes, each of which has an independent projection which licenses its existence. Therefore, Neg needs not be licensed syntactically. The prefix *ani* just converts the meaning of verb into a negative one. Requirement of NPI licensing and neg-scope ambiguity can be accounted for without either NegP projection or the emphatic *AN*. I will discuss this in §5.

Jung (1992) is another linguist who claims the independent projection of NegP in Korean. She rejects the single underlying structure hypothesis discussed in §2 and proposes that each of the two types of negation is derived from an independent underlying structure but “by a single operation of head movement” (p. 82). Her single operation of head movement seems to be designed to capture the fact that *ani* appears before a verb regardless of whether it is an ordinary verb or the verb *ha*. Without any strong independent evidence for the projection of NegP, she analyzes that *ani* is a verbal inflectional prefix and claims that “NegP is projected as a member of the entire verbal extended projection” (p. 100), utilizing the extended projection proposed in Grimshaw (1991) and Baker’s (1985a) Mirror Principle of syntactic morphemes. In Jung’s analysis, both types of negation project NegP as the first functional category above the outmost VP as shown in (6). In (6a) the main verb and in (6b) *ha* are agglutinated with the functional morphemes in the course of movement to C.

- (6) a. [[[[[... V]_{VP} **ani**]_{NegP} Agr]_{AgRP} T]_{TP} C]_{CP} (Neg2)
 b. [[[[[[... V]_{VP} *ci*]_{XP} *ha*]_{VP} **ani**]_{NegP} Agr]_{AgRP} T]_{TP} C]_{CP} (Neg1)

In these underlying structures, NegP is projected above VP which contains every content morpheme of the sentence, including the subject, and Neg has the widest scope. Applying (6a) to (7a), which she analyzes as a VP conjunction sentence, she faces a problem. In the underlying structure (7b) for (7a), NegP is projected above the conjoined VP₃, dominating both VP₁ and VP₂, and we expect the interpretation that both conjuncts are negated, that is, meaning ‘John didn’t drink alcohol and smoke cigarettes.’ The force of negation is, however, actually confined within VP₂, as glossed.

- (7) a. John-i swul-ul masi-ko tampay-lul **ani** phiwu-ess-ta
 John-Nom alcohol-Acc drink-and cigarette-Acc **not** smoke-Pst-C
 ‘John drank alcohol and did not smoke cigarettes.’
 b. ...[_{NegP}[_{VP3}[_{VP1} swul-ul masi-] ko [_{VP2} tampay-lul phiwu]] **ani**]...

To account for this fact, she postulates Scope Relativity Condition as stated in (8). With this condition, Neg has scope over only VP₂ from which V combines with Neg.

- (8) Scope Relativity Condition (Jung 1992: 92)
 Negation has scope over the X^{max} immediately dominating the trace of the X⁰ which raises to Neg.

She extends the application of this condition to the analysis of the Neg1 conjunction sentences like (9a). Unlike (7a), (9a) is ambiguous as glossed. To account for this ambiguity, she postulates that (9a) has two different underlying structures, as shown in (9b&c). In (9b), *ha* is located inside the second

conjunct from which it raises over the negator, hence inducing the partial negation interpretation with the condition (8). In (9c), *ha* is located above both conjuncts and when it moves out of there above the negator, the whole negation interpretation is obtained.

- (9) a. John-i swul-ul masi-ko tampay-lul phiwu-ci **ani** ha-ess-ta
 John-Nom alcohol-Acc drink-and cigarette-Acc smoke-C **not** do-Pst-Dec
 ‘John drank alcohol and did not smoke cigarettes.’
 ‘John didn’t drink alcohol and smoke cigarettes.’
- b. ...[[swul-ul masi-] ko [tampay-lul phiwu-ci **ha**]] **ani**...
- c. ...[[[swul-ul masi-] ko [tampay-lul phiwu-ci]] **ha**] **ani**...

Her Independent Projection of NegP requires several postulations as we discussed above. In regard of explanatory adequacy, her analysis is not so different from Ahn’s (1991), and I could not find any justification of independent projection of NegP in Korean in her proposal, as in Ahn’s proposal.⁵

5. One reviewer of this paper has commented that the following sentences can possibly provide evidence for the syntactic visibility of *ani* in Korean. The reviewer suggests that the ungrammaticality of (ia) is probably due to a kind of violation of the Minimality Condition, that is, the adjunct *way* ‘why’, unlike the argument *mwues* ‘what’ in (ib), cannot be licensed by its licenser *ni* (interrogative morpheme) because *ani* intervenes between them.

- (i) a. *ne-nun ku-ka way o-ess-ta-ko ani mit-ni?
 you-Nom he-Nom why come-Pst-Dec-Comp not believe-Int
 ‘Which of his reasons for coming do you not believe?’ (intended reading)
- b. ne-nun ku-ka mwues-ul sa-ess-ta-ko ani mit-ni?
 you-Nom he-Nom what buy-Pst-Dec-Comp not believe-Int
 ‘What don’t you believe he bought?’

However, I am not quite sure of the ungrammaticality of (ia). The following sentence similar to (ia) is perfectly grammatical in my intuition. If (ia) is unacceptable, the unacceptability can possibly be accounted for in terms of selectional restriction. I will leave

4. Choe's (2000 & 2001) Analysis and Problems

This section discusses Hyun-Sook Choe's recent studies on Korean sentence negation. First of all, I will examine her analysis that Neg1 and Neg2 show asymmetry in neg-scope interpretation, and try to show that there is no significant difference of neg-scope interpretation between the two types of negation in Korean. Secondly, I will examine the validity of her proposal that NegP projections are different between Neg1 and Neg2.

4.1. Alleged Asymmetry between Neg1 and Neg2

The first example Choe (2001) uses to prove the asymmetry between Neg1 and Neg2 in Korean is (11) and (12). She agrees with the opinion that the English sentences in (10) show scope ambiguity regarding the quantifier and the negator. She analyzes that the Korean Neg1 sentences in (11) are ambiguous like the English corresponding sentences in (10), but in the Neg2 sentences in (12), only the first one, in which the quantifier *modwu* 'everyone' is used as object, shows ambiguity. That is, her analysis is that in both sentences of (11) *ani* can have a wider scope than the quantifier *modwu* 'everyone' inducing a partial negation, whereas in (12) only the first sentence can have the reading of partial negation.

- (10) a. John didn't meet everyone.
 b. Everyone didn't meet John.

this question for further study.

- (ii) ne-nun ku-ka way o-ki-lul ani para-ni?
 you-Nom he-Nom why come-Comp-Acc not want-Int
 'Which of his reason for coming do you not like?'

- (11) a. John-un modwu-lul manna ci ani ha-ess-ta.
 John-Nom everyone-Acc meet Comp not do-Pst-Dec
 ‘It is not the case that John met everyone.’
- b. modwu-ka John-ul manna ci ani ha-ess-ta.
 everyone-Nom John-Acc meet Comp not do-Pst-Dec
 ‘It is not the case that everyone met John.’
- (12) a. John-un modwu-lul ani manna-ess-ta.
 John-Nom everyone-Acc not meet-Pst-Dec
 ‘John did not meet everyone.’
- b. modwu-ka John-ul ani manna-ess-ta.
 everyone-Nom John-Acc not meet-Pst-Dec
 ‘Everyone did not meet John.’ (Choe 2001: 7-8)

In my intuition, however, not only (12a) but also (12b) shows neg-scope ambiguity. When the context is appropriately expanded, the partial negation reading, that is “some-reading” in Choe's terminology (p. 8), becomes clearer, as shown in (13). Choe herself also footnotes some linguists' observation that (12a) can possibly have the some-reading.

- (13) modwu-ka John-ul ani manna-ko, myec myeng-man John-ul
 everyone-Nom John-Acc not meet-and some ones-only John-Acc
 manna-ess-ta.
 meet-Pst-Dec
 ‘Not everyone, but some met John.’

Choe (2001) presents some more examples which she thinks show clearer ambiguity regarding neg-scope interpretation. She claims that the asymmetry regarding neg-scope ambiguity between Neg1 and Neg2 is clearer in the

sentences in which the quantifier *modun* ‘every’ appears in adjuncts as in (14). She interprets that (14a) has the reading of ‘not on every stage’, whereas (14b) does not have this reading.

- (14) a. ku-nun modun mwutay-eyse nolay-lul pwulu ci ani ha-ess-ta
 he-Non all stage-on sing-Acc sing Comp not do-Pst-Dec
 ‘It is not the case that he sang songs on every stage.’
 b. ku-nun modun mwutay-eyse nolay-lul ani pwul-ess-ta
 he-Non all stage-on sing-Acc not sing-Pst-Dec
 ‘He did not sing songs on every stage.’

But, again, if the context is appropriately expanded as in (15), the partial negation reading is possible. I have never met anyone who judges (15) ungrammatical.

- (15) ku-nun modun mwutay-eyse nolay-lul ani pwul-ko, myec myec
 he-Non all stage-on sing-Acc not sing-and some some
 mwutay-eyse-man pwul-ess-ta
 stage-on-only sing-Pst-Dec
 ‘He sang songs not on every stage, but on some stages.’

The only one interpretation on which I partially agree with Choe is the one related to adverb of quantification. In (16b), the adverb *hangsang* ‘always’ seems hardly to be negated, whereas in (16a) it can easily be negated, inducing the reading of ‘not always’.

- (16) a. ku-nun hangsang hakkyo-ey ka ci ani ha-n-ta.
 he-Nom always school-to go Comp not do-Prs-Dec
 ‘It is not the case that he always goes to school.’

- b. ku-nun hangsang hakkyo-ey ani ka-n-ta.
 he-Nom always school-to not go-Prs-Dec
 ‘He always does not go to school.’

Again, if the context is adroitly expanded a little as in (17), we become to know that the reading of ‘not always’ is not totally impossible in (16b).⁶ And, the frequency can be a focus of question as illustrated in (18).

- (17) ku-nun hangsang hakkyo-ey ani ka ko kakkum ka-n-ta.
 he-Nom always school-to not go and once in a while go-Prs-Dec
 ‘He goes to school not always, but once in a while.’

- (18) a. ku-nun hangsang hakkyo-ey ka-nya?
 he-Nom always school-to go-Int
 ‘Does he always go to school?’
 b. ani, kakkum ka.
 no once in a while go
 ‘No, he goes to school once in a while.’

Not only I but also many linguists such as Song (1988), Choi (1985), and Jung (1992) observe that Neg2 can have the same kind of ambiguity as Neg1. For example, Song states as follows:

6. If the reading of ‘not always’ is not possible in (16b) and (17), it is probably because of the characteristics of the adjunct of quantification itself, in the sense of Lasnik’s (1972), as Choe (2001) footnotes on p. 11. There is another way to capture the impossibility of this reading though. If the adverb *hangsang* ‘always’ is a sentential adverb, and we assume that sentential adverbs adjoin CP at LF but does not cross over CP, it can escape the force of Neg2. It cannot, however, escape the force of Neg1 that negates the whole embedded sentence. However, in my judgment (17) is perfectly grammatical, and I insist that the adverb *hangsang* ‘always’ can always be negated.

“My own investigation reveals that simplex sentence negation (Neg2) is also ambiguous between verb and sentence negation readings in the affected environment.⁷ Thus, both types of negation are ambiguous and their interpretations completely overlap.” (Song 1988: 139)

With this much observation, Choe (2001) generalizes the neg-scope interpretation as in (19):

- (19) a. The (A) reading (= none-reading) in relation with the element Υ is always possible.
- b. The (B) reading (= some-reading) in relation with the element Υ is syntactically restrained: In Neg1, the (B) reading in relation with any element Υ is possible, whereas in Neg2 the (B) reading is possible in relation with VP-internal element Υ only.

Choe also assumes the following:

- (20) a. Sentential negations consist of a negation phrase as the maximal functional projection.
- b. The existence of sentential negation means the existence of operator in Spec position. (2000: 305)
- (21) a. Sentential negation is an adverbial, which has a modification relation with the negated element, and it merges with the negated element, consisting of a component.

7. Song's (1988) “affected environments” are the contexts in which “a quantifier, an adverbial phrase, or a presupposition-bearing element” is used. (p. 135)

- b. Sentential negation moves to the Spec position of the Negation Phrase to get its feature [+sn] checked, and therein it is combined with a verbal or inflectional element through cliticization or incorporation.

(2001: 12 & 2000: 307)

Rejecting the traditional approach of the Neg-operator movement or QR, Choe's approach is following the Minimalist Program, in which every movement is morphologically triggered and realized by feature checking. To summarize her approach to sentential negation formation, it is as in (22): (excerpted from Choe (2001: 13) and modified)

- (22) a. i. ... [_{NegP1} neg1_i [_{Neg1'} ... [TP... [_{NegP2} t_i [_{Neg2'} ... V... t_i-Y...]]]]]
 ii. ... [_{NegP1} neg1_j [_{Neg1'} ... [TP t_j-Y ... [_{NegP2} ... [_{Neg2'} ...]]]]]
 b. i. ... [_{NegP1} ... [TP... [_{NegP2} neg2_i [_{Neg2'} ... V... t_i-Y...]]]
 ii.*... [_{NegP1} ... [_{NegP1} ... [TP t_j-Y ... [_{NegP2} neg2_j [_{Neg2'} ...]]]]]

The gist of her approach is that *ani* in the Spec of NegP has the higher position than any elements dominated by the NegP and negates any elements inside the NegP. (22a) shows that Neg1 can negate any elements of sentence from the Spec position of NegP₁ located above TP, whereas Neg2 is located in the Spec position of NegP₂ below TP where it can negate VP-internal elements only, as shown in (22b).

4.2. Theoretical Problems with Choe (2000 & 2001)

Choe's (2000 & 2001) approach begins on the basis of her observation that Neg1 and Neg2 show asymmetry in neg-scope interpretation. As I discussed in §4.1, however, her observation is quite idiosyncratic. At least, it is quite clear

that there is no consistent agreement about the neg-scope interpretation between Neg1 and Neg2 among linguists. Supposing that her observation is reasonable to some extent, this section discusses how well her proposal works for negation formation.

On the basis of her assumptions and postulations, when (21) and (22) are adapted to the derivation of (23), the process of Neg1 formation quite differs from that of Neg2 formation. Let us focus on the bracketed parts of (23). In the process of Neg1 formation, *ani* is originally merged with the negated element \bar{Y} inside VP, moves to the Spec position of the NegP above TP, is incorporated with the inflected verb *ha-ess-ta*, and is finally realized as *ani ha-ess-ta*, as shown in (24a). On the other hand, in the process of Neg2 formation, the original position of *ani* is the same as Neg1, but it moves to the Spec position of the NegP below TP, is cliticized to the inflected verb *mek-ess-ta*, and finally realized as *ani mek-ess-ta*, as shown in (24b).⁸

(23) a. ku-nun pap-ul mek ci [ani ha-ess-ta]. (Neg1)

he-Nom rice-Acc eat Comp not do-Pst-Dec

‘It is not the case that he ate the rice.’

b. ku-nun pap-ul [ani mek-ess-ta]. (Neg2)

he-Nom rice-Acc not eat-Pst-Dec

‘He did not eat the rice.’

(24) a. [[TP SUB [T[... $t_i\bar{Y}$...]VP *ha-ess-ta*]_T]TP *ani*]_{NegP} \Rightarrow *ani ha-ess-ta*

b. [[[[... $t_j\bar{Y}$... t_i]VP *ani*]_{NegP} *mek-ess-ta*]_T]TP \Rightarrow *ani mek-ess-ta*

This approach induces several questions or problems as stated in (25).

8. In Choe's paper, the terms ‘cliticization’ and ‘incorporation’ are not clearly defined. What I understand is that *ani* is cliticized with *ha* in the contracted form *anha-ess-ta*, whereas it is incorporated with other verbs which cannot be contracted with it.

- (25) a. This explanation provides two processes for the single surface form of negated verbs. The negator *ani* invariably appears in front of verb regardless of whether it is the so-called auxiliary/dummy verb or a content verb. In (24), however, *ani* combines with *ha* from a higher position, whereas it combines with the content verb *mek* ‘eat’ from a lower position.
- b. Contrary to Choe's analysis that Neg2 cannot negate the subject since Neg₂P projects below TP whose Spec position is occupied by the subject, the subject can be negated, as illustrated in (26).
- c. It is hard to understand how to derive the sentences in (27) where Neg1 and Neg2 coexist. To make this approach adaptable to the derivation of this sentence, it must be justified that a single element can be base-generated with two negators.
- d. The argument that *ani* is merged with the negated element before it moves to NegP cannot interpret the meaning of the negative sentence which has more than one focus and therefore has more than one element to be negated as in (28).
- (26) Chelswu-ka pap-ul ani mek-ko, Yeonghi-ka mek-ess-ta.
 Chelswu-Nom rice-Acc not eat-Conj Yeonghi-Nom eat-Pst-Dec
 ‘It is not Chelswu but Yenghi who ate the rice.’
- (27) Chelswu-ka pap-ul ani mek ci ani ha-ess-ta
 Chelswu-Nom rice-Acc not eat Comp not do-Pst-Dec
 ‘It is not the case that Chelswu did not eat the rice.’
- (28) na-nun **ku il-lo** **Chelswu-lul** ani manna-ess-ta.
 I-Nom that matter-because Chelswu-Acc not meet-Pst-Dec
 ‘I met not Chelswu and not because of that matter.’

5. *Ani* as a Verbal Prefix and No NegP Projection

The problems with the previous approaches to the negation formation and scope interpretation are caused by introducing the independent projection of NegP in the framework of the generative syntax, pursuing the syntactic universality. This section will propose an analysis of the Korean negation formation without NegP and try to provide explanations about the phenomena related to negation.

5.1. *Ani* as a Verbal Prefix

My observations on the sentential negation in Korean can be summarized as in (29).

- (29) a. The negator *ani* differs from the other functional categories such as Tense, Agr, and sentential endings, which obligatorily appear as a verbal inflection and have their own independent projection to license them. The distribution of *ani* is similar to the other derivational affixes like the passive morphemes in Korean.⁹
- b. Unlike other languages such as English and French, negation in Korean does not show any syntactic operation triggered by a neg-operator.
- c. The alleged asymmetry between Neg1 and Neg2, on which the argument of the function of neg-operator is based, does not exist.

9. Cheong-Soo Suh (1996) states that even though many school grammar books treat the Korean passive and causative morphemes as derivational morphemes, it is better to treat them as inflectional morphemes. The classification of the morphemes is not a major concern of this paper. The main point is that *ani* shows a distribution similar to the passive and causative morphemes that do not require any independent syntactic projection.

First, let us examine how different *ani* is from other verbal inflectional morphemes. In the conjunction structure (30), the past tense morpheme *-ess* appears only in the second conjunct. However, the verb in the first conjunct is also interpreted as past. This can be explained with the projection of TP in the position where the past tense morpheme dominates both verbs.

- (30) John-i chwum-ul chwu-ko nolay-lul pwulu-**ess**-ta.
 John-Nom dance-Acc dance-and song-Acc sing-**Pst**-Dec.
 ‘John danced and sang songs.’

The honorific morpheme *-si* shows the same kind of phenomenon. In the following conjunction structure, even though *-si* appears only in the last conjunct, the first and second conjuncts are interpreted as containing honorification. This also can be accounted for with the projection of AgrP in the position where *-si* dominates all the three conjuncts.¹⁰

- (31) Sensayngnim-i [hakkyo-ey ka]-se [chayk-ul ilk]-ko [tolao-**si**]-ess-ta.
 teacher-Nom school-to go-and book-Acc read-and come back-**Hon**-Pst-Dec
 ‘The teacher went to school, read a book and came back.’

The negator *ani* shows a totally different syntactic behavior from these

10. More precisely, the past tense and the honorific morpheme can optionally appear in the non-last conjuncts, as shown below. For more discussions, refer to Kim (1996).

- (i) a. John-i chwum-ul chwu(-**ess**)-ko nolay-lul pwulu-**ess**-ta.
 John-Nom dance-Acc dance-**Pst**-and song-Acc sing-**Pst**-Dec.
 ‘John danced and sang songs.’
 b. Sensayngnim-i [hakkyo-ey ka(-**si**)]-ese [chayk-ul ilk(-**si**)]-ko [tolao-**si**]-ess-ta.
 teacher-Nom school-to go-**H**-and book-Acc read-**H**-and come back-**H**-Pst-Dec
 ‘The teacher went to school, read a book and came back.’

morphemes. As we have discussed in §3, in the conjunction sentence like (32a), repetition of (7a), *ani* exerts its force on the last verb only unlike other verbal inflectional morphemes. Jung (1992) has treated *ani* as a verbal functional category like others which have their own projections, and suggested the underlying structure (32b), repetition of (7b). To capture the different syntactic behavior from the other verbal inflectional morphemes, she has postulated (33), repetition of (8). With this condition, Neg has a scope over only VP₂ from which V raises to Neg.

- (32) a. John-i swul-ul masi-ko tampay-lul **ani** phiwu-ess-ta
 John-Nom alcohol-Acc drink-and cigarette-Acc **not** smoke-Pst-C
 ‘John drank alcohol and did not smoke cigarettes.’

b. ...[_{NegP}[_{VP3}[_{VP1} swul-ul masi-] ko [_{VP2} tampay-lul phiwu]] ani]...

- (33) Scope Relativity Condition (Jung 1992: 92)

Negation has scope over the X^{max} immediately dominating the trace of the X⁰ which raises to Neg.

If we treat *ani* as a pure verbal prefix, we need not to postulate such a condition as (33), still complying with our intuition that (32a) is a VP conjunction sentence.

In addition, even when *ani* precedes several verbs in conjunction structures, it negates the first verb only as illustrated in (34a).¹¹ If we want to negate all the following verbs in the second and third conjuncts, *ani* must be repeated as shown in (34b). This is a typical difference from English negation like (34c), where one negator negates all the three following verbs. I believe this fact can be a piece of evidence for the argument that in Korean NegP does not project

11. Notice that in NegI *ani* attaches to *ha* which locates in the position dominating the subordinated VPs and possibly negates any elements inside the subordinated VPs. This will be discussed in §5.2.

for location of *ani*, whereas in English NegP independently projects above the conjoined VP.¹²

- (34) a. ku-nun **ani** mek-ko nol-ko ca-ass-ta
 he-Top **not** eat-and play-and sleep-Pst-Dec
 ‘He played and slept without eating.’
- b. ku-nun **ani** mek-ko **ani** nol-ko **ani** ca-ass-ta
 he-Top not eat-and not play-and not sleep-Pst-Dec
 ‘He did not eat, play, and sleep.’
- c. ‘He did not eat, play, or sleep.’

Second, let us examine how similar *ani* is to the passive morpheme *-i*. The parallelism between the passive morpheme and *ani* has been observed by No (1988) and Ahn (1991) also. In (35a), the passive verb *po-i* ‘to be seen’ appears twice. If the second appearance of the verb has the active form *po* ‘see’, the sentence is ruled out, as shown in (35b). Even though the use of the passive verb is syntactically required, we do not postulate the syntactic projection for the passive morpheme.¹³ The negator *ani* shows the same kind of behavior. In (36a),

12. One reviewer of this paper has commented that the difference between Korean and English is possibly due to the difference of headness. In the NegP approach, however, the underlying structure for (34a) probably has a NegP projected above the conjoined VPs, and some explanation must be provided how the conjoined VPs move above NegP (since *ani* precedes the conjoined VPs) and how *ani* negates the first conjunct only. If it is argued that *ani* preceding the first verb is originally located inside the first conjunct in the underlying structure, it will not be a VP anymore but a NegP and cannot combine with other VPs to form a conjunction structure. The reviewer has also suggested that the VPs can possibly conjoin together if we assume that the category of the conjoined structure has both positive and negative values regarding negation. If this suggestion is adopted, the same structure must be applied to the conjunction structure (32a), in which the negator appears before the last verb, and we can dispense with NegP projection above the conjoined category. This idea is basically the same as mine.

ani is used twice. If the second verb is used without *ani*, the sentence will be out, as shown in (36b).

- (35) a. ku san-i po-i-ki-nun po-i-n-ta
 the mountain-Nom see-**Pass**-ki-Top see-**Pass**-Prog-Dec
 ‘The mountain is seen anyway.’
 b. *ku san-i po-i-ki-nun po-n-ta.
- (36) a. pap-ul **ani** mek-ki-nun **ani** mek-ess-ta
 meal-Acc **not** eat-ki-Top **not** eat-Pst-Dec
 ‘(I) didn't eat the meal anyway.’
 b. *pap-ul **ani** mek-ki-nun mek-ess-ta¹⁴

13. The use of a passive verb requires the object of an active sentence to be changed into the subject, as illustrated below:

- (i) a. na-nun ku san-ul po-n-ta
 I-Nom the mountain-Acc see-Prs-Dec
 ‘I see the mountain.’
 b. ku san-i po-i-n-ta.
 the mountain-Nom see-**Pass**-Prs-Dec
 ‘The mountain is seen.’

14. One reviewer of this paper has commented that even though *ani* is not repeated before the second *ha* ‘do’ in (ib), this sentence has the same interpretation as (ia) in which *ani* is obligatorily repeated before the second *mek* ‘eat’. The reviewer considers that this phenomenon reflects a clear syntactic status of *ani* in regard with *ha* at least.

- (i) a. Mary-ka pap-ul ani mek₁-ki-nun ani mek₂-ess-ta.
 Mary-Nom meal-Acc not eat-ki-Top not eat-Pst-Dec
 ‘Mary did not eat the meal anyway.’
 b. Mary-ka [[pap-ul mek-ci] ani ha₁-ki-nun] ha₂-ess-ta.
 Mary-Nom meal-Acc eat-Comp not do-ki-Top do-Pst-Dec
 ‘It is the case that Mary did not eat the meal anyway.’

I accept the interpretation that these two sentences are synonymous. However, I do not see a clear syntactic status of *ani* regarding *ha* in this interpretation. As glossed, (iia) is also

The distributional similarity between *ani* and the derivational morphemes alone cannot be a decisive piece of evidence for the argument that *ani* is not a syntactic entity. However, if the phenomena provided to prove the independent projection of NegP can be accounted for without NegP, which is discussed in the previous sections 3 & 4, the explanation of the phenomena without NegP would be better in the sense of parsimony, complying with the spirit of minimalism.

Quite recently, Hong (1998) has presented an analysis in favor of the affixation approach.¹⁵ He has succinctly compared the two, verb-movement approach and affixation approach, and claimed the latter is more economic than the former. According to him, even the verb-movement approach requires verbal affixation in morphology in some cases of conjunction structures. Consider the conjunction structure in (37). The verbal functional morphemes that appear after the second verb exert their forces on the first conjunct as well as the second one. To explain this, the verb-movement approach assumes that the functional

synonymous with (ia) and (ib). In (ib) the object of *ha*₂ is the larger bracketed part in the same regard as that of *ha* in (iia) is the bracketed part. In contrast, to form a complete parallelism with (ia), *ha*₂ must come along with *ani* as shown in (iib), which is also synonymous with the other three sentences, and where the object of both *ha* verbs is the bracketed part, which is the same as the inner bracketed part in (ib). That is, in (ib) *ha*₂ differs from *ha*₁ in regard with their objects, whereas in (iib) both *ha* verbs are the same one. This shows that *ani* must come along with *ha* indifferently from other ordinary verbs when repeated for emphasis.

- (ii) a. Mary-ka [pap-ul ani mek-ki-nun] ha-ess-ta.
 Mary-Nom meal-Acc not eat-ki-Top do-Pst-Dec
 'It is the case that Mary did not eat the meal anyway.'
- b. Mary-ka [pap-ul mek-ci] ani ha₁-ki-nun ani ha₂-ess-ta.
 Mary-Nom meal-Acc eat-Comp not do-ki-Top not do-Pst-Dec
 'Anyway, it is not the case that Mary ate the meal.'

15. In Hong's (1998) affixation approach, the bound morphemes attach to verbs in the level of phonology and morphology without syntactic movements (p. 34). He treats the negator as a kind of verbal bound morpheme.

morphemes have their own independent projections above the two conjuncts and argues that the second verb *cohaha* ‘like’ continues moving up until it reaches the final functional morpheme, that is, the sentential ending *-ta*. Hong has pointed out that this movement, however, violates the Coordinating Structure Constraints. Consequently, the verb-movement approach has to introduce, partially as it may be, the affixation in morphology to capture the verb and the verbal functional morphemes form a single unit.

- (37) emeni-ka [[sakwa-lul sileha] ko [pay-lul cohaha]]-si-ess-ta.
 mother-Nom apple-Acc dislike Con pear-Acc like-Hon-Pst-Dec
 ‘Mother disliked apples and liked pears.’

Extending his affixation approach to the negation formation, Hong criticizes that Koizumi’s (1995) verb-movement approach does not provide a reliable explanation about the following scrambled negative sentence. If we analyze (38) in accordance with Koizumi’s approach, its structure might be either (39a) or (39b). In (39a), the verb *mek-ci* ‘eat’ first moves to the auxiliary *aniha* ‘not do’, and then the combined verb *mek-ci aniha* ‘don’t eat’ moves to the verbal functional categories *-ess-ta* (Pst-Dec). Hong has pointed out, however, that the verb movement is normally allowed only for either the main verb or the auxiliary in a single clause, but not for the combined verb.

- (38) Chelswu-nun sakwa-lul Yenghi-nun pay-lul
 Chelswu-Top apple-Acc Yenghi-Top pear-Acc
 emeni-ka mek-ci ani ha-ess-ta-ko malha-ess-ta
 mother-Nom eat-C not do-Pst-Dec-C say-Pst-Dec
 ‘Chelswu didn’t eat the apple and Yenghi didn’t eat the pear, Mother said.’

- (39) a. [[Chelswu-nun sakwa-lul t_i] [Yenghi-nun pay-lul t_i]_j
 emeni-ka [t_j [mek-ci ani-ha]_i]-ess-ta-ko malha-ess-ta
 b. [[Chelswu-nun sakwa-lul t_i] [Yenghi-nun pay-lul t_i]_j
 emeni-ka [t_j [mek]_i]-ci ani-ha-ess-ta-ko malha-ess-ta

In (39b), only the verb *mek* ‘eat’ moves to *ci* (Comp). This structure does not incur such a problem as with the structure (39a). According to Hong, however, this structure involves a problem of logical entailment regarding the interpretation of neg-scope. As *ani* locates in the position where it dominates both conjuncts, its logical entailment can be expressed as in (40).

$$(40) \neg[A \cap B] \Rightarrow [\neg A \cup \neg B]$$

That is, if $\neg[A \cap B]$ is true, then $[\neg A \cup \neg B]$ is also true. This implies both of the following interpretations must be true. However, the sentence (38) has the interpretation (41b) only.

- (41) a. ...Chelswu didn't eat the apple or Yenghi didn't eat the pear...
 $[\neg A]$ or $[\neg B]$
 b. ...Chelswu didn't eat the apple and Yenghi didn't eat the pear...
 $[\neg A]$ and $[\neg B]$

Hong argues that the affixation approach does not incur these kinds of problems. In his analysis, the two conjuncts have the same negated verb *aniha* ‘not do’ in the underlying structure, and after the focused elements move up under FocP, one of the two remaining identical structures is deleted, deriving the surface form (38).

Before we proceed with our discussion, it must be made clear why the lexical negative-verbs like *pwul-hayng-ha-ta* ‘to be unhappy’ and *mwu-sik-ha-ta* ‘to be

ignorant,’ neither show scope ambiguity nor allow NPI, unlike the verbs negated by *ani*. In (42) the verbs *pwul-hayng-ha-ta* ‘unhappy’ and *mwu-sik-ha-ta* ‘to be ignorant’ do not incur scope ambiguity with regard to the quantifier *ta* ‘all’ and have only one reading, with wide-scope of the quantifier. And again, in (43) the lexical negative verbs do not allow the NPIs, *amwuto* ‘anyone’ and *amwukesto* ‘anything’, and the sentences are out.

- (42) a. ta **pwul**-hayng-ha-ta.
 all **not**-happy-Dec
 ‘All are unhappy.’
 b. ta **mwu**-sik-ha-ta.
 all **not**-learned-Dec
 ‘All are ignorant.
- (43) a.*amwuto **pwul**-hayng-ha-ta
 anyone not-happy-Dec
 ‘Nobody is happy.’ (intended reading)
 b.*Chelswu-ka amwukesto **pwu**ceng-ha-ess-ta
 Chelswu-Nom anything **not**-accept-Pst-Dec
 ‘Chelswu accepted nothing.’ (intended reading)

As Hong (1989) has correctly observed, the negative semantic property of these morphemes is not so different from that of *ani*. However, the internal morphological structures of these verbs are different from the ones which are formed by attaching *ani* to verbs. The verb *pwul-hayng-ha-ta* ‘to be unhappy’ is not formed by attaching the negative morphemes *pwul* ‘not’ to the strings *hayng-ha* as in (44b). Instead, the negative morpheme first attaches to the noun *hayng* ‘happiness’ to derive the negative noun *pwul-hayng* ‘unhappiness’ and then the negative noun attaches to *ha* as illustrated in (44a). In other words, the

negative morphemes *pwul* and *mwu* are nominal prefixes always attached to nouns, whereas *ani* is a verbal prefix always attached to verbal elements. Therefore, the lexical negative verbs in (42) and (43) are actually formed by attaching *ha* to the negative nouns *pwul-hayng* ‘unhappiness’, *mwu-sik* ‘ignorance’, and *pwu-ceng* ‘denial’.¹⁶

- (44) a. [_V [_N pwul [_N hayng]] ha]
 not happiness do
 b.*[_V pwul [_V hayng [_V ha]]]

From this morphological structure, we can conjecture that the negative force of the nominal negative morphemes does not exceed the boundary of nouns when the derived negative nouns are incorporated with *ha* to form verbs in terms of Baker (1985b). The negator *ani*, however, attaches to verbs or adverbs only and it can exert its negative force over verbs.

With this much observation, I disqualify the arguments in favor of the independent NegP projection, and propose the following.

- (45) a. The negator *ani* is a pure verbal prefix attached to the verbal stems in the lexicon before the verb is selected into syntax.
 b. The negator free-rides on the verb-movement to C, the highest c-commanding position, at LF.
 c. The feature [+Neg] of the negated verb located in the head position of CP at LF is added to the element(s) bearing the feature [+Foc] by c-commanding.
 d. A NPI must be governed by the feature [+Neg] at LF.

16. Hong (1998) discusses these nominal prefixes' syntactic behavior different from *ani*. I am quite positive about his observation and analysis. As the focus of this paper is on the treatment of *ani*, I will not discuss the morpho-syntactic structure of these morphemes in detail.

As for (45a&b), more discussion is necessary. In the approach of the independent NegP projection, Korean verbal functional morphemes like tense and agreement (Honorification) morphemes, sentential endings, and the negation morpheme have been treated as forming their own syntactic projections in the syntax.¹⁷ For example, Jung (1992) and Ahn (1991) take (46b) as the D-structure of (46a). They argue that the S-structure is derived as a result of cyclic overt verb-movement until it reaches the declarative sentential ending *-ta*, as shown in (46c).

- (46) a. *emenim-i ku chayk-ul ani ilk-usi-ess-ta*
 mother-Nom that book-Acc **not** read-**Hon-Pst-Dec**
 Mother did not read that book
- b. [[[[[emenim-i ku chayk-ul ilk]_{VP} **ani**]_{NegP} **-usi**]_{AgP} **-ess**]_{TP-ta}]_{CP}
- c. [[[[[emenim-i ku chayk-ul *t_v*]_{VP} *t_{Neg}*]_{NegP} *t_{AgP}*]_{AgP} *t_T*]_{TP} **ani-ilk-usi-ess-ta**]_{CP}

Instead, I adopt Kim's (1996) proposal that the base-generated structure for (46a) is (47). The functional categories Agr, T, and C are phonologically empty and just a bundle of functional features which, at LF, license the functional morphemes attached to the verb. Notice that *ani* is a verbal prefix and there is no NegP projection in Korean. The fully inflected verb covertly moves to C by way of Agr and T to get their features checked, whereas *ani* free-rides on this verb movement and finally arrives at C.¹⁸

17. Jung (1992) proposes that the Korean sentential endings like *-ta* 'declarative', *-la* 'imperative', *-nya* 'interrogative', *-ca* 'cohortative', etc. are C. And similarly, Kim (1996) proposes that the sentential endings moves to C at LF to get their features (like the declarative feature [+Dec], the interrogative feature [+Int], etc.) checked as a part of the fully inflected verb. This means that CP is always projected as the highest phrasal category in Korean. In this paper, I insist on Kim's (1996) proposal.

18. This movement does not comply with Chomsky's (1995) Move-F. If we adopt

(47) [[[[[emenim-i ku chayk-ul **ani-ilk-usi-ess-ta**]_{VP} Agr]_{AgrP} T]_{TP} C]_{CP}

This approach can be considered more economic in the sense of eliminating the expensive overt verb movement in Korean and relieving the burden to devise various transformational rules in order to explain the appearance of *ani* before verbs, as pointed out by Hong (1998), unlike other functional morphemes. One thing to make clear is that *ani* just adds the semantic feature [+Neg] to its host verbs and does not need to undergo any feature checking process unlike other inflectional morphemes. In other words, the inflectional morphemes like Tense or Agr attached to verbs must get their features checked in their own projection at LF in Korean, whereas *ani* adding the feature [+Neg] to its verbs does not require an independent projection of NegP which syntactically checks its appearance.

As for (45c), notice that, as far as negation is concerned, this proposal abandons the scope principle on the lines of May (1985), in which the structurally higher position has the wider scope. For instance, *ani* locates in a higher position than a quantifier, a some-reading is obtained, whereas the quantifier occupies a syntactically higher position than the negator, a non-reading is obtained.

In the verbal affixation approach proposed here, however, even though *ani* gets to the highest position at LF, it does not mean to have the widest scope. It just occupies the highest c-commanding position from which it negates any

Move-F, only the feature [+Dec] (see footnote 17) will get to C at LF, leaving the feature [+Neg] in its original position, and hence [+Neg] cannot occupy the highest C-commanding position. In this paper, it is assumed that the fully inflected verb moves to C along with all its features. In Korean, a head-final language, explicit evidence is hardly found for the verb-movement regardless of whether it is overt or covert. The NegP approach invariably assumes the overt movement at PF, whereas this paper simply assumes the covert movement at LF complying to Chomsky's (1995) notion that LF movement is more economic. As far as negation is concerned, I could not recognize any serious problem with this assumption.

focused element(s), inducing scope ambiguity. Technically, we can say that the focused elements have the feature [+Foc] and the feature [+Neg] is added to the elements bearing [+Foc] by c-commanding.¹⁹ When the feature [+Neg] is added to a quantifier, the quantifier becomes negated, inducing a some-reading.

5.2. Adaptation of the Proposal

This section will show how well the proposal (45) works for the interpretation of neg-scope and licensing of negative polarity items. As discussed in the previous sections, these two topics have been the major concerns in favor for the necessity of independent projection of NegP. Therefore, it is necessary to prove that the proposal works well for these two topics.

First, let us consider (48) in relation with neg-scope interpretation. In this sentence, the negated verb *ani mit-nun-ta* ‘not to believe’ is inserted into syntax as a fully inflected form. It moves to the head position of CP at LF to get the declarative sentential ending licensed by feature checking. From this highest position of the sentence, the negation force of the verb, that is the feature [+Neg], can negate any focused element(s) by c-commanding, as proposed in (45c). As expected with this process, (48) can be variously interpreted from (48a) to (48f) according to the elements that are negated. As the flow of the neg-force is similar to that of water, it can flow into more than one focused element simultaneously. This water-like flow of [+Neg] can account for the negation of the sentences that have more than one focused element and therefore that number of negated elements, as discussed with (28) in §4.2.

19. The focused elements are the stressed ones in speech. In this paper, I do not postulate any FocP to which the focused elements move.

- (48) na-nun [_{CP} John-i yelsimhi yunge-lul paywu-ess-ta-ko] **ani** mit-nun-ta
 I-Nom John-Nom hard English-Acc learn-Pst-Dec-C **not** believe-Prg-Dec
- a. I do **not believe** John learned English hard.
 b. I believe John did **not learn** English hard.
 c. I believe John learned **not English** hard.
 d. I believe John learned English **not hard**.
 e. It is **I** who do **not** believe that John learned English hard.
 f. It is **not John** who I believe learned English hard.

However, the embedded verb does not cross over a CP boundary. For example, in (49) the negation force of *ani* in the embedded CP does not affect the external elements *na* ‘I’ and *mit-nun-ta* ‘believe’. In other words, the feature [+Neg] comes along with the embedded verb *paywu-ess-ta* ‘learned’ up to the embedded C but not to the matrix C since it has no feature to be checked by the matrix C. Consequently, it cannot negate the elements outside the embedded CP and (49) does not have the meanings of (48a, d, & e).

- (49) na-nun [_{CP} John-i yelsimhi yenge-lul **ani** paywu-ess-ta-ko] mit-nun-ta
 I-Nom John-Nom hard English-Acc **not** learn-Pst-Dec-C believe-Prs-Dec
- a. I believe John learned **not English** hard.
 b. I believe John learned English **not hard**.
 c. It is **not John** who I believe learned English hard.

Remember Choe (2001) argues that (12b), repeated as (50) here, does not have the some-reading. As we have discussed in §4.1, however, this sentence possibly has the some-reading, in which the quantifier *modwu* ‘everyone’ is negated. The negated verb *ani-mana-ess-ta* ‘not met’ locates in C at LF and its feature [+Neg] can c-command any element(s) of the sentence. If the quantifier

is focused, it is negated by the feature [+Neg] through c-commanding, inducing the some-reading (= not everyone), and if any other element is focused, the none-reading (= no one) is obtained.

- (50) modwu-ka John-ul ani manna-ess-ta.
 everyone-Nom John-Acc not meet-Pst-Dec
 a. 'Everyone met not John, (but someone else).'
 b. 'Not Everyone met John.'

Next, let us consider licensing of negative polarity items. As we have discussed in §3, negative polarity items must be in a local relationship with a negator. This phenomenon may be accounted for by c-commanding of NPI by a negator at S-structure like in English, as Ahn (1991) proposed. However, if we assume that the c-commanding relation between NPIs and a negator is a matter of LF, the projection of NegP over TP is not necessary. The fully inflected verbs move to C to get the feature checked and consequently occupy a c-commanding position. In this way, the NPI in (51) is licensed, being c-commanded by *ani* at LF.

- (51) ku-nun pang-pakkey mek ci ani ha-ess-ta.
 he-Nom bread-only eat Comp not do-Pst-Dec
 'He ate nothing but bread.'

At this point, we face a tricky problem regarding NPI licensing. The following sentence satisfies the c-commanding condition for the NPI *pakkey*, but it is still ungrammatical. To account for this, Ahn (1991) postulates a condition, as stated in (53). (52) does not satisfy the condition (53) and is ruled out correctly.

- (52) **na-nun* [_{CP} *ku-ka ppang-pakkey mek-ess-ta-ko*] *ani mit-nun-ta*
 I-Nom he-Nom bread-only eat-Pst-Dec-C not believe-Prs-Dec.
 ‘I don’t believe that Yenghi ate anything but bread.’

- (53) NPIs must co-exist with their licensors at LF in their local domains.

However, if we treat *ci* as Comp, (51) does not satisfy the condition (53) because the NPI *ppakey* and its licensor *ani* do not co-exist in their local domain, and is ruled out incorrectly. To take the grammatical sentence (51) into the safe zone from the condition (53), Ahn treats the morpheme *ci* as an aspectual morpheme but not as Comp, and analyzes the sentences containing the morpheme *ci* as simplex sentences.

As the morpheme *ci* has been treated as Comp in this paper and the bracketed part as an embedded CP, the c-commanding and the co-existence conditions for NPI cannot be maintained. To solve this problem, following Kim (1996), I adopt a Government relation between NPI and its licensor, as in (45d), restated as (54).

(54) Negative Polarity Licensing Condition

A NPI must be governed by the feature [+Neg] at LF.

This condition correctly rules out (53) as ungrammatical since the CP headed by the Comp *ko* plays a role of barrier for Government between the feature [+Neg] of the negated verb *ani mit-nun-ta* and the NPI *pakkey*. However, this condition is not enough to correctly predict the grammaticality of (51). In this sentence, the CP headed by the morpheme *ci* is still a barrier for Government and the feature [+Neg] of *ani-ha-ess-ta* cannot govern the NPI *pakkey*. Here, I assume that *ci* is a defective Comp and the CP headed by *ci* does not incur a barrierhood. Unlike the Comp *ko*, the clause headed by *ci* cannot have an overt

subject and hardly has Tense expressed in it.²⁰ In this regard, *ci* can be treated defective to form a barrierhood.

6. Conclusion

This paper has examined the literature that argues the necessity of independent projection of NegP in Korean. The arguments have inevitably been related with the two types of negation formation and neg-scope interpretation. I have tried to show that the argument of NegP does not provide satisfactory explanations for these two phenomena, and argued that there is no NegP in Korean syntax. I have claimed the following:

- A. The negator *ani* is a pure verbal prefix attached to the verbal stem in the lexicon, which does not need to be syntactically licensed by feature checking unlike other verbal inflectional morphemes.
- B. When fully inflected verbs selected from the lexicon move to the head position of CP at LF to get the sentential ending checked, *ani* free-rides on the verb movement.
- C. The feature [+Neg] of the negated verb located in the Spec position of CP is added to any focused element(s) of the sentence by c-commanding, negating them

20. One reviewer of this paper has reminded me of this fact, but another reviewer has commented that there is no crucial evidence for the argument that the subject is located in [Spec, TP] but not in [Spec, VP]. Regardless of which one is more appropriate, it is clear that the CP headed by *ci* is quite different from the one headed by *ko* in their internal structures. As far as this paper discusses the syntactic necessity of the independent projection of NegP, the clarification of the morphological status of *ci* is not crucial. Even if we adopt Ahn's treatment of *ci* as an aspectual morpheme and his c-commanding and clause-boundness conditions for NPIs, the approach to NPI licensing without NegP is still valid.

D. NPIs must be governed by the feature [+Neg] at LF, where the CP headed by *-ci* is defective to form a barrierhood in this government relation.

I am quite sure in the sense of Null Hypothesis that if the explanatory power is the same in the two approaches, NegP approach and No-NegP approach, and there is no real syntactic evidence in favor of NegP, the latter is better.

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