Scope Interactions and Phrasal Movement in Korean Negation*

Paul Hagstrom

Massachusetts Institute of Technology

1 Overview

It is well known that negative sentences can take one of two forms in Korean. In "short form negation," S-Neg (1), the negative morpheme precedes the verb, and in "long form negation," L-Neg (2), the negative morpheme follows the verb. Compare these to the affirmative sentence in (3).

(1) Chelswu-ka ppang-ul an mek-ess-ta "S-Neg"
C -NOM bread-ACC NEG eat-PST-DC
'Chelswu did not eat the bread.'

(2) Chelswu-ka ppang-ul mek-ci anh-ass-ta "L-Neg"
C -NOM bread-ACC eat-*ci* NEG.do-PST-DC
'Chelswu did not eat the bread.'

(3) Chelswu-ka ppang-ul mek-ess-ta Affirmative
C -NOM bread-ACC eat-PST-DC
'Chelswu ate the bread.'

Here I will motivate a unified account under which both L-Neg and S-Neg involve a functional projection for negation (NegP) which has the negative morpheme in its specifier, and which triggers leftward movement of certain material. The difference between the two forms will be reduced to a difference in the hierarchical position of NegP. The effect of the leftward movement is shown below. In S-Neg (4), the object moves leftward over *an*, and in L-Neg (5), the entire predicate moves.

(4) Chelswu-ka $[\text{ppang-ul}]_i$ an(i) t_i mek-ess-ta
(5) Chelswu-ka $[\text{ppang-ul mek-ci}]_i$ an(i) t_i h-ass-ta

The analysis is set in the "minimalist" framework of Chomsky (1995) which assumes movement is motivated by the need to check features introduced within

* I am extremely grateful to Judy Yoo-Kyung Baek, Eun Cho, Hyon Sook Choe, Seung-Man Kang, and Yoonjung Kang, for their help and patience with judgments and discussions. I also wish to thank the participants and particularly the organizers involved with HISOKL 1997.

In Susumu Kuno et al. (1997) (eds.), *Harvard Studies in Korean Linguistics VII*. Cambridge, MA: Harvard University and Seoul: Hanshin.

lexical items as the derivation begins. I assume that the separation of the verb and the tense suffix in L-Neg results in the introduction of *ha-* 'do', although by what mechanism is not crucial here.[1]

2 Scope differences between L-Neg and S-Neg

In this section, we will see that, in general, while S-Neg is restricted to taking very narrow scope, L-Neg is able to take wider scope, suggesting that they occupy different hierarchical positions.

First, consider the coordination examples below,[2] from Cho (1993), which show that S-Neg, in (6), can only take scope within its own conjunct, while L-Neg, in (7), can additionally take scope over both conjuncts.

(6) a. Chelswu-ka swul-ul an masi-ko tampay-lul phiwu-ess-ta
C -NOM alcohol-ACC NEG drink-*ko* cigarette-ACC smoke-PST-DC
'Chelswu didn't drink alcohol, but smoked cigarettes' (S-Neg>first)

b. Chelswu-ka swul-ul masi-ko tampay-lul an phiwu-ess-ta
C -NOM alcohol-ACC drink-*ko* cigarette-ACC NEG smoke-PST-DC
'Chelswu drank alcohol but didn't smoke cigarettes.' (S-Neg>second)

(7) Chelswu-ka swul-ul masi-ko tampay-lul phiwu-ci anh-ass-ta
C -NOM alcohol-ACC drink-*ko* cigarette-ACC smoke-*ci* NEG.did
'Chelswu drank alcohol but did not smoke cigarettes' (L-Neg>second)
'Chelswu did not drink alcohol or smoke cigarettes' (L-Neg>both)

The relation of negation to clausemate quantifiers also reveals a scope difference between S-Neg and L-Neg.[3,4] With respect to both subject and object

---

[1] Elsewhere (Hagstrom 1996), I have argued that *ha-* is a result of "PF insertion," essentially like *do*-support in English (Halle & Marantz 1993).

[2] Here, it is irrelevant whether (6-7) involve true coordination or adjunction. I will refer to it as coordination, but see Yoon (1997) for a thorough discussion.

[3] It is important to note that data of this type is complex and controversial, and there is disagreement both in the literature and between my consultants (see note 4). I suspect that focus effects and differences between individual quantifiers are the main source of these disagreements. Contrastive focus, either marked morphologically by *-n(un)* or prosodically by stress, forces the focused element to be the "target" of negation. I assume that focus can introduce meanings not represented in the unfocused structure, which are more closely related to "metalinguistic" negation than to ordinary sentential negation (see Jackendoff 1972, Horn 1985, D. Kim 1991, and Carston & Noh 1995). Focus aside, further complexity arises from the heterogeneous scopal properties of quantifiers (see Ahn 1990, Beghelli 1995, Sohn 1995). For space reasons, I report only what appears to be the broad pattern, glossing over much complexity.

[4] The literature is nearly unanimous in judging (8) to be unambiguous and (10-11) to be ambiguous (although, citing judgments involving contrastive focus,

quantifiers, S-Neg takes narrow scope (8-9), while L-Neg takes either narrow or wide scope (10-11).

(8) manhun enehakca-ka Chelswu-lul an manna-ss-ta [S-Neg SubjQ]
many linguists-NOM C -ACC NEG meet-PST-DC
'Many linguists did not meet Chelswu.' *many > not*
* 'Not many (=few) linguists met Chelswu.' * *not > many*

(9) Chelswu-ka manhun enehakca-lul an manna-ss-ta [S-Neg ObjQ]
C -NOM many linguists-ACC NEG meet-PST-DC
'Many linguists, Chelswu didn't meet.' *many > not*
* 'Chelswu met not many (=few) linguists.' * *not > many*

(10) manhun enehakca-ka Chelswu-lul manna-ci anh-ass-ta [L-Neg SubjQ]
many linguists-NOM C -ACC meet-*ci* NEG.do-PST-DC
'Many linguists did not meet Chelswu.' *many > not*
'Not many (=few) linguists met Chelswu.' *not > many*

(11) Chelswu-ka manhun enehakca-lul manna-ci anh-ass-ta [L-Neg ObjQ]
C -NOM many linguists-ACC meet-*ci* NEG.do-PST-DC
'Many linguists, Chelswu didn't meet.' *many > not*
'Chelswu met not many (=few) linguists.' *not > many*

3 L-Neg and S-Neg are not fundamentally different

Despite the scope differences, I suggest that L-Neg and S-Neg are more similar than different, contrary to a popular account (e.g., Yoon 1990, Sohn 1995), which takes S-Neg to be a lexically attached verbal prefix while taking L-Neg to be involved in a syntactic NegP projection. Morphological evidence both for and against this position is fairly sparse, but I will review two suggestive points.[5]

First, there is a second negative marker, *mos*, which can appear in the same contexts as *an(i)*; compare (12-13) to (1-2). One might suppose that despite the coincidence of homophony, L-Neg *an(i)*, a syntactic head or adverb, differs

---

Lee 1993, Suh 1989:528, and a reviewer cited by Yoon 1990:346, disagree). For (9), the majority find it unambiguous (Cho 1975, Joh & Park 1993, B. Kim 1991, Park 1994, Suh 1989, Yoon 1990, Yoon 1994), but some indicate at least marginal ambiguity (Sohn 1995, Choe 1997, Lee 1993). My consultations with native speakers revealed essentially the same patterns of disagreement.

[5] Of course, arguments have been presented on this issue. Takahashi & Whitman (1992), citing Silva (1989), and Min (1997) point out that there is a major phonological boundary between preverbal *an(i)*/*mos* and the verb. However, this is not a successful argument against negation being a prefix, given that even less controversial prefixes are separated from the stem by a prosodic word boundary in Korean, unlike suffixes (see, e.g., Han 1993). On the other side, No (1988) advances the argument that S-Neg *an* is a verbal prefix based on the fact that, like the passive suffix, it must be duplicated in the "verb copy" focus construction. Although I have no specific counterproposal, see note 14.

categorically from S-Neg *an(i)*, a morphological affix; yet, this loses much of its appeal when a second, exactly parallel case of homophony is required for *mos*.

(12) Chelswu-ka ppang-ul mos mek-ess-ta
C -NOM bread-ACC NEG eat-PST-DC
'Chelswu was unable to eat the bread.'
(13) Chelswu-ka ppang-ul mek-ci mos hay-ss-ta
C -NOM bread-ACC eat-*ci* NEG do-PST-DC
'Chelswu was unable to eat the bread.'

Consider also the plural marker *-tul*, which attaches to phrases but not to inflectional morphemes, as (14) from Park (1994) shows. Notice that *-tul* can marginally follow the negative morpheme both in S-Neg (15) and L-Neg (16).[6] Marginality aside, this implies that *an* is phrasal, hence syntactic.[7]

(14) a. aitul-i pakk-eyse(-tul) sikkulepkey(-tul) nol-ko(-tul) iss-ess-ta
children-NOM outside-at(-PL) noisily(-PL) play-*ko*(-PL) be-PST-DC
'Children are playing noisily outside.'
b. aitul-i pakk-(*tul-)eyse sikkulepkey nol-(*tul-)ko
children-NOM outside-(*PL-)at noisily play-(*PL-)*ko*
iss-(*tul-)ess-(*tul-)ta
be-(*PL-)PST-(*PL-)DC
'Children are playing noisily outside.'
(15) ? aitul-i pap-ul an(i)-tul mek-ess-ta
children-NOM food-ACC NEG-PL eat-PST-DC
'The children didn't eat the food.'
(16) ? *pro*(pl.) pap-ul mek-ci ani-tul ha-ko mwues ha-ni?
food-ACC eat-*ci* NEG-PL do-*ko* what do-Q
'What are you doing without eating food?'

Finally, note that L-Neg and S-Neg are equally capable of licensing Negative Polarity Items (NPIs) in (19). However, *pwul-* in (18), more uncontroversially lexical, cannot (as argued by Cho 1994).[8] We see that L-Neg and S-Neg pattern together, yet both differ from clearly prefixal negation.

---

[6] Cho (1993) disagrees with Park (1994) here; Cho, while accepting (15), judges an example like (16) to be out, and concludes that *-tul* cannot attach to L-Neg.

[7] Hyon-Sook Choe (p.c.) indicates that *mos* in (12) also has an adverbial interpretation as an antonym of *cal* 'well,' while in (13), only the non-adverbial ('unable') interpretation is available. In sentences parallel to (15-16), only adverbial *mos* allows *-tul*, which may mean that (15-16) involve an adverbial form of *an(i)* as well (cf. Ahn 1991). If this is true, (15-16) become irrelevant.

[8] Hyon-Sook Choe (p.c.) suggests that *pwul-* may not play a synchronic role in Korean morphology, being a Chinese borrowing. Intuitively, no morpheme boundary seems to be present after *pwul-*, but this is why I take it to be "lexical."

(17) * amwuto ppang-ul mek-ess-ta
anybody bread-ACC eat-PST-DC
('Anybody ate the bread')

(18) *amwuto pwul-hayngha-ta
anybody NEG-happy-DC
('Nobody is happy')

(19) a. amwuto ppang-ul an mek-ess-ta
anybody bread-ACC NEG eat-PST-DC
'Nobody ate the bread.'

b. amwuto ppang-ul mek-ci anh-ass-ta
anybody bread-ACC eat-*ci* NEG.do-PST-DC
'Nobody ate the bread.'

4 Isolating S-Neg; VP-Focus and overt Case checking

Because the scope facts (section 2) suggest a hierarchical difference between L-Neg and S-Neg, we will now try to isolate the structural position of S-Neg by looking carefully at the "VP-Focus" construction in (20). We are particularly interested in this construction because of (21), which shows that S-Neg is contained within the *-ki* phrase. In determining the structural position of the *-ki* phrase, we will find an upper bound for the structural position of S-Neg. As both (21) and affirmative (22) show, it is possible to front the constituent nominalized by *-ki*, but only if the verb and the object are fronted together, suggesting that both are contained in the *-ki* phrase.

(20) Chelswu-ka ppang-ul mek-ki-nun ha-ess-ta
C -NOM bread-ACC eat-*ki*-FOC do-PST-DC
'Eat the bread, Chelswu did.'

(21) a. Chelswu-ka ppang-ul an mek-ki-nun ha-ess-ta
C -NOM bread-ACC neg eat-*ki*-FOC do-PST-DC
'Not eat the bread, Chelswu did.'

b. [ppang-ul an mek-ki-nun]$_j$ Chelswu-ka t_j ha-ess-ta
bread-ACC neg eat-*ki*-FOC C -NOM do-PAST-DC
'Not eat the bread, Chelswu did.'

(22) a.* mek-ki-nun$_i$ Chelswu-ka ppang-ul t_i ha-ess-ta
eat-*ki*-FOC C -NOM bread-ACC do-PST-DC
('Eat the bread, Chelswu did.')

b. [ppang-ul mek-ki-nun]$_i$ Chelswu-ka t_i ha-ess-ta
bread-ACC eat-*ki*-FOC C -NOM do-PST-DC
'Eat the bread, Chelswu did.'

Ahn (1991) notices a constrast among intransitives with respect to fronting. While an unergative can be fronted (23), an unaccusative cannot be (24). The problem is the fronting itself, since both types are fine in situ (25).

(23) [(ppalli) ttwuy-ki-nun]$_i$ Chelswu-ka t_i ha-yess-ciman...
(fast) run-*ki*-FOC C -NOM do-PST-although
'Run fast, although Chelswu did...'

(24) * [(manhi) o-ki-nun]$_i$ pi-ka t_i ha-yess-ciman...
(a lot) come-*ki*-FOC rain-NOM do-PST-although
('Rain a lot, although it did...')

(25) a. Chelswu-ka (ppalli) ttwuy-ki-nun ha-yess-ciman...
C -NOM (fast) run-*ki*-FOC do-PST-although
'Run fast, although Chelswu did...'

b. Pi-ka (manhi) o-ki-nun ha-yess-ciman...
Rain-NOM (a lot) come-*ki*-FOC do-PST-although
'Rain a lot, although it did...'

Recall that a transitive verb and its object form a constituent. As Ahn points out, if an unaccusative subject originates as the direct complement of the verb, the trace of the subject is fronted in (24). Assuming that this results in an ill-formed representation (e.g. by some version of the Proper Binding Condition[9]), the facts follow straightforwardly. Moreover, the grammaticality of (22b) indicates that the *-ki* phrase does not contain the trace of a transitive subject.[10]

We have concluded that (in a transitive clause), the *-ki* phrase includes the base position of the object but excludes the base position of the subject. We now turn to evidence that the object raises overtly for Case, which suggests that the

---

[9] I do not spell out a full analysis because several tangential issues arise. I assume that the intuition behind Takano's (1995) analysis of English predicate fronting is basically correct. Takano argues that a fronted predicate in English contains the trace of the subject, rendering the subject chain uninterpretable due to a lack of c-command between its members (Chain Condition). The fronted predicate must therefore be "reconstructed" (interpreted in its base position), explaining the lack of new binding possibilities. However, to account for the ungrammaticality of (24), we must rule out the possibility of reconstruction in this case. When presenting this paper, I suggested that the *-ki* phrase moves to a focus projection even in its "base order" (Sohn 1995, Nishiyama & Cho 1997). This implies that unaccusatives have a Chain Condition violation in their base order, so further scrambling dooms the representation, since even undoing the scrambling does not repair the original Chain Condition violation.

[10] *-ki* also seems able to attach higher, as discussed by Nishiyama & Cho (1997), even above TP, as in (i). Notice in (ii) that tense morphology appearing under *-ki* disallows fronting over the subject, presumably because the subject is within the *-ki* phrase. Our present concern, however, is the lowest attachment site for *-ki*, which we have seen is above the object and below the subject.

(i) Chelswu-ka ppang-ul mek-ess-ki-nun hayssta
C -NOM bread-ACC eat-PST-*ki*-FOC did 'Eat bread, Chelswu did.'

(ii)* [Ppang-ul mek-ess-ki-nun]$_j$ Chelswu-ka t_j hayssta
bread-ACC eat-PST-*ki*-FOC C -NOM did ('Eat bread, Chelswu did.')

-ki phrase must also include the Case position of the object.

Lee (1993) divides adverbs in Korean into two classes. One, exemplified by *pelsse* 'already' in (26), occurs nearly anywhere, and the other, exemplified (perhaps exhaustively) by *cal* 'well' in (27), appears only in preverbal position.[11] Assuming there are no right-adjoined adverbs in Korean, this indicates that *cal* is an adverb which attaches very low and that the object moves over it, presumably to check its Case features.[12]

(26) (pelsse) John-un (pelsse) yenge kongpwu-lul (pelsse) machi-ess-ta
(already) J -TOP (already) English studies-ACC (already) finish-PST-DC
'John has already finished his English studies.'

(27) (*cal) Chelswu-nun (?*cal) sayngsenhwoi-lul (cal) mek-nun-ta
(well) C -TOP (well) raw.fish-ACC (well) eat-PRST-DC
'Chelswu eats raw fish well'

Accepting that the object must check Case overtly, the fact that it can be fronted within the *-ki* phrase, as in (22b), indicates that the Case checking position must also be inside the *-ki* phrase.[13]

Lastly, notice that *cal* and *an*, when they co-occur, may only occur in one order, as shown in (28), indicating that *cal* must attach at or above NegP.

(28) John-i pap-ul (cal) an (?*cal) meknunta
J-NOM meal-ACC (well) NEG (well) eat
'John didn't eat food well'

Collecting the observations above, we are led to the "split VP" structure in (29). The *-ki* phrase excludes the subject, but includes both the base and derived positions of the object. This requires that AgrOP be distinguished from *v*P (in accord with Koizumi (1995), but contra Chomsky (1995)).[14] NegP appears

---

[11] There seems to be speaker variation for *cal* before an object; Lee (1993) assigns "*", but Hyon-Sook Choe (p.c.) finds it comparable to (15-16).

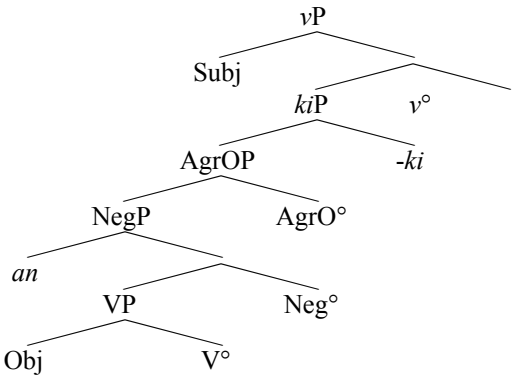
[12] Costa (1995) similarly argues that *well* marks the left edge of VP in English.

[13] *-ki* could conceivably be AgrO°, but this would require us to assume that AgrOP can be present even in intransitives.

[14] Where *cal* attaches is not indicated in (29). If its limited distribution indicates that *cal* can adjoin to only one category, available in both negative and affirmative sentences, this is evidence for a phrase between NegP and AgrOP, *cal*P. This phrase may be the domain for copying in the "verb copy" variant of VP-Focus discussed by No 1988, Nishiyama & Cho 1997. Both the passive morpheme *i~hi~li~ki* and S-Neg *an* must appear with both copies of the verb, adverbs are optionally copied, and objects are marginally copied. The identity of *cal*P is unclear, but one possibility is that it "verbalizes" its complement (cf. Marantz 1996), responsible for turning the (misleadingly named under this interpretation) VP into a verbal category. Many issues remain to be explored.

above the lowest verbal projection, with *an* in its specifier.[15] The claim that *an* is above and to the left of the base position of the object is corroborated by evidence from first-language acquisition, to which we turn next.

(29)



5 "Misplacement of *an*" in the acquisition of negation

Many have observed that children around age 2 will sometimes "misplace" S-Neg *an* or *mos* before the object. Some examples are given in (30), from Hahn (1981). All of these examples are ungrammatical in adult speech.

(30) a. na mos pap hay
I NEG meal do
'I can't cook' (p.130)

b. an keyelan meke
NEG eggs eat
'(I) won't eat (my) eggs' (p.206)

c. an ppesu tha
NEG bus get.on
'(Let's) not take the bus' (p. 106)

As suggested by both Wexler (1993) and Whitman (1995), we have a natural explanation if we assume that for both the child and the adult, *an* is generated to the left of the object, but for some reason children will sometimes fail to perform the operation which yields the surface order in the adult grammar.[16]

Children do not "misplace *an*" before subjects, but with one interesting

[15] For present purposes, I treat *an* as if it were base-generated in SpecNegP. Choe (1997) makes a good case for the view that *an* is base-generated as an adjunct to its "target" and then moves into SpecNegP. The analysis presented here is compatible with this view, as long as movement of *an* is overt.

[16] Kim (1992) proposes that children initially can adjoin *an*, an adverb, either left or right, but later learn that it only adjoins rightward. Baek (1995) observes, however, that the adult grammar could never be attained if acquisition is an error-driven process, since any input the child receives will be consistent with a grammar that allows both the adult form and the "misplaced *an*" form.

exception. Kim (1992) notices that sometimes *an* can precede unaccusative subjects (31), though *an* before transitive or unergative subjects is unattested.

(31) an ippal sseke
NEG tooth decay
'(I) won't get a cavity.' (Hahn 1981:204)

The acquisition data thus supports the view that the *an* of S-Neg originates above and to the left of the base position of the object, yet below the base position of transitive and unergative subjects.

6 The surface order of L-Neg

If we assume that the underlying order of S-Neg is *an object verb*, something must move the object leftward.[17] We have already seen that objects seem to move overtly to check Case features,[18] but the surface order of L-Neg can give us further clues, under the hypothesis that both forms of negation utilize the same NegP at different structural positions.

The word order of L-Neg indicates that the *-ci* phrase moves leftward over *an*, just as the object does in S-Neg. However, in L-Neg this movement cannot be Case-driven movement to AgrOP, since in the next section we will see that the *-ci* phrase contains the base position of the subject and therefore also AgrO. Instead, NegP itself seems to be responsible for the movement. In particular, it suggests that the object in S-Neg, and the *-ci* phrase in L-Neg, move into a second, outer specifier of NegP.[19,20] The proposed structure for L-Neg is (32).

---

[17] An alternative (Park 1994, Choe 1997), consistent with most of the facts so far, takes S-Neg *an* to be a clitic which moves from SpecNegP to the verbal complex, over the complement. I cannot adequately review this position here.

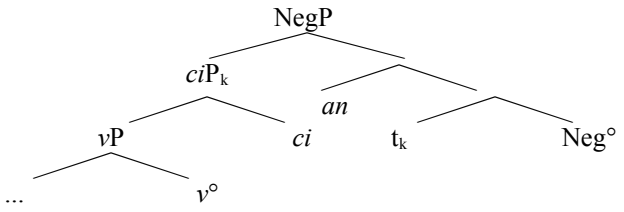
[18] Interestingly, with phrasal complements, S-Neg (i) is degraded compared to L-Neg (ii). While the implications are not entirely clear, it may lend support to the idea that the VP complement must move in these cases.

(i) ? John-i [Chelswu-ka ppang-ul mek-ess-ta-ko] an malha-ess-ta
J-NOM [C-NOM bread-ACC eat-PST-DC-that] NEG say-PST-DC

(ii) John-i [Chelswu-ka ppang-ul mek-ess-ta-ko] malha-ci anh-ass-ta
J-NOM [C-NOM bread-ACC eat-PST-DC-that] say-*ci* NEG.do-PST-DC
'John didn't say that Chelswu ate the bread.' (both (i) and (ii))

[19] Richards (1997) argues that movement into a second specifier creates an inner specifier, yet in (32) I have claimed that the *-ci* phrase moves to an outer specifier. My speculative interpretation of this is that movement to an inner specifier is a preference which can be overridden by a preference that movement change linear order. Because Korean is head-final, moving the complement into an inner specifier would be string-vacuous, so an outer specifier is created instead. This predicts that a head-initial language with the same syntax for negation would show movement of the "*-ci* phrase" to an inner specifier,

(32)



7 Isolating L-Neg; The scope of negation

We now return to the scope facts from section 2 both to see how they follow and to get evidence for the structural position of L-Neg. The assumptions we will need about the syntax of scope are listed in (33).[21] Taken together, (33II-III) mean that if A moves over B, the two are scopally ambiguous, but if A moves further, then A takes scope over B. Of course, (33) is only a first approximation to a full theory of scope interactions.

(33) I. *an* does not move from SpecNegP, and is interpreted as negation.
II. A c-commands B ⇒ A can take scope over B.
III. B c-commands t_A & no t'_A c-commands B ⇒ B can take scope over A.

The cases from (6) indicate that coordination, like nominalization with *-ki*, seems to be restricted to phrases at least as high as AgrOP. This would explain why S-Neg is restricted to its own conjunct. The cases from (7) indicate that it is possible to coordinate either below or above NegP in L-Neg, yielding the readings with negation over only the second conjunct, or over both, respectively. With that in mind, consider (34), from Joh & Park (1993), which shows that if the first conjunct contains tense, L-Neg can only negate the second verb. This indicates that the NegP in L-Neg is below the tense projection (TP).

(34) John-i Miller-lul masi-ess-ko Mary-ka Bud-lul masi-ci anhassta
J-NOM M -ACC drink-PST-*ko* M-NOM B -ACC drink-*ci* NEG.do-PST-DC
'John drank Miller and Mary did not drink Bud.'

---

following the base generated specifier. Nweh, a Bantu language analyzed by Nkemnji (1995), may in fact provide confirmation of this prediction.

[20] The word order in double negation, as in (i) also suggests this interpretation. Following the discussion in section 9, the assumption is that the category of *-ci* is selected for by NegP, but NegP is not itself an instance of this category. Thus, for two occurrences of NegP there must be at least one instance of *-ci*.

(i) Chelswu-ka ppang-ul mek-ci anh-ci anh-ass-ta
C -NOM bread-ACC eat-*ci* NEG.do-*ci* NEG.do-PST-DC
'Chelswu didn't not eat the bread.' (implication: he did eat the bread)

[21] (33III) is a slight adaptation of the proposal in Kitahara (1996).

We now turn our attention to the more complicated interaction with clausemate quantifiers. The simplest case is S-Neg with subject quantifiers (8); since even the base position of the subject c-commands S-Neg, the lack of ambiguity is no mystery. The fact that object quantifiers also must take scope over S-Neg (9) requires slightly more explanation, since we have argued that the object originates below negation.[22] Notice that the object in S-Neg moves twice, once to SpecNegP, and again to check Case. Thus it fails the third scope assumption of (33), moving both from and to a position above negation. Accordingly, the object unambiguously takes scope over negation.

Let us now consider L-Neg. Because L-Neg can take scope over a subject quantifier (10), NegP must c-command the base position of the subject. Significantly, this now gives us a lower bound for the hierarchical position of the NegP of L-Neg. We discovered in the first part of this section that L-Neg must be below TP, and we now know that L-Neg must be above the base position of the subject. This narrows down the structural position of L-Neg to a very small area of the structure, perhaps even uniquely specifying it.[23]

In L-Neg, the *-ci* phrase moves to a position c-commanding *an*, but notice that the sub-constituents of the *-ci* phrase, the subject and the object, have no c-command relationship with *an* at this point. Assuming that the subject must move overtly at least as high as SpecTP in order to satisfy the Extended Projection Principle,[24] the subject will c-command *an* in SpecNegP, but no trace of the subject will c-command *an*, since the subject moved from inside the *-ci* phrase. Thus, by the third scope assumption in (33), ambiguous scope should be possible between the subject and negation, as we saw in (10).

I will assume that the ambiguity between L-Neg and the object (11) arises in

---

[22] In fact, in the question period following the presentation of this paper, Hyon-Sook Choe (p.c.) indicated that she found object quantifiers to be ambiguous with respect to S-Neg (but cf. note 4). This in fact strengthens the position that the object begins below negation in both S-Neg and L-Neg. We might explain this judgment by removing the exception concerning t'_A in (33).

[23] Hong (1997) provides example (i) to suggest that *-ci* is even higher than tense. However, (i) is a tag question, whose basic assertion is affirmative. I suspect that the *-ci* in this construction is not identical to the *-ci* in L-Neg (at least structurally); note that *-ci* also has a distinct use as a complementizer-like morpheme, meaning 'whether' or 'if' (ii) and as a question marker (iii).

(i) Chelswu-ka ka-ss-ci ani ha-ni? 'Chelswu left, didn't he?'
C -NOM go-PST-*ci* NEG do-Q

(ii) Chelswu-ka ka-ss-nun-ci molu-n-ta 'I don't know whether Chelswu left.'
C -NOM go-PST-?-*ci* not.know-PRST-DC

(iii) Chelswu-ka ka-ss-ci? 'Did Chelswu leave?'
C -NOM go-PST-*ci*

[24] Lee (1995) provides evidence that the subject has raised out the VP in Korean, based on the varying interpretation of certain adverbs by linear position.

the same way, although this requires one further assumption. This is because, although the EPP forces the subject to move into a position c-commanding *an*, there is no obvious motivation for the object to move out of the *-ci* phrase. Following Sohn (1995), I will assume that it is nevertheless possible to scramble the object out to a position above NegP. As evidence, Sohn notes that without a pause after the object, (11) is interpreted unambiguously with negation taking scope over the object. Assuming that the pause is an overt reflex of scrambling, this is what we would expect.

8 A comment about licensing Negative Polarity Items

I wish to make one very brief point concerning the licensing of NPIs. We have seen that S-Neg never c-commands the subject, but that subject NPIs are nevertheless possible with S-Neg. Clearly, if we assume that NegP must at any point c-command the NPI, we are left with a paradox.[25] I wish to suggest that the best escape from this paradox is to abandon the idea that NegP licenses NPIs, and instead adopt from Zanuttini (1994) the proposal that the sentential negation involves both NegP and a very high "Polarity Phrase," the latter of which is responsible for NPI licensing. Although this approach raises various issues, they all seem easier to deal with than the paradox we faced before.

9 Reducing the difference to hierarchy

So far we have narrowed down the differences between L-Neg and S-Neg to two, not one. The primary difference is hierarchical; in S-Neg, NegP is above the lowest projection of the clause, while in L-Neg, NegP is between the subject's base position and TP. The second difference is *-ci*, present in L-Neg but absent in S-Neg. What we lack is any explanation of why they covary.

I will close by briefly speculating on this issue. Under our current assumptions (e.g. in (29)), at least two syntactic heads are generally involved in a transitive "verb," one which introduces the object, and the other the light verb which introduces the subject. Since we have no direct evidence about the category of the lower of these heads, suppose it is of category X, a category which is shared by the suffix *-ci*. Then, Neg° simply selects for category X. X seems to share properties of both nouns (the *-ci* phrase moves, and can be case-marked) and verbs (theta-marking the object).[26] If this is correct, NegP can only

---

[25] There are also reasons to suspect that this "checking" approach to NPI licensing (e.g. Sohn 1995, K. Kim 1997, among others) might be too unsophisticated to correctly handle the variation in NPI licensing contexts and "strength" (Chung & Lee 1997).

[26] At the presentation of this paper, I suggested that "category X" might be category of verbal nouns in "light verb constructions" (see Ahn 1991, Park 1992). However, as Peter Sells (p.c.) pointed out, *cal* must appear before *ha* in

occur higher in the clause (L-Neg) if one of the higher phrases is "nominalized" by *-ci*.[27] This would then truly reduce the difference between L-Neg and S-Neg to simple hierarchical position of NegP.

Notes

References

Ahn, Hee-Don. 1991. *Light verbs, VP-movement, negation and clausal architecture in Korean and English*. Ph.D. dissertation, U. Wisconsin Madison.

Ahn, Hee-Don. 1996. A study of syntactic word-formation. In *Morphosyntax in generative grammar*, eds. H.-D. Ahn et al. Seoul: Hankuk.

Ahn, Sung Ho. 1990. *Korean quantification and universal grammar*. Ph.D. dissertation, U. Connecticut.

Aoyagi, Hiroshi. 1994. On association with focus and scope of focus particles in Japanese. In *Formal approaches to Japanese Linguistics, MITWPL 24*, eds. M. Koizumi et al. Cambridge, MA: MITWPL.

Baek, Judy Yoo-Kyung. 1995. Negation and object shift in early child Korean. Ms., MIT.

Beghelli, Filipo. 1995. *The phrase structure of quantifier scope*. Ph.D. dissertation, UCLA.

Bobaljik, Jonathan. 1995. *Morphosyntax: The syntax of verbal inflection*. Ph.D. dissertation, MIT.

Carston, Robyn, and Eun-Ju Noh. 1995. A truth-functional account of metalinguistic negation with evidence from Korean. In *UCL Working Papers in Linguistics* 7.

Chang, Suk-Jin (1986). Tag questions in Korean: Form and function. *Studies in the Linguistic Sciences* 16(2), 15-26.

Cho, Choon-Hak. 1975. The scope of negation in Korean. In *The Korean language*, ed. H.-M. Sohn. Center for Korean Studies, U. Hawaii.

Cho, Dong-In. 1993. Emphasis, negation, and verb movement. In *Papers from the fifth Student Conference in Linguistics, MITWPL 20,* eds. V. Lindblad et al. Cambridge, MA: MITWPL.

Cho, Dong-In. 1994. Functional projections and verb movement. In *Theoretical issues in Korean linguistics,* ed. Y.-K. Kim-Renaud. Stanford, CA: SLA/CSLI.

Choe, Hyon Sook. 1997. Two functions of negation: Negating and licensing. Ms., MIT/Yeungnam University.

Chomsky, Noam. 1995. *The minimalist program*. Cambridge, MA: MIT Press.

---

these constructions (and not before the verbal noun), which suggests that a verbal noun cannot be a direct complement of NegP.

[27] This analysis falls somewhere inbetween the two well-known positions on the relationship of (VP-Focus) *-ki* and (L-Neg) *-ci*. Due to their different hierarchical distributions, *-ci* is not simply a negative allomorph of *-ki*. Nevertheless, they seem to perform a similar function; *-ki* nominalizes its complement, like *-ci* turns its complement into a phrase of "category X."

Chung, Daeho, and Chongmin Lee. 1997. On the semantic taxonomy of NPI triggers. HISOKL 1997.
Costa, João. 1995. Adverb positioning and V-movement in English. Ms.
Hagstrom, Paul. 1996. *Do*-support in Korean: Evidence for an interpretive morphology. In *Morphosyntax in generative grammar*, eds. H.-D. Ahn et al. Seoul: Hankuk.
Hahn, Kyung-Ja Park. 1981. *The development of negation in one Korean child*. Ph.D. dissertation, U. Hawaii. Seoul: Hanshin.
Halle, Morris, and Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In *The view from building 20*, eds. K. Hale et al. Cambridge, MA: MIT Press.
Harley, Heidi. 1995. *Subjects, events, and licensing*. Ph.D. dissertation, MIT.
Han, Eunjoo. 1993. The phonological word in Korean. In *Japanese/Korean linguistics 2*, ed. P. Clancy. Stanford, CA: SLA/CSLI.
Han, Ho, and Myung-Kwan Park. 1995. The syntax of negation in Korean and its development in child language. ESCOL '94.
Hong, Young-Yeah. 1997. *Ha*-verbs in long-form negation and VP-focus constructions. HISOKL 1997.
Horn, Laurence. 1985. Metalinguistic negation and pragmatic ambiguity. *Language* 61(1):121-174.
Jackendoff, Ray. 1972. *Semantic interpretation in generative grammar*. Cambridge, MA: MIT Press.
Joh, Jehyun, and Soohyuck Park. 1993. Verb raising, negation, and copy theory in Korean coordinate structures. In *Harvard studies in Korean linguistics V*, eds. S. Kuno et al. Seoul: Hanshin.
Kim, Boomee. 1991. The acquisition of the two negation forms in Korean. In *Harvard studies in Korean linguistics IV*, eds. S. Kuno et al. Seoul: Hanshin.
Kim, Dae-Bin. 1991. Metalinguistic negation, neg raising, and *nun* in Korean. In *CLS 27: The parasession on negation*, eds. L. Dobrin et al. Chicago: Chicago Linguistic Society.
Kim, Kyoung-kook. 1997. Shortest movement effect on NPI raising in Korean. HISOKL 1997.
Kim, Youngjoo. 1992. The acquisition of Korean. Draft ms., to appear in *The crosslinguistic study of language acquisition, vol. 4*, ed. D. Slobin. Lawrence Erlbaum.
Kitahara, Hisatsugu. 1996. Raising quantifiers without quantifier raising. In *Minimal ideas*, eds. W. Abraham, et al. Amsterdam: John Benjamins.
Koizumi, Masatoshi. 1995. *Phrase structure in minimalist syntax*. Ph.D. dissertation, MIT.
Lee, Jae-Hong. 1993. Postverbal adverbs and verb movement in Korean. In *Japanese/Korean linguistics 2*, ed. P. Clancy. Stanford, CA: SLA/CSLI.
Lee, Rhanghyeyun. 1995. Deriving A-movement properties of scrambling, a non-morphologically driven operation. Edinburgh Occasional Papers in Linguistics.
Marantz, Alec. 1996. Cat as a phrasal idiom. Ms., MIT.
Min, Haesik. 1997. Syllabification in Korean: Evidence from speech errors. HISOKL 1997.

Nishiyama, Kunio, and Eun Cho. 1997. Predicate cleft constructions in Japanese and Korean: The role of dummy verbs in TP/VP-preposing. Ms., Cornell University.
Nkemnji, Michael. 1993. *Heavy pied-piping in Nweh*. Ph.D. dissertation, UCLA.
No, Yongkyoon. 1988. Negative morphemes in Korean: Evidence for a derivational treatment. In *Proceedings of 6th international conference on Korean linguistics*. U. Toronto Press.
Park, Kabyong. 1992. *Light verb constructions in Korean and Japanese*. Ph.D. dissertation, U. North Carolina, Chapel Hill.
Park, Myung-Kwan. 1994. *A morpho-syntactic study of Korean verbal inflection*. Ph.D. dissertation, U. Connecticut.
Richards, Norvin. 1997. Featural cyclicity and (anti)superiority. Paper presented at Student Conference in Linguistics 9.
Saito, Mamoru. 1989. Scrambling as semantically vacuous A'-movement. In *Alternative conceptions of phrase structure*, eds. M. Baltin et al. Chicago: U. Chicago Press.
Silva, David. 1989. Korean obstruent voicing: Investigations into prosodic structuring. In *Harvard studies in Korean linguistics III*, eds. S. Kuno et al. Seoul: Hanshin.
Sohn, Keun-Won. 1995. *Negative polarity items, scope, and economy*. Ph.D. dissertation, U. Connecticut.
Song, Seok Choong. 1971. A note on negation in Korean. *Linguistics* 76:59-76. Revised and reprinted in *Explorations in Korean Syntax and Semantics* (1988), Center for Korean Studies, University of California, Berkeley.
Suh, Jinhee. 1989. Scope interaction in negation. In *Harvard studies in Korean linguistics III*, eds. S. Kuno et al. Seoul: Hanshin.
Takahashi, Chioko, and John Whitman. 1992. The position of negation in Japanese and Korean. Ms. (unfinished), Cornell University.
Takano, Yuji. 1995. Predicate fronting and internal subjects. *Linguistic Inquiry* 26(2):327-340.
Wexler, Ken. 1993. The relation of negation in two year old Korean to universal properties of the development of functional categories, head movement and word order. HISOKL 5.
Whitman, John. 1995. Apparent discontinuities in the acquisition of verbal morphology in Korean. Ms., Cornell University.
Yoon, Hang-Jin. 1994. Negation and NPI. In *Explorations in generative grammar*, eds. Y.-S. Kim et al. Seoul: Hankuk.
Yoon, Jeong-Me. 1990. Verb movement and the structure of IP in Korean. *Language Research* 26(2):343-371.
Yoon, James Hye-Suk. 1997. Coordination (a)symmetries. HISOKL 1997.
Zanuttini, Raffaella. 1994. Re-examining negative clauses. In *Paths towards generative grammar*, eds. G. Cinque et al. Georgetown University Press.

Department of Linguistics and Philosophy
MIT E39-245
77 Massachusetts Avenue
Cambridge, MA 02139
email: hagstrom@mit.edu