Generalizing the Immediate Scope Constraint on NPI Licensing

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Abstract

We show in this paper that Korean NPIs are universal-like in nature, scoping over negation. Specifically, a Korean NPI takes negation in its immediate scope, respecting a generalized form of the Immediate Scope Constraint of Linebarger (1987).

1 Introduction

Korean has different expressions of negation: lexical negation, short-form negation, or long-form negation. Any of these forms can license a negative polarity item (NPI) anywhere in the clause, even in subject position. The examples in (1) show this with the simple NPI *amwu-to* ('anyone'):

(1) a. amwu-to cip-ey   eps-ess-ta   (lexical negation)
       anyone house-at not.be-PAST-DECL
       'No one was at home.'

    b. amwu-to ku chayk-ul an   ilk-ess-ta   (short-form negation)
       anyone   that book-ACC NEG read-PAST-DECL
       'No one read that book.'

    c. amwu-to ku chayk-ul ilk-ci   anh-ass-ta (long-form negation)
       anyone   that book-ACC read-COMP NEG-PAST-DECL
       'No one read that book.'

Several researchers have suggested that Korean NPIs are not in the scope of negation. This is quite prevalent view, in fact (see for example, Chung and Park, 1998; K.-S. Kim, 1999; H. Lee, 2001; A.-R. Kim, 2002; Han et al., 2005; Sells, 2006). An example like (2) shows that lexical negation cannot scope over the subject position, even though an NPI is licensed in the same position in (1a).

(2)   manhun salam-tul-i   cip-ey   eps-ess-ta
        many   people-PLU-NOM house-at not.be-PAST-DECL
        'Many people were not at home.' (the only scope order is *many > Neg*)

Further, the contrast in (3) shows that the scalar NPI *han salam-to* is licensed in a position over which negation cannot scope.

(3) a. han salam-i   o-ci   anh-ass-ta
       one person-NOM come-COMP NEG-PAST-DECL
       'One person did not come.' (the only scope order is *one > Neg*)

    b. han salam-to   o-ci   anh-ass-ta
       one person (NPI) come-COMP NEG-PAST-DECL
       'Not one person came.'

We present several pieces of evidence which show that NPIs in Korean are universals, taking wide scope over the licensing negation. In fact, they take immediate wide scope over negation, due to the Immediate Scope Constraint, which we propose to generalize to these wide scope universal NPI cases. Further, even though

¬∃ and ∀¬ are logically equivalent, we will show that there are identifiable semantic consequences to the choice of these two semantic structures for NPIs, and that Korean clearly has the latter. We do not intend the NPI-as-universal analysis to necessarily mean that NPIs have all the semantic and pragmatic properties of standard universal quantifiers: for our purposes here, we use 'universal' as a label for the type of NPI which outscopes the negation which licenses it.

In particular, Korean NPIs outside the scope of negation can lack the presupposition of existence often assumed for a regular universal quantifier such as *every* in English. An example such as (4) with *amwuto* does not require a presupposed set of individuals (equivalent examples with an *n*-word in Greek are supposed to be pragmatically odd (cf. Giannakidou 2000, 505)).

(4)   totwuk-un amwu huncek-to namki-ci   anh-ass-ta
        thief-TOP *any trace*   leave-COMP NEG-PAST-DECL
        'The thief didn't leave any trace.'

There is no commitment in this example to the existence of traces of the thief; if the NPI were presuppositional, the example would be pragmatically odd at best. (5) also shows that a Korean NPI does not have an existential presupposition.

(5)   ku-nun Mary-eykey amwu kwansim-to eps-ess-ta
        he-TOP Mary-DAT *any interest*   not.be-PAST-DECL
        'He didn't have any interest in Mary.'

2   The Immediate Scope Constraint

Assuming that English NPIs are existentials in the scope of negation, Linebarger (1987) showed that a simple scope condition on NPIs is not strong enough: their relation to the licensing negation is subject to a locality condition. For this, she proposed the Immediate Scope Constraint, according to which an NPI can be licensed only if it is in the 'immediate scope' of a negation.

(6)   *Immediate Scope Constraint (ISC)*   (Linebarger, 1987, 338)
        A negative polarity item is acceptable in a sentence S if in the LF of S the
        subformula representing the NPI is in the immediate scope of the negation
        operator. An operator is in the immediate scope of NOT only if (i) it
        occurs in a proposition that is the entire scope of NOT, and (ii) within this
        proposition there are no logical elements intervening between it and NOT.

The ISC is a kind of minimality requirement on NPI-licensing which ensures that no other logical operator can intervene between an NPI and its licensing negation, The 'logical elements' in (6) correspond roughly to propositional operators (e.g., quantificational NPs and adverbs). The effect of the ISC is seen in the contrast in examples like those in (7), from Honcoop (1998, 116):

(7) a.   Nobody gave John *a red cent/anything*.
    b.   *Nobody gave most beggars/every beggar *a red cent/anything*.

By the ISC, an NPI must be in the immediate scope of its licensor, so (7b) fails as *every beggar*, a scope-bearing element, intervenes between the negation and the NPI *a red cent/anything*.

Now, for a language in which an NPI outscopes negation, something like the ISC would require that an NPI as universal takes immediate wide scope with respect to negation (see e.g., Horn, 1972, chap. 3; Lasnik, 1972; Kroch, 1974; LeGrand, 1975; Eisner, 1994 – cited in Horn, 2005). We show that Korean NPIs are universal-like in nature, and take immediate scope over negation, respecting the ISC. The relevance of the ISC is noted already in Kim (1999), who proposes the same generalizations for Korean NPIs as we argue for here, though with only a limited set of data. Specifically, we argue for a generalized version of the constraint:

(8)   *Generalized Immediate Scope Constraint (GISC)*
       An NPI and negation are in an immediate scope relation with each other.

The universal analysis plus the GISC can explain several interesting facts in Korean (and, we believe, in other OV languages like Japanese or Turkish). An immediate question for a universalist analysis of NPIs is whether examples can be found with the interpretation $\forall > QP > Neg$. Although such interpretations have occasionally been claimed for Japanese, the Korean data is unequivocal: such scope configurations do not exist. However, we argue, this is not a mark against the universal analysis of Korean NPIs, but, rather, it is evidence that the GISC applies.

3   Korean NPIs are Universals

As we noted above, if Korean NPIs were existentials in the immediate scope of negation, we would have to show that negation can scope over the subject. It is especially clear in (non-NPI examples in) Korean that this is not possible with short-form or lexical negation. These forms of negation never c-command and scope over the subject, but subject NPIs are nevertheless possible:

(9) a.   han salam-i   an   o-ass-ta
          one person-NOM NEG come-PAST-DECL
          'One person didn't come.'   (*one > Neg, *Neg > one*)

     b.   han salam-i   cip-ey   eps-ess-ta
          one person-NOM house-at not.be-PAST-DECL
          'One person wasn't at home.'   (*one > Neg, *Neg > one*)

(10) a.   mila-man an   o-ass-ta
          Mira-only NEG come-PAST-DECL
          'Only Mira didn't come.'   (*only > Neg, *Neg > only*)

     b.   mila-man cip-ey   eps-ess-ta
          Mira-only house-at not.be-PAST-DECL
          'Only Mira wasn't at home.'   (*only > Neg, *Neg > only*)

(11) a.   amwu-to an   o-ass-ta
          anyone   NEG come-PAST-DECL
          'No one came.'

b. amwu-to cip-ey eps-ess-ta
anyone house-at not.be-PAST-DECL
'No one was at home.'

We can directly show that a Korean NPI is not in the scope of negation. In the 'VP-focus construction' with *nun* on the verb, negation must take wide scope.

(12) a. mila-to ca-ci-nun anh-ass-ta
Mira-also sleep-COMP-FOC NEG-PAST-DECL
'It's not the case that also Mira slept.' (*Neg > also, *also > Neg*)

b. mila-man ca-ci-nun anh-ass-ta
Mira-only sleep-COMP-FOC NEG-PAST-DECL
'It's not the case that only Mira slept.' (*Neg > only, *only > Neg*)
(Other people slept too.)

In these examples, negation must scope over the expression in the subject position. However, an NPI in that position leads to unacceptability:

(13) *amwu-to ca-ci-nun anh-ass-ta
anyone sleep-COMP-FOC NEG-PAST-DECL
'No one slept.'

If *amwu-to* were an existential in the scope of negation, (13) should be grammatical with this focus construction. Only the analysis in which *amwu-to* is a universal with negation in its immediate scope predicts the unacceptability of (13). (13) is in fact grammatical when it is the verb *sleep* that is focused and negation targets it. In this case (13) means something like 'Whoever it was, it wasn't sleeping that he/she did.', and in this case the scope relation is *anyone > Neg > Focus*. (14) also shows that *amwu-to* is compatible in principle with this focus construction, as long as negation can associate with some focalizable element besides the NPI.

(14) amwu-to mila-man manna-ci-nun anh-ass-ta
anyone Mira-only meet-COMP-FOC NEG-PAST-DECL
'No one met only Mira.'

4 Generalizing the Immediate Scope Constraint

Here we provide evidence that in conjunction with the universal analysis of Korean NPIs, the Generalized ISC (GISC) makes several correct predictions.

Korean examples with multiple quantification tend to be interpreted with scope being isomorphic to linear order. On the assumption that the GISC holds, we correctly predict that (15a) is very unnatural, while (15b) is perfect.

(15) a. ?*amwu-to taypwupwun-uy kyengwu cip-ey eps-ess-ta
anyone most-GEN case house-at not.be-PAST-DECL
(*any > most > Neg → *GISC*)

b. taypwupwun-uy kyengwu amwu-to cip-ey eps-ess-ta
most-GEN case *anyone* house-at not.be-PAST-DECL
'In most cases, there was nobody at home.'
(*most > any > Neg*)

The contrasts in (15) also argue against any analysis which treats the true semantic negation as a high abstract negative operator which takes both NPIs and Neg in its scope. The only reason to posit such an abstract negation would be to license NPIs in subject position, but then (15a) should be acceptable, as the effective scope relations would be *Neg > any > most*. Similarly, if the NPI *anyone* were an existential, (15b) would require that negation scope over the subject; and if that were possible, it ought to be possible too for (15a), giving the scope order just cited. These are all incorrect predictions. Now, if logical scope corresponds closely to linear order, as in (15b), negation has the lowest scope, consistent with the universal analysis of the NPIs; and the infelicity of (15a) shows that negation cannot scope much higher than its surface position. Only the universal analysis of NPIs predicts the contrast in (15), in conjunction with the GISC.

Finally, there is one class of interactions which clearly favor the universal analysis. Ladusaw (1983, 389) observed that neither the 'Attraction to Focus' negation nor denial negation (if they are distinct) is an acceptable licenser for English NPIs. The NPI in (16) is acceptable only if the negation is not attracted to focus.

(16)   John didn't meet anyone on Sunday$_F$.

    a.   It was on Sunday that John didn't meet anyone.   (no attraction to focus)

    b.   *It wasn't on Sunday that John met anyone.   (attraction to focus; cannot licence NPI)

In the interpretation(s) of the example (16), negation cannot both license an NPI and associate with focus; attraction to focus would require a scope structure *Neg > Focus > anyone*, which the ISC disallows.

However, significantly, Korean does allow an extra focus in the same clause as the NPI which can be targeted by the negation (see also (14)).

(17)   mila-nun amwu-to ilyoil$_F$-ey   manna-ci-nun
            Mira-TOP *anyone* Sunday-DAT meet-COMP-FOC
            anh-ass-ta
            NEG-PAST-DECL
            'Whoever Mira met, it wasn't on Sunday that Mira met him.'

This difference between English and Korean can only be traced to the relative scope properties of negation. In Korean, negation can both license an NPI (intuitively, 'above' negation), and target a separate focus (intuitively, 'below' negation).

(18) illustrates a similar contrast between the languages. We include here an example from Turkish, which patterns just like Korean.[1]

(18) a.   kutul-un amwuil-to wanpyekhakey$_F$ ha-ci-nun
          they-TOP *any work* perfectly   do-COMP-FOC
          anh-ass-ta
          NEG-PAST-DECL
          'They didn't do any work perfectly$_F$.' (adverb negated)

b. onlar hiçbir iş-i   kusur-suz-ca$_F$ yap-ma-dı-lar
   they *any* *work*-ACC fault-less-ly   do-NEG-PAST-3.PL
   'They didn't do any work faultlessly$_F$.' (adverb negated)
c. *They didn't do any of the tasks perfectly$_F$/faultlessly$_F$.
   (adverb negated; cf. Linebarger, 1980)

The interpretations in these languages show that the scope relations must be *NPI > Neg > Focus*, so that the NPI outscopes Neg on the one hand, and Neg can negate another constituent on the other – an account that is only consistent with the universal analysis of NPIs, respecting the GISC. This interpretation is impossible in English. The precise basis of the typological difference between Korean and English, and whether it correlates with OV/VO, remains to be explored. However, the evidence we have surveyed argues strongly that the GISC holds, allowing languages to have either the existential or universal type of NPI.

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