

Negation Scope and Negative Polarity Items in Korean

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1. Negative Polarity Items

- (1) Forms of Negation in Korean (*mek-ess-ta* 'ate')
 - a. Long-Form Negation, e.g., *mek-ci anh-ass-ta* 'did not eat'
 - b. Short-Form Negation, e.g., *an mek-ass-ta* 'did not eat'
 - c. Lexically negative verbs: *eps-ta* 'not exist', *molu-ta* 'not know'.
Cf. **an iss-ta* (negation of 'exist'), **an al-ta* (negation of 'know'); LFN is always OK.

- (2) (Some) Negative Polarity Items
 - a. *amwu-to* 'anyone', *amwu kes-to* 'anything', *amwu tey-to* 'anywhere', etc.; *-to* means 'even'.
 - b. *hana-to* 'even one thing', *han salam-to* 'even one person', etc.
 - c. NP+*pakkey* 'other than'; cf. *pakk* 'outside' + *-ey* (dative). With negation, this forms a construction with the meaning of 'only'.
 - d. *yekan*+scalar predicate 'commonly'; with negation, this forms a construction meaning 'very'.

- (3) a. *swuni-ka amwu tey-to ka-ci anh-ass-ta*
Swuni-NOM *anywhere* go-COMP NEG-PAST-DECL
'Swuni didn't go anywhere.'

- b. *swuni-ka han mati-to ha-ci anh-ass-ta*
Swuni-NOM *one word-even* do-COMP NEG-PAST-DECL
'Swuni didn't say even one word.'

- c. *swuni-ka ku chayk-pakkey ilk-ci anh-ass-ta*
Swuni-NOM *that book-pakkey* read-COMP NEG-PAST-DECL
'Swuni read only that book.'

- d. *swuni-ka yekan nolla-ci anh-ass-ta*
Swuni-NOM *commonly* surprise-COMP NEG-PAST-DECL
'Swuni was very surprised.' (was [not commonly] surprised)

Any kind of negation can license an NPI:

- (4) a. *amwu-to ton-i eps-ta*
anyone money-NOM not.exist-DECL
'No one has money.'

- b. *amwu-to ku chayk-ul an ilk-ess-ta*
anyone that book-ACC NEG read-PAST-DECL
'No one read that book.'

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

This is so, even though negation typically cannot scope over the subject:

- (5) manhun salam-i Seoul-ey eps-ess-ta
 many people-NOM Seoul-to NEG.be-PAST-DECL
 ‘Many people were not in Seoul.’ (the only scope order is *many* > *neg*)

Thus, it seems that NPIs are not (need not be) in the scope of negation. Cf. Chung and Park (1998), Kim, A.-R. (2002), Han et al. (2003), among others.

- (6) Some points of the talk:
- a. There are forms of negation that cannot be shown independently to scope over all surface positions where NPIs can be licensed, yet which can license NPIs in any position.
 - b. Relative scope corresponds very closely to surface order (section 2).
 - c. If NPIs are not in the scope of negation, there is no motivation to consider them licensed in Spec,NegP.
 - d. The interactions of multiple NPIs also show that their licensing conditions cannot be reduced simply to the (structural) scope of negation (section 4).
 - e. Rather, they are licensed by semantic properties of the scope of negation and of their (following) context, along the lines of Kadmon and Landman (1993) and Chierchia (2004) (section 8).

(7) shows the kinds of interactions that I am interested in.

- (7) a. Marcia-ka . yekan pappu-ci anh-ta
 Marcia-NOM *commonly* busy-COMP NEG-DECL
 ‘Marcia is uncommonly busy.’
- b. amwu yeca-to . pappu-ci anh-ta
any woman busy-COMP NEG-DECL
 ‘No woman is busy.’
- c. amwu yeca-to . yekan pappu-ci anh-ta
any woman *commonly* busy-COMP NEG-DECL
 ‘Every woman is uncommonly busy.’
 (no ‘NPI’ interpretation for *any woman*; if acceptable at all)

2. Surface Scope

The interpretation of NPIs is also subject to the intervention effects noted in various languages, especially by Beck and Kim (1997); see also Sohn (1995, 64ff.).¹

- (8) a. Swuna-ka mwues-ul sa-ss-ni?
 Swuna-NOM what-ACC buy-PAST-Q
 ‘What did Swuna buy?’
- b. mwues-ul Swuna-ka sa-ss-ni?
 what-ACC Swuna-NOM buy-PAST-Q
 ‘What did Swuna buy?’
- (9) a. *amwu-to mwues-ul sa-ci anh-ass-ni?
anyone what-ACC buy-COMP NEG-PAST-Q
 ‘What did no one buy?’
- b. mwues-ul amwu-to sa-ci anh-ass-ni?
 what-ACC *anyone* buy-COMP NEG-PAST-Q
 ‘What did no one buy?’

¹Rather similar intervention effects are reported for Japanese by Takahashi (1990), Yanagida (1996) and Aoyagi and Ishii (1994).

- (10) a. nwukwu-ka amwu-to chotayha-ci anh-ass-ni?
 who-NOM *anyone* invite-COMP NEG-PAST-Q
 ‘Who did not invite anyone?’
- b. *amwu-to nwukwu-ka chotayha-ci anh-ass-ni?
anyone who-NOM invite-COMP NEG-PAST-Q
 ‘Who did not invite anyone?’

These examples suggest that the NPI should scope higher than negation, with no intervening operator. Cf. Linebarger (1987), Horn (2000), Kim, A.-R. (2002), Kim, S.-S. (2002), among others.

- (11) a. amwuto sey myeng-isang-ul chotayha-ci anh-ass-ta.
anyone three person-more.than-ACC invite-COMP NEG-PAST-DECL
- b. Immediate scope: For any person x you might pick, it is not the case that there are more than 3 people who x invited.
- c. Low scope: For any person x you might pick, there are more than 3 people who x did not invite. (unavailable)

3. Negation Scope

Sohn (1995) proposed that NPIs are licensed in Spec,NegP, though only for examples involving LFN. The exclusion of lexical negation and SFN is odd. For example:

- (12) han salam-to eps-ess-ta
one person-even NEG.be-PAST-DECL
 ‘No one was there.’

Here, the scalar NPI is licensed in the absence of NegP.

NPIs are typically not good in constructions like those in (13), with the focus marker *-nun* on V (see Sells (2001a), Kim, A.-R. (2002)):

- (13) a. *han salam-to o-ci-nun anh-ass-ta
one person-even come-COMP-FOC NEG-PAST-DECL
- b. *amwuto o-ci-nun anh-ass-ta
anyone come-COMP-FOC NEG-PAST-DECL

Here it is plausible that the NPI IS in the scope of negation, but the examples are bad. Shifting the prosodic focus to the verb improves things. The interpretations of (14) (from Sohn (1995, 24)) seem to show that negation scopes at Focus, not above Focus.

- (14) a. John-i amwu kes-to ecey sa-ci-nun anh-ass-ta
 John-NOM *anything* yesterday buy-COMP-FOC NEG-PAST-DECL
- b. Stress on *John*: unacceptable.
- c. Stress on *ecey*: ‘It was [not yesterday] that John bought something.’
- d. Stress on *sa-ci*: ‘It was [not buy] (something) that John did yesterday.’

Sohn (1995) proposes that *-nun* heads FocP which is lower than NegP, with the Focus phrase licensed in SpecFocP and the NPI in SpecNegP (at s-structure). This predicts that the focussed phrase cannot be higher than the NPI, ruling out (14)b, but allowing (14)c–d.

- (15) ... [_{NegP} NPI [_{FocP} Foc [_{VP} XP YP ... V]-*ci-nun*] Neg] ...
-

However, if we look at the interpretations in (14) that Sohn gives, we can see that (15) cannot be the correct abstract analysis. The first problem is that it is clear that negation itself associates with the Focus; and more seriously, in the acceptable interpretations, the NPI does not even get an NPI interpretation. More accurate interpretations are:

- (16) c. Stress on *ecey*: ‘Whatever it was, it was [not yesterday] that John bought it.’
 d. Stress on *sa-ci*: ‘Whatever it was, it was [not buying] it that John did yesterday.’

Consider also:

- (17) han salam-to SEOUL-ey ka-ci-nun anh-ass-ta
one person-even SEOUL-to go-COMP-FOC NEG-PAST-DECL
 ‘Even the most likely person to go somewhere did not to go Seoul.’

4. Multiple NPIs

In English, there is no restriction on the number of *any*-type NPIs in a given clause:

- (18) Max did not say anything to anyone, at any time.

In Korean multiple NPIs are possible, but not always straightforwardly so. Two *amwu*-NPs are considered to be fine in the contemporary literature, and are fine according to my consultants (though Nam (1994) and Chung and Park (1998) do not accept all such examples).

- (19) a. amwu-to amwu kes-to mek-ci anh-ass-ta
anyone anything eat-COMP NEG-PAST-DECL
 ‘No one ate anything.’ (acceptable to almost all speakers)
 b. John-i amwu-eykey-to amwu kes-to an cwu-ess-ta
 John-NOM *to.anyone anything* NEG give-PAST-DECL
 ‘John didn’t give anything to anyone.’ (acceptable to almost all speakers)

Two *han*-NP type NPIs are also generally acceptable (noted by Kuno and Whitman (2004)), though some speakers hesitate:

- (20) a. han salam-to han mati-to ha-ci anh-ass-ta
one person-even one word-even do-COMP NEG-PAST-DECL
 ‘Not one person said even one word.’ (acceptable only to some speakers)
 b. han salam-to han phwun-to nay-ci anh-ass-ta
one person-even one cent-even give-COMP NEG-PAST-DECL
 ‘Not one person gave even one cent.’ (acceptable only to some speakers)

For multiple NPIs, Kuno and Whitman (2004) propose a scale of strength of NPIs:

- (21) a. The leftmost NPI is an clause is licensed by clause-mate negation.
 b. An NPI that is licensed can license an NPI to its right unless the latter is stronger on the scale
-pakkey > han N-to > amwu N-to.

I will suggest below that NPIs may be licensed by the relative properties of the clause in its linear order, but there is no relative ‘strength’ of NPIs. Note that if the leftmost NPI is in the scope of negation, any NPI to the right must also be in the scope of negation, and hence licensed by (21)a. It is not clear what mechanism of licensing (21)a refers to, though.

Mixing the types of NPI leads to unexpected results. Kuno and Whitman (2004) claim that only the order *han*-NP > *amwu*-NP is acceptable, but I have found the opposite: speakers only accept the order *amwu*-NP > *han*-NP, quite consistently.

- (22) a. amwu-to han phwun-to nay-ci anh-ass-ta
anyone one cent-even give-COMP NEG-PAST-DECL
 ‘Noone gave even one cent.’
- b. ??han salam-to amwu kes-to nay-ci anh-ass-ta
one person-even anything give-COMP NEG-PAST-DECL
 ‘Not one person gave anything.’
- (23) a. amwuto han mati-to ha-ci anh-ass-ta
anyone one word-even do-COMP NEG-PAST-DECL
 ‘Noone said even one word.’
- b. ??han salam-to amwu mal-to ha-ci anh-ass-ta
one person-even any word-even do-COMP NEG-PAST-DECL
 ‘Not one person said any word.’

Why is there an asymmetry in the relative order of the NPIs?

5. *pakkey*

Given its etymology, one would expect NP-*pakkey* to have the meaning of an ‘exceptive phrase’. There is a considerable literature on the semantics of exceptives (see e.g., von Stechow (1991), Moltmann (1992)). (24)a can be paraphrased in (24)b; a similar account is suggested in A. H.-O. Kim (1997, 328) for Korean.

- (24) a. No one read anything except this book.
- b. If you remove this book from the domain of quantification, then the generalization is that no one read anything.

In Korean, NP-*pakkey* and *amwu*-NP may express the same argument, as noted by A. H.-O. Kim (1997), though only some speakers accept this overt expression of the exceptive argument.

- (25) a. Swuni-pakkey o-ci anh-ass-ta
Swuni-pakkey come-COMP NEG-PAST-DECL
 ‘Only Swuni came.’
- b. Swuni-pakkey amwu-to o-ci anh-ass-ta
Swuni-pakkey anyone come-COMP NEG-PAST-DECL
 ‘Except Swuni, no one came.’ (acceptable only to some speakers)
- (26) a. Swuni-ka ku chayk-pakkey ilk-ci anh-ass-ta
 Swuni-NOM that book-*pakkey* read-COMP NEG-PAST-DECL
 ‘Swuni read only that book.’
- b. Swuni-ka ku chayk-pakkey amwu kes-to ilk-ci anh-ass-ta
 Swuni-NOM that book-*pakkey* anything read-COMP NEG-PAST-DECL
 ‘Swuni read nothing except that book.’ (acceptable only to some speakers)

Suppose this analysis is right. We know that *amwu*-NP is not in the scope of negation, so this would entail that NP-*pakkey* is not in the scope of negation, either.²

Multiple *-man* (‘only’) phrases are acceptable, as is a combination of one *-pakkey* and one *-man* phrase, as in (27)a–b. However, examples with multiple *-pakkey* phrases as in (27)c are sharply unacceptable:

²Kim, A.-R. (2002) suggests that NP-*pakkey* is licensed by and within the scope of ‘constituent negation’, which for her is VP-level negation (in a system which distinguishes VP and vP). This seems an unworkable proposal, as NP-*pakkey* can be in subject position, and can be licensed by any form of negation.

- (27) a. Swuni-man i chayk-man ilk-ess-ta
Swuni-only this book-only read-PAST-DECL
'Only Swuni read only this book.'
- b. Swuni-man i chayk-pakkey ilk-ci anh-ass-ta
Swuni-only this book-pakkey read-COMP NEG-PAST-DECL
'Only Swuni read only this book.'
- c. *Swuni-pakkey i chayk-pakkey ilk-ci anh-ass-ta
Swuni-pakkey this book-pakkey read-COMP NEG-PAST-DECL
'Only Swuni read only this book.'

If *-pakkey* need not be in the scope of negation, why is (27c) bad? – (27)a–b are well-formed and have coherent meanings.³ Even with NP-*pakkeys*, the meaning of (27)c can be expressed, using a cleft construction which puts each NP-*pakkey* in a separate clause with its own negation:

- (28) i chayk-pakkey ilk-ci anh-un salam-un Swuni-pakkey eps-ta
this book-pakkey read-COMP NEG-PAST person-TOP Swuni-pakkey NEG.exist-DECL
'The person who read only this book is only Swuni.'

This shows that two such exceptives can occur in the same sentence (contra Kuno and Whitman (2004)), though not in the same clause.

Note that exceptives do not always correspond straightforwardly in interpretation to 'only': (29)b but not (29)c indicates the meaning of (29)a.

- (29) a. No one except John read anything except War and Peace.
b. The only thing that happened was: John read War and Peace.
c. Only John read only War and Peace.

Even though it is fundamentally an exceptive, *-pakkey* seems to have a scalar component:

- (30) chelswu-ka sey salam-pakkey manna-ci anh-ass-ta
chelswu-NOM three person-pakkey meet-COMP NEG-PAST-DECL
'Chelswu met only three people.' (not more than three people)

Examples with an *amwu*-NP and an NP-*pakkey* expressing different arguments receive quite different judgements regarding acceptability and interpretation. Even (31) with only one NPI receives different judgements (cf. Kuno and Kim (1999), Sells (2001a)).

- (31) amwu-to i kes-man ilk-ci anh-ass-ta
anyone this thing-only read-COMP NEG-PAST-DECL
'No one read only this (but read other things).'
'Only this, no one read.'

Now we replace *-man* by *-pakkey*:

- (32) amwu-to i kes-pakkey ilk-ci anh-ass-ta
anyone this thing-pakkey read-COMP NEG-PAST-DECL
'Everyone read only this.'
'No one read only this.'

The first interpretation is 'no matter which person x you pick, if you remove this (thing), x read nothing'. The second interpretation suggests that *-pakkey* is interpreted directly as 'only', with negation surviving to license the *amwu*-NP (see Sells (2001a)).

Some speakers do not accept the examples in (33). This would suggest that, for them, negation scopes just under NP-*pakkey*, and therefore over *amwu*-NP, which is bad.

³Double occurrence of NP-*sika* in Japanese is reported as bad by Kato (1985) and Aoyagi and Ishii (1994).

- (33) a. Swuni-pakkey amwu kes-to mek-ci anh-ass-ta
 Swuni-*pakkey anything* eat-COMP NEG-PAST-DECL
 ‘Except for Swuni, no one ate anything.’
 ‘Only Swuni did not eat anything.’
- b. Swuni-pakkey amwu tey-to ka-ci anh-ass-ta
 Swuni-*pakkey anywhere* go-COMP NEG-PAST-DECL
 ‘Except for Swuni, no one went anywhere.’
 ‘Only Swuni did not go anywhere.’

Again, the second interpretation is most easily accounted for if *-pakkey* is interpreted directly as ‘only’, with negation surviving to license the *amwu*-NP.

(34) presents another contrast, from Kuno and Whitman (2004).

- (34) a. chelswu-pakkey han mati-to ha-ci anh-ass-ta
 chelswu-*pakkey one word-even* do-COMP NEG-PAST-DECL
 ‘No one except Chelswu said a single word.’ (acceptable only to some speakers)
- b. *han salam-to chelswu-wa-pakkey manna-ci anh-ass-ta
one person-even chelswu-with-*pakkey* meet-COMP NEG-PAST-DECL
 ‘Not one person met anyone except Chelswu.’

The order of NPIs in b leads to strong unacceptability, which I will explain below. In none of the acceptable interpretations of NP-*pakkey* is there evidence that negation scopes over it.

6. Japanese

The usual counterpart of Korean *-pakkey* plus negation is taken in Japanese to be *-sika ... nai*. However, in addition, Japanese has *-igai ... nai*, and *igai* is literally much more like *pakkey*, with a literal meaning of ‘outside’.⁴ *-igai* is a clear exceptive and has a semantics similar to that just alluded to for *-pakkey*. However, *-sika* is different; it is not an exceptive. Rather, it seems to have a scalar interpretation which could be rendered in English as ‘anything more than’.⁵

In some examples there is strong contrast between *-sika* and *-igai*.

- (35) a. daremo kono hon-o yom-ana-katta
anyone this book-ACC read-NEG-PAST
 ‘No one read this book.’
- b. daremo kono hon-sika yom-ana-katta
anyone this book-*sika* read-NEG-PAST
 ‘Everyone read only this book.’
- c. daremo kono hon-igai yom-ana-katta
anyone this book-*igai* read-NEG-PAST
 ‘No one read anything except this book.’
 ‘Everyone read only this book.’

Examples like (35)b are judged ungrammatical by Kato (1985, 155) and Aoyagi and Ishii (1994, 301), but my consultants found the example acceptable. Kuno and Whitman (2004) cite a similar example as somewhat acceptable.

The examples in (35) are totally or largely acceptable. In contrast, speakers feel considerable confusion with (36) with the particle *-dake*, which means ‘only’ (without negation).

⁴The particle *-igai* is not a pure NPI (Shoji (1986)), but it has a clear ‘exceptive’ function.

⁵This idea was inspired by Miyawaki (1972); see also Shoji (1986), Kuno (1999).

- (36) ??daremo kono hon-dake yom-ana-katta
anyone this book-only read-NEG-PAST
 ‘No one read only this book.’

The example seems quite marginal at best, and speakers have difficulty expressing its meaning.

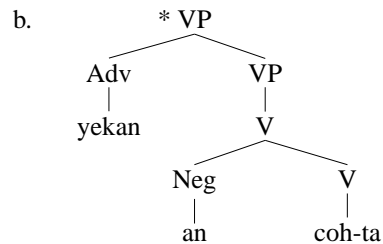
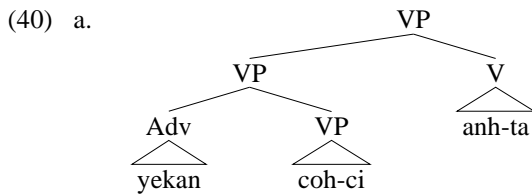
There also seems to be a difference in the examples in (37). NP-*sika* cannot appear with an overt NPI argument, unlike the Korean examples (25)–(26), as noted by A. H.-O. Kim (1997). However, NP-*igai* is much more felicitous with an overt NPI argument, and this fits well with its status as an exceptive marker.

- (37) a. Taroo-wa kono hon-sika (**nanimō*) yom-ana-katta
 Taroo-TOP this book-*sika* (**anything*) read-NEG-PAST
 ‘Taroo did not read anything more than this book.’
- b. Taroo-wa kono hon-igai (?*nanimō*) yom-ana-katta
 Taroo-TOP this book-*igai* (?*anything*) read-NEG-PAST
 ‘Taroo did not read anything except for this book.’

7. *yekan*

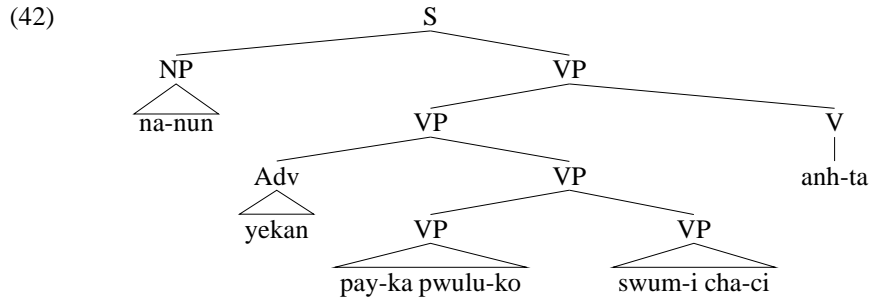
Unlike the other NPIs, *yekan* is only licensed by LFN (noted in Sells (1994)), or by the negative copula *ani-ta*, suggesting that it must be c-commanded by negation (on *yekan*, see also Cho (2001), Sells (2001b), Cho and Lee (2002)). Intuitively its interpretation might be taken to be [neg *yekan*], but it does not seem to involve ‘constituent’ negation (see (43)–(44)).

- (38) a. *Sue-ka yekan ton-i eps-ta
 Sue-NOM *commonly* money-NOM not.exist-DECL
 ‘Sue has much money.’
- b. Sue-ka yekan ton-i manh-ci anh-ta
 Sue-NOM *commonly* money-NOM much-COMP NEG-DECL
 ‘Sue has uncommonly much money.’
- (39) a. yekan coh-ci anh-ta
commonly good-COMP NEG-DECL
 ‘is very good’
- b. yekan nolla-ci anh-ass-ta
commonly surprise-COMP NEG-PAST-DECL
 ‘was very surprised’
- c. yekan papo-ka ani-ta
commonly fool-NOM NEG.COP-DECL
 ‘is very foolish’



yekan scopes over some predicative constituent:

- (41) na-nun yekan [pay-ka pwulu-ko] [swum-i cha-ci] anh-ta
 I-TOP *commonly* [stomach-NOM be.full-CONJ] [breath-NOM gasp-COMP] NEG-decl
 ‘As for me, my stomach is extremely full and my breath is extremely short.’



Yet it is not in 1-1 correspondence with negation (it is not ‘constituent negation’):

- (43) na-nun [yekan pay-ka pwulu-ko] [yekan swum-i cha-ci]
 I-TOP [*commonly* stomach-NOM be.full-CONJ] [*commonly* breath-NOM gasp-COMP]
 anh-ta
 NEG-DECL
 ‘As for me, my stomach is extremely full and my breath is extremely short.’

And it is not strictly locally licensed:

- (44) i kes-to [[yekan elyew-un] il-i ani-n] kes kathsupni-ta
 this thing-even [*commonly* difficult-PRES] thing-NOM NEG-PRES] fact seem-DECL
 ‘Even this thing seems like a really difficult thing.’

8. Interpretations

Kadmon and Landman (1993), Chierchia (2004): *any*-type NPIs are licensed only when the possibility of domain widening would be informative.

- (45) a. amwuto o-ci anh-ass-ta
anyone come-COMP NEG-PAST-DECL
 ‘No one came.’
- b. No matter which person x you pick, it is not the case that x came. ‘free choice x ’
- c. Chierchia’s notation: $\forall g \in \Delta, FC_{g(D)}x, \neg come(x)$. Let D' be a larger domain than D :
- d. $FC_{D'}x, \neg come(x)$
- e. $FC_{D'}x, \neg come(x)$

Failure to find a suitable x in D' is more informative than failure to find a suitable x in D .

- (46) a. han salam-to o-ci anh-ass-ta
one person-even come-COMP NEG-PAST-DECL
 ‘Not a single person came.’
- b. Concessive (scalar) interpretation (Lahiri (1998), Lee (2002)): it is not the case that one person came, and for all N , the likelihood of N persons not coming is greater than the likelihood of one person not coming.
- c. Assume that *even* scopes out above negation (Guerzoni (2004)), and that negation scopes over the predicates *one* and *person*.
- d. $EVEN \neg[one(x) \wedge person(x) \wedge come(x)]$

- (47) a. any person not come
 b. $FC_{Dx}[person(x) \wedge \neg come(x)]$
- (48) a. any person any book not read (FC scopes out; absorption?)
 b. $FC_{Dx,FC_{Ey}}[person(x) \wedge book(y) \wedge \neg read(x, y)]$
- (49) a. one person even not come (even scopes out)
 b. $EVEN [one(x) \wedge person(x) \wedge \neg come(x)]$
- The dashed line represents the interpreted scope of negation. Negation never scopes wider than a quantifier which precedes/commands it.
- (50) a. one person even one book even not read (even scopes out; absorption?)
 b. $EVEN [one(x) \wedge person(x) \wedge one(y) \wedge book(y) \wedge \neg read(x, y)]$
- (51) a. any person one book even not read (even scopes out) (\approx (22)a)
 b. $FC_{Dx}[person(x) \wedge EVEN[one(y) \wedge book(y) \wedge \neg read(x, y)]]$
- (52) a. *one person even any book not read (even scopes out) (\approx (22)b)
 b. $EVEN [one(x) \wedge person(x) \wedge FC_{Dx}[book(y) \wedge \neg read(x, y)]]$

For (7)c, assume that a scale is intuitively directional:

- (53) $\xrightarrow{\text{slightly busy \quad busy \quad very busy}}$

yekan itself picks out the central prototypical area of this scale (Cho and Lee (2002, 516)), and the negation denies the relevance of this area, leading the interpretation to the ‘positive’ (very busy) end of the scale. (Cf. Lee (2002, 489) ‘norm-denying upward understatement’.) Effectively, this is a positive property asserted of the subject; ‘x is not commonly busy’ in this usage does not entail ‘x is not busy’.

- (54) $FC_{Dx}[person(x) \wedge \neg busy\text{-to-}\mu\text{-degree}(x)]$

This interpretation does not license the NPI, as widening from a domain D in which any choice of individual is very busy to a domain D’ does not provide a stronger interpretation.

9. Conclusion

- (55) a. Relative scope of quantificational elements (quantifiers, negation) corresponds very closely to surface order.
 b. NPIs need not be licensed by (being in) the scope of negation.
 c. The interactions of multiple NPIs suggest complex interactions of negation and of the semantics of the forms involved.

References

- Aoyagi, Hiroshi, and Toru Ishii. 1994. On NPI licensing in Japanese. In Noriko Akatsuka (ed.), *Japanese/Korean Linguistics*, Vol. 4. Stanford, CSLI, Stanford Linguistics Association, 295–311.
- Beck, Sigrid, and Shin-Sook Kim. 1997. On WH- and operator scope in Korean. *Journal of East Asian Linguistics* 6, 339–384.
- Chierchia, Gennaro. 2004. Scalar implicatures, polarity phenomena, and the syntax/pragmatics interface. In Adriana Belletti (ed.), *Structure and Beyond: The Cartography of Syntactic Structures, Volume 3*. Oxford, Oxford University Press, 39–103.
- Cho, Sae-Youn. 2001. The NPI *Yekan* and *Yekan X-senun* construction in Korean. In S. Kuno et al. (ed.), *Harvard Studies in Korean Linguistics*, Vol. 9. Dept. of Linguistics, Harvard University, 275–286.
- Cho, Sae-Youn, and Han-Gyu Lee. 2002. Syntactic and pragmatic properties of the NPI *yekan* in Korean. In Noriko Akatsuka and Susan Strauss (eds.), *Japanese/Korean Linguistics*, Vol. 10. Stanford, CSLI, Stanford Linguistics Association, 509–521.
- Chung, Daeho, and Hong-Keun Park. 1998. NPIs outside of negation scope. In Ho-Min Sohn and John Haig (eds.), *Japanese/Korean Linguistics*, Vol. 6. Stanford, CSLI, Stanford Linguistics Association, 415–435.
- Guerzoni, Elena. 2002. Intervention effects on NPIs and feature movement: Towards a unified account of intervention. Ms., MIT.
- Guerzoni, Elena. 2004. Even-NPIs in Yes/No questions. *Natural Language Semantics* 12, 319–343.
- Han, Chung-hye, Jeffrey Lidz, and Julien Musolino. 2003. Verb-raising and grammar competition in Korean: Evidence from negation and quantifier scope. Ms., Simon Fraser University, Northwestern University, and Indiana University.
- Horn, Laurence R. 2000. Pick a theory (not just *any* theory): Indiscriminatives and the free choice indefinite. In Laurence R. Horn and Yasuhiko Kato (eds.), *Negation and Polarity*. Oxford, Oxford University Press, 147–192.
- Kadmon, Nirit, and Fred Landman. 1993. Any. *Linguistics and Philosophy* 16, 353–422.
- Kataoka, Kiyoko. 2004. ‘Neg-sensitive’ elements, Neg-c-command and scrambling in Japanese. In Timothy Vance (ed.), *Japanese/Korean Linguistics*, Vol. 14. Stanford, CSLI, Stanford Linguistics Association, to appear.
- Kato, Yasuhiko. 1985. *Negative Sentences in Japanese*. *Sophia Linguistica* 19, Sophia University, Tokyo.
- Kim, Ae-Ryung. 2002. Two positions of Korean negation. In Noriko Akatsuka and Susan Strauss (eds.), *Japanese/Korean Linguistics*, Vol. 10. Stanford, CSLI, Stanford Linguistics Association, 587–600.
- Kim, Alan Hyun-Oak. 1997. The NPI *pakkey* and universal quantifier negation in Korean. In S. Kuno et al. (ed.), *Harvard Studies in Korean Linguistics*, Vol. 7. Dept. of Linguistics, Harvard University, 323–337.
- Kim, Shin-Sook. 2002. Focus matters: Two types of intervention effect. Paper presented at WCCFL 21, UC Santa Cruz.
- Kuno, Susumu. 1998. Negative polarity items in Korean and English. In Ross King (ed.), *Description and Explanation in Korean Linguistics*. Ithaca, NY, East Asia Program, Cornell University, 87–131.
- Kuno, Susumu. 1999. The syntax and semantics of the *dake* and *sika* constructions. In Susumu Kuno and Bert Vaux (eds.), *Harvard Working Papers in Linguistics*, Vol. 7. Dept. of Linguistics, Harvard University, 144–172.
- Kuno, Susumu. 2002. NPI licensing, *O/Ga* alternation, verb raising and scrambling. In Noriko Akatsuka and Susan Strauss (eds.), *Japanese/Korean Linguistics*, Vol. 10. Stanford, CSLI, Stanford Linguistics Association, 465–480.

- Kuno, Susumu, and Young-joo Kim. 1999. The syntax and semantics of the *man* and *pakkey* constructions. In S. Kuno et al. (ed.), *Harvard Studies in Korean Linguistics*, Vol. 8. Dept. of Linguistics, Harvard University, 436–456.
- Kuno, Susumu, and John Whitman. 2004. Licensing of multiple negative polarity items. In Young-Key Kim-Renaud and John Whitman (eds.), *Kuno in Korean Linguistics*. Seoul, to appear, 207–228.
- Lahiri, Utpal. 1998. Focus and negative polarity in Hindi. *Natural Language Semantics* 6, 57–123.
- Lee, Chungmin. 2002. Negative polarity in Korean and Japanese. In Noriko Akatsuka and Susan Strauss (eds.), *Japanese/Korean Linguistics*, Vol. 10. Stanford, CSLI, Stanford Linguistics Association, 481–494.
- Lee, Young-Suk. 1993. Licensing and semantics of any revisited. In S. Kuno et al. (ed.), *Harvard Studies in Korean Linguistics*, Vol. 5. Dept. of Linguistics, Harvard University, 577–592.
- Linebarger, Marcia. 1987. Negative polarity and grammatical representation. *Linguistics and Philosophy* 10, 325–387.
- Miyawaki, Kuniko. 1972. On *dake* and *shika*. Research Institute of Logopedics and Phoniatics, University of Tokyo. *Annual Bulletin* 6, 111–122.
- Moltmann, Friederike. 1992. *Coordination and Comparatives*. Doctoral dissertation, MIT.
- Nam, Seungho. 1994. Another type of negative polarity item. In Makoto Kanazawa and Christopher Piñón (eds.), *Dynamics, Polarity, and Quantification*. Stanford, CSLI Publications, 3–15.
- Sells, Peter. 1994. Sub-phrasal syntax in Korean. *Language Research* 30, 351–386.
- Sells, Peter. 1998. Structural relationships within complex predicates. In Byung-Soo Park and James Yoon (eds.), *Proceedings of ICKL 11*. Seoul, International Circle of Korean Linguists, 115–147.
- Sells, Peter. 2001a. Negative polarity licensing and interpretation. In S. Kuno et al. (ed.), *Harvard Studies in Korean Linguistics*, Vol. 9. Dept. of Linguistics, Harvard University, 3–22.
- Sells, Peter. 2001b. Three aspects of negation in Korean. *Journal of Linguistic Studies* 6, Jeju Linguistics Circle, 1–15.
- Shoji, Atsuko. 1986. *Dake and Shika in Japanese: Syntax, Semantics and Pragmatics*. Doctoral dissertation, Cornell University.
- Sohn, Keun-Won. 1995. *Negative Polarity Items, Scope, and Economy*. Doctoral dissertation, University of Connecticut.
- Takahashi, Daiko. 1990. Negative polarity, phrase structure, and the ECP. *English Linguistics* 7, 129–146.
- von Stechow, Kai. 1991. A semantics for exception phrases. In Dawn Bates (ed.), *Proceedings of WCCFL*, Vol. 10. Stanford, CSLI, Stanford Linguistics Association, 493–504.
- Yanagida, Yuko. 1996. Deriving surface word order in discourse configurational languages. In M. Koizumi, M. Oishi, and U. Sauerland (eds.), *Formal Approaches to Japanese Linguistics* 2, MIT Working Papers in Linguistics 29. Cambridge, Dept. of Linguistics, MIT, 283–302.

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