

Quantifier Scope Interaction in Korean and English

Introduction. The contrast in scope ambiguity between English and Korean in (1-2) has been a topic of research. Huang (1982: 220) and Hoji (1985: 248) argue that quantifier scope in languages like Korean, Chinese and Japanese is determined by the surface word order contra English. Recently, some researchers (Hornstein 1995 among others) proposed that there is no quantifier-raising rule in the grammar (contra May 1985, Aoun and Li 1993) and that quantifier scope is parasitic on A-chain, adopting the minimalist assumption (Chomsky 1995) that every movement is driven by morphological requirements, but not by the search for the semantic intelligibility. According to Hornstein (1995: 164 also Aoun and Li 1993: 190), the cross-linguistic contrast in scope ambiguity in (1-2) can be attributed to the parametric difference in the base subject position, viz. Spec IP in Korean and Spec VP in English.

Proposal. Although admitting the proposal that there is no quantifier-raising rule, we diverge concerning the driving force for quantifier scope. Specifically, we propose that the overt movement is the driving force for quantifier scope (cf. Johnson 2000), thus suggesting that the contrast in scope ambiguity in (1-2) correlates with the parametric difference in the object raising, not in the base subject position. The contrast in grammaticality with respect to binding and the antecedent-contained deletion in (3-4) strongly suggests that the object in English moves overtly, while its counterpart in Korean moves covertly, given the crucial assumption that the whole category including quantificational and referential features undergoes overt movement for PF convergence, while only formal features undergo covert movement, leaving behind those features (Lasnik 1999: 186 cf. Chomsky 1995: 272). (also see Johnson 1991, Koizumi 1995 for the overt object raising in English) The correlation between the contrast in scope ambiguity in (1-2) and the contrast in grammaticality in (3-4) remains a mere accident, according to the proposal that the parametric difference in the subject position is attributed to the contrast in scope ambiguity in (1-2). For the execution of our proposal, we further assume: (a) Movement leaves a copy (Chomsky 1995). (b) C-command relation between the quantifiers determines their relative scope, given that c-command is the logical notion of scope. (May 1985, Aoun and Li 1993) (c) Reconstruction is forced to meet the output conditions at LF (e.g., Binding) (Hornstein 1999, Fox 2000).

Account. The cross-linguistic contrast in scope ambiguity in (1-2) follows from our proposal, given the above assumptions (a-b): *everyone* in (1a-2a), which moves overtly into Spec AgroP, c-commands the copy of *someone* in the base position, and the former in turn is c-commanded by *someone* in Spec IP, thus leading to scope ambiguity. Meanwhile, only formal features of *motwun salam* (everyone) in (1b-2b) moves covertly leaving behind its quantificational and referential features, thus having narrow scope vis- -vis *nwukwunka* (someone).

Implication. Importantly our proposal, given the above assumptions in (a-c), correctly predicts contra Huang (1982) and Hoji (1985) the contrast in the scope ambiguity between English and Korean in (1-2) disappears in (5-10) where parametric difference in the object raising is not involved: The existential quantifier in (5-7), which moves overtly into the matrix Spec IP c-commands the universal quantifier, which in turn c-commands the copy of the existential quantifier, thus resulting in scope ambiguity in both the two languages; In (8-10), the subject in the matrix Spec IP, not its copy, is forced to delete to obviate Binding violation, thus resulting in the narrow scope of the existential quantifier vis- -vis the universal quantifier. (Contra operator-variable chain, deletion of the head of A-chain is not problematic regarding full interpretation at LF. see Hornstein 1995: 154) Our proposal thus has the important consequence of accounting for the cross-linguistic contrast in scope ambiguity in (1-2) and the lack of it in (5-10), without assuming that subject is base-generated in Spec IP in Korean contra English (Hornstein 1995, Aoun and Li 1993), which is not theoretically desirable as well as empirically convincing. It is also expected by our proposal that when the object is raised overtly via scrambling (Saito 1989), scope ambiguity obtains, which is confirmed in (11).

- (1) a. Someone loves everyone
 b. nwukwunka-ka motwun salam-ul salanghanda
 someone-NOM everyone-ACC loves
- (2) a. Someone expects everyone to come
 b. nwukwunka-ka motwun salam-ul oki palanta
 someone-NOM everyone-ACC come expect
 ($\forall > \exists$, $\exists > \forall$ for 1a and 2a)
 ($*\forall > \exists$, $\exists > \forall$ for 1b and 2b)
- (3) a. The DA proved [two men to have been at the scene] during each other's trial. (Lasnik 1999)
 b. *ku kensa-nun [twu salam_i-ul ywucoy-lako]
 the prosecutor-TOP two men-ACC to be guilty
 casintul_i-uy caypan-eyse cungmyenghaessta.
 their_i-reflexive trial-in proved (Kim 1994)
- (4) a. John sent his mother every book that Mary did
 b. *John-un caki-uy emeni-ekey Tom-i ponesstun
 J-TOP his-POSS mother-to T-NOM sent
 motwun chayk-ul ponessta.
 every book-ACC sent
 (Otani and Whitman 1991, Takahashi 1993)
- (5) Passive
 a. Someone was criticized by everyone.
 b. nwukwunka-ka motwun salam-eyuyhay
 someone-NOM everyone-by
 pipantoyeceyessta.
 was criticized ($\forall > \exists$, $\exists > \forall$ for 5ab)
- (6) Subject Raising
 a. Some picture seemed to everyone to be ugly
 b. sacin myet cang-i motwun salam-ekey
 picture some CL-NOM everyone-to
 chwuhakey poyessta.
 ugly seemed ($\forall > \exists$, $\exists > \forall$ for 6ab)
- (7) Psych verb Construction (Belletti & Rizzi 1988)
 a. Someone worried everyone
 b. nwukwunka-ka motwun salam-ul
 someone-NOM everyone-ACC
 kekcengsikhyessta
 worried (Kim 1990, Sohn 1995)
 ($\forall > \exists$, $\exists > \forall$ for 7ab)
- (8) a. Some picture of himself_i was criticized by everyone_i.
 b. casin_i-uy sacin myet cang-i
 his-reflexive picture some CL-NOM
 motwun salam_i-eyuyhay pipantoyeceyessta.
 everyone-by was criticized
 ($\forall > \exists$, $*\exists > \forall$ for 8ab)
- (9) a. Some picture of themselves_i seemed to everyone_i to be ugly
 b. casintul_i-uy sacin myet cang-i
 their-reflexive picture some CL-NOM
 motwun salam_i-ekey chwuhakey poyessta
 everyone-to ugly seemed

($\forall > \exists$, $*\exists > \forall$ for 9ab)

(10) a. Some picture of himself_i worried everyone_i

b. casin_i-uy sacin myet cang-i
his(reflexive) picture some CL-NOM
motwun salam_i-ul kekcengsikhyessta
everyone-ACC worried

($\forall > \exists$, $*\exists > \forall$ for 10ab)

(11) Scrambling

a. motwun salam_i-ul, nwukwunka-ka t_i coahanta
everyone-ACC someone-NOM likes

b. motwun salam_i-ul, nwukwunka-ka t_i oki palanta
everyone-ACC someone-NOM come expect

($\forall > \exists$, $\exists > \forall$ for 11ab)

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