

Verb Raising in Korean Redux*

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Choi, YoungSik. (2013). Verb Raising in Korean Redux. *The Linguistic Association of Korea Journal*, 21(3), 31-53. It has been a standard assumption that adverbials are uniformly left adjoined in a strict head final language. I, however, suggest that monosyllabic manner adverbs and the negation *ani* 'not' are right adjoined, thus lending strong support to the overt verb raising in Korean. I also suggest that clausal typing is the driving force par excellence for the overt verb raising in Korean, where clauses are typed with the sentence final verbal morphology. The present proposal has a nontrivial theoretical implication for languages typologically akin to Korean where verbal morphology determines clause types.

Key Words: verb, raising, negation, type, adverb, manner

1. Introduction

I claim that the verb in Korean undergoes overt verb raising. I critically review the proposals including sloppy identity in Otani and Whitman (1991), and coordination by Yoon (1994). Then I suggest that monosyllabic manner adverbs, along with negation are evidence for the overt raising in Korean. The organization of the presentation is as following: In section 2, I review two hypotheses on verbal morphology to lay the ground for our discussion of the verb raising in Korean in subsequent sections. Section 3 is a critical review of the two competing proposals in the literature for the verb raising in Korean. I make an alternative proposal in section 4, where I claim monosyllabic manner adverbs, along with negation, argue for the overt verb raising in Korean. Section 5 is the conclusion and theoretical implication.

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2. Lexicalist Hypothesis vs. Strong Lexicalist Hypothesis

Chomsky (1970) puts forward the Lexicalist Hypothesis, which says that only inflectional morphology, not derivational morphology, is subject to transformations. Under this hypothesis, the surface form of the verb *ilkessta* ‘read’ below in (1) including the stem and the inflectional morphology will be derived by means of a transformation including lowering and re-raising that creates the word.

- (1) John-i chayk-ul ilk-ess-ta
 J-NOM book-ACC ilk-PAST-IND
 ‘John read a book.’

Otherwise, inflectional morphemes, namely, affixes, will be stranded. Hence, (1) will have the structural representation below in (2) along the assumption that subject is base-generated in the Spec of VP, following the proposal in the literature (Koopman and Sportiche 1991).

- (2) [IP [TP [VP NP-NOM [_v NP-ACC ilk] ess] ta]]

Chomsky (1995) goes further to suggest that even inflectional morphology is not subject to transformations, which is known as the Strict Lexicalist Hypothesis. According to the Strict Lexicalist Hypothesis, the word *ilkessta* ‘read’ above in (1) is already complete in the lexicon with all the inflectional morphology part of the word as shown below in (3).

- (3) [IP [TP [VP NP-NOM [_v NP-ACC ilkessta] T] I]]

According to the Strict Lexicalist Hypothesis, affix stranding is not an issue any more, with the affixes already part of the stem, hence overcoming the problem of lowering in the Lexicalist Hypothesis, an operation not allowed in the computation (see Fiengo 1974, 1977, Chomsky 1976, Lasnik and Saito 1992, Chomsky 1995). Chomsky suggests that a finite verb is a bundle of features including person, number and gender, which he calls Φ -features. The features

should be checked against the features in the relevant heads including T and I, through head-to-head movement during the computation. Chomsky argues that the Strict Lexicalist Hypothesis addresses the cross-linguistic difference in the relative position of the verb as in English and French as below in (4) in a more elegant way than the Lexicalist Hypothesis.

- (4) a. John often kisses Mary.
 b. Jean embrasse souvent Marie.
 Jean kisses often Marie
 (Chomsky 1995: 38)

The Φ -features on the English verb in (4a) is checked at LF, with the verb staying in situ until at LF, whereas they are checked at S Structure in French with the verb overtly raising, leading to the difference in word order relative to the adverbial between the two languages. So, within the framework of the Strong Lexicalist Hypothesis, it is either overt or covert verb raising that creates cross linguistic variation in the placement of the verb. When it comes to Korean as below in (5), which is arguably a strict head final language (Koizumi 2000, Tanaka 2001, among many others), it is not easy to argue whether the verb raises overtly or covertly.

- (5) John-i cacwu chayk-ul ilk-ess-ta
 J-NOM often book-ACC read-PAST-IM
 'John often read a book.'

In a strict head final language, the verb always follows the object with no right XP adjunction or rightward XP movement, whereas X movement is always to the right. Hence, one may suggest that the verb in (5) is raised overtly out of VP to a functional head, or one may equally maintain that the verb stays in situ without overt raising, since either way, the word order of the verb relative to the adverbial follows.

3. Past Proposals

The issue of the verb raising has always been a controversy in Korean literature. Otani and Whitman (1991), among others argue for the overt verb raising, whereas Yoon (1994), among others, argues against it. It will be shown that none of the proposals, either for the overt verb raising or not, are convincing. As an alternative, I will show that monosyllabic manner or degree adverbs along with negation are key to the question of the verb raising in Korean.

3.1. Sloppy Identity Reading

Korean allows a null argument in finite clauses as illustrated below in (6), since it is a typical *pro*-drop language (Perlmutter 1971, Borer 1983, Chomsky 1981, 1986, 1995, Chomsky and Lasnik 1977, Jaeggli 1982, among others).

- (6) a. John-un caki-uy pyenci-lul pelyessta.
 John-TOP self-POSS letter-ACC discarded
 'John_i threw out his_i letter.'
- b. Mary-to **e** pelyessta.
 M-also discarded
 'Mary also threw out.'

The null argument phenomenon has been a topic of great interest in Korean type languages. Since Kuroda (1965), it has been a common view that the null subjects and objects are empty pronouns or zero pronouns (also see Huang 1984, Hoji 1985, and Saito 1985). Otani and Whitman (1991), in the meantime, claim that (6b) is the result of overt verb raising and VP ellipsis, but not the existence of an empty pronoun, diverging from Kuroda (1965), Huang (1984), Hoji (1985), and Saito (1985) among others. Their proposal for overt verb raising and the VP ellipsis is motivated by the fact that (6b), like the English example in (7b), also has a sloppy identity reading available.

- (7) a. John threw out his letter.
 b. Mary did, too.

Otani and Whitman claim the sloppy identity reading in (6b) in Korean arises in the same way as English in (7b). Along with their proposal for the overt verb raising, they suggest the application of the Derived VP Rule, Pronoun Rule and VP rule in Williams (1977) will give the representation below in (8a) for (6b) much like English below in (8b) for (7b).¹⁾

- (8) a. Mary-to [_{VP} λ_x (x x-uy pyenci-lul t_i)] pelyessta_i.
 Mary-also letter-ACC discarded
 b. Mary did [_{VP} λ_x (x throw out x's letter)] too.

Now, from their proposal there should hold a necessary correlation between the availability of the sloppy identity reading and VP ellipsis. However, as Choi (2013) points out, quite contrary to the prediction by Otani and Whitman (1991), the sloppy identity reading is also available in a construction that cannot be derived with VP ellipsis, that is, missing subject construction, as shown below in (9).

- (9) a. John_i-un [_{CP} caki_i-uy cito haksayng-i ttokttokhata-ko]
 John-TOP self-POSS student-NOM smart-COMP
 sayngkakhanta.
 think
 'John_i thinks that his_i student is smart.'
 b. Mary-to [_{CP} e ttokttokhata-ko] sayngkakhanta.
 Mary-also smart-COMP think
 'Mary_j also thinks his_i /her_j student is smart.'
 (Choi 2013: 42)

Otani and Whitman cannot deal with the sloppy identity reading in (9b), since the domain for the Derived VP Rule is VP not IP, a problem also pointed out by Oku (1998) with regard to Japanese. This strongly suggests that something other

1) Note, however, that the explanation by Otani and Whitman (1991) only goes through with the trace theory of movement, assuming movement leaves non-distinct traces behind in the original positions, but not with the copy theory of movement in the minimalist program (Chomsky 1995), which posits that movement leaves copy behind its original position.

than VP ellipsis is behind the sloppy identity reading.²⁾

3.2. Coordination

Yoon (1994) in the meantime argues against overt verb raising, based on the coordination fact in Korean as below in (10).

2) There are other proposals for the overt verb raising in Korean type languages. Koisumi (2000) suggests (i) is VP coordination, with the verb overtly raised in an across-the-board fashion out of VP.

- (i) John-i Mary-ekey chayk-ul, Bill-i Emily-eykey CD-lul cwuessta.
 John-NOM Mary-DAT book-ACC Bill-NOM Emily-DAT CD-ACC gave
 'John gave Mary a book, and Bill gave Emily a CD.'

One can, however, derive the same result with gapping, deleting the first occurrence of the same verb, which leads one to suspect that (i) constitutes a genuine argument for the overt verb raising. Choi (1999) suggests the negative polarity item in the subject position in (ii) is evidence for the overt verb raising, under the assumption that it is an existential quantifier under negation. See Ladusaw (1979), and Carlson (1980) (also see Horn 1972, Fauconnier 1975, Linebarger 1980, 1987 Laka 1990, Progovac 1988, Giannakidou 1998, and Lee 1999 among others, for related discussions).

- (ii) Amwuto John-ul an chotayhayssta.
 anyone John-ACC NOT invited
 'No one invited John.'

However, recent research suggests *amwuto* 'anyone' is a universal quantifier over negation (Chung and Park 1998, Kim 1999, and Choi 2012). In fact, this view can offer a systematic account for the long standing observation for the clause-boundedness of Korean NPIs below in (iii) (see Choe 1988, Suh 1990, Kuno 1998, Chung and Park 1998, Choi 2000, among others), given that universal quantifiers, quite unlike existentials or indefinites, are clause-bound (Abusch 1994, Ludlow and Neale 1991, Farkas and Giannakidou 1996, Reinhart 1997, Farkas 1997).

- (iii) *John-un [Mary-ka amwuto mannassta-ko] sayngkakhaci ani hayssta.
 John-TOP Mary-NOM anyone met-COMP think NOT did
 'John does not think Mary met anyone.'

- (10) John-i pap-ul mek-ko kulus-ul chiwu-ess-ta.
 John-NOM rice-ACC eat-CONJ dish-ACC clean-PAST-IM
 'John ate rice and cleaned the dish.'
 (Yoon 1994: 252)

Specifically, Yoon claims that (10) is an instance of VP coordination as represented below in (11).

- (11) John-i [_{VP} pap-ul mek-ko kulus-ul chiwu-ess-ta]
 John-NOM rice-ACC eat-CONJ dish-ACC clean-PAST-IND
 'John ate rice and cleaned the dish.'

From the structure in (11), it follows that verb raising is simply out of the question due to the coordinate structure constraint, which prohibits an element from moving out of a conjunct. Yoon thus suggests that the tense and indicative morphemes are thus lowered to combine with the second occurrence of the verb like clitics, arguing against overt verb raising. Yoon's proposal is problematic in that lowering is what is responsible for the surface verbal morphology in (11), an operation not allowed in the computation, since it is a violation of the proper binding condition that specifically prohibits downward movement (see Fiengo 1974, 1977, Chomsky 1976, Lasnik and Saito 1992, Chomsky 1995). Also, one can readily give a structural representation for (11) that is quite compatible with the overt verb raising as shown below in (12) (also see Chung 2001 for a related discussion on *ko*-construction).³⁾

- (12) [_{CP} John_i-i pap-ul mek-ko] [_{CP} pro_i kulus-ul
 John-NOM rice-ACC eat-CONJ dish-ACC
 chiwu-ess-ta]
 clean-PAST-IND
 'John ate rice and cleaned the dish.'

3) Also note that *ko* can be construed as a subordinate conjunction corresponding to *after* in English as well. For this, one can analyze the clause headed by *ko* as adjoined to IP, which is again orthogonal to the issue of the verb raising *per se*.

The example in (11) thus cannot be taken as an argument against overt verb raising in Korean.

4. Alternative Proposal

So far, it was shown that none of the opposing arguments in Korean literature, either for the overt verb raising or not, turn out to be less than convincing. As an alternative, I suggest that certain manner adverbials and negation constitute evidence for the overt verb raising in Korean, although it is quite difficult to argue whether it allows verb raising or not, since Korean is arguably a strict head final language.

4.1. Right-adjoined Adverbs

Korean is known as a language that allows optional object movement via the operation of scrambling to the effect that the object in (13b) can appear to the left of the manner adverbial *yelsimhi* 'diligently' or *yelcengcekulo* 'passionately.'

- (13) a. John-i {yelsimhi /yelcengcekulo} swukcey-lul hayssta.
 John-NOM {diligently /passionately} assignment-ACC did
 'John did his assignment {diligently/passionately}.'
- b. John-i swukcey-lul {yelsimhi /yelcengcekulo} hayssta.
 John-NOM assignment-ACC {diligently/passionately} did
 'John did his assignment {diligently/passionately}.'

However, when the manner adverbial *yelsimhi* 'diligently' and *yelcengcekulo* 'passionately' in (13) are replaced with the manner adverbial *cal* 'well,' the object does not enjoy the freedom of the optional appearance to the left of the manner adverb any more, as shown in (14).

- (14) a. John-i swukcey-lul cal hayssta.
 John-NOM assignment-ACC well did
 'John did his assignment well.'

- b. *John-i cal swukcey-lul hayssta.
 John-NOM well assignment-ACC did
 'John did his assignment well.'

One may suggest for this that *cal* 'well' is part of a word, thus not allowing the object to intervene between *cal* 'well' and the verb.⁴⁾ The example below in (15), where the plurality morpheme *tul* can be attached to *cal* 'well' suggests that it is a separate word.

- (15) John-kwa Mary-ka swukcey-ul cal-tul hayssta.
 John-and Mary-NOM assignment-ACC well-PL did
 'John and Mary did their assignments well.'

It should be noted that *tul* cannot come within a word but only after a word boundary as shown below in (16-17), suggesting that it is a phrasal affix.⁵⁾

- (16) John-i chinkwu-tul-ul chotayhayssta.
 John-NOM friend-PL-ACC invited
 'John invited his friends.'

- (17) a. *John-kwa Mary-ka swukcey-lul ha-yess-tul-ta.
 John-and Mary-NOM assignment-ACC do-PAST-PL-IM
 'John and Mary did their assignments.'

4) Alternatively one may take (14) as an argument for overt object raising as in Hagstrom (2000). However, this approach should address the question of why the object raising is optional as in (13).

5) In fact, the plurality marker *tul* can attach to various phrasal syntactic categories such as a noun phrase as in (16), adverbial phrase, and prepositional phrase as shown below in (i).

- (i) a. John-kwa Mary-ka swukcey-lul yelsimhi-tul hayssta.
 John-and Mary-NOM assignment-ACC diligently-PL did
 'John and Mary did their assignments diligently.'
 b. John-kwa Mary-ka hakkyo-ey-tul kassta.
 John-and Mary-NOM school-to-PL went
 'John and Mary went to school.'

- b. *John-kwa Mary-ka swukcey-lul ha-tul-ess-ta.
 John-and Mary-NOM assignment-ACC do-PL-PAST-IM
 'John and Mary did their assignments.'

The difference in grammaticality in (14) follows once we take the manner adverb *cal* 'well' as right adjoined to VP à la Lee (1993) in contrast to the manner adverb *yelshimhi* 'diligently,' and *yelcengcekulo* 'passionately' that are left adjoined (also see Kim 1997). The prediction then is that the manner adverbs *yelshimhi* 'diligently' and *yelcengcekulo* 'passionately' cannot appear to the right of *cal* 'well,' whereas the opposite word order is innocuous. The prediction is indeed confirmed as shown in (18).

- (18) a. John-i {yelshimhi /yelcengcekulo} swukcey-lul cal
 John-NOM {diligently /passionately} assignment-ACC well
 hayssta.
 did
 'John did his assignment well {diligently/passionately}.'
- b. *John-i swukcey-lul cal {yelshimhi /yelcengcekulo}
 John-NOM assignment-ACC well {diligently /passionately}
 hayssta.
 did
 'John did his assignment well{diligently /passionately}.'

The question is: is *cal* 'well' the only adverb right adjoined to VP in Korean? If so, in terms of child language acquisition, it will cause a burden to the mastery of their language and will thus lead to question the validity of the proposal for right adjunction of the adverb above in (14). As a matter of fact, there are other adverbs that behave like *cal* 'well.' They are *ta* 'completely,' and *kkok* 'firmly' in the paradigm in (19-20).

- (19) a. John-i swukcey-lul ta hayssta.
 John-NOM assignment-ACC completely did
 'John did his assignment completely.'

- b. *John-i ta swukcey-lul hayssta.
 John-NOM completely homework-ACC did
 'John did his assignment completely.'
- (20) a. John-i Mary-lul kkok capassta.
 John-NOM Mary-ACC firmly held
 'John held Mary firmly.'
- b. *John-i kkok Mary-lul capassta.
 John-NOM firmly Mary-ACC held
 'John held Mary firmly.'

Again, one cannot attribute the ungrammaticality of the examples in (19b-20b) to the lexical status of *ta hata* 'do completely' or *kkok capta*, 'hold firmly,' since the plurality morpheme *tul* can be attached to *ta* 'completely' and *kkok* 'firmly' in (21).

- (21) a. John-kwa Mary-ka swukcey-lul ta-tul hayssta.
 John-and Mary-NOM assignment-ACC completely-PL did
 'John and Mary did their assignments completely.'
- b. John-kwa Mary-ka son-ul kkok-tul capassta.
 John-and Mary-NOM hand-ACC firmly-PL held
 'John and Mary held hands firmly.'

The grammaticality of the following paradigm in (22-23) with *ta* 'completely' and *kkok* 'firmly' after left adjoined adverbs *yelsimhi* 'diligently' and *yelcengcekulo* 'passionately' also follows. given the present proposal that like *cal* 'well,' *ta* 'completely' and *kkok* 'firmly' are also adverbs right adjoined to VP.⁶⁾

6) An anonymous reviewer wonders whether *phuk* in Korean also behaves in the same way as monosyllabic manner adverbs. It seems *phuk* is an intensifier, corresponding to 'quite' in English as shown below in (i).

- (i) John-i swukcey-lul phuk cal hayssta.
 John-NOM assignment-ACC quite well did
 'John did his assignment quite well.'

The reviewer also wonders whether syllable number matters in syntax. Note that syllable

- (22) a. John-i swukcey-lul {yelsimhi /yelcengcekulo}
 John-NOM assignment-ACC {diligently / passionately}
 ta hayssta.
 completely did
 'John did his assignment completely {diligently/ passionately}.'
- b. *John-i swukcey-lul ta {yelsimhi /
 John-NOM assignment-ACC completely diligently
 yelcengcekulo} hayssta.
 passionately} did
 'John did his assignment completely {diligently/ passionately}.'
- (23) a. John-i Mary-lul yelcengcekulo kkok capassta.
 John-NOM Mary-ACC passionately firmly held
 'John held Mary firmly passionately.'
- b. *John-i Mary-lul kkok yelcengcekulo capassta.
 John-NOM Mary-ACC firmly passionately held
 'John held Mary firmly passionately.'

Now, one may wonder what generalization applies for the characterization of the adverbs *cal* 'well,' *ta* 'completely,' and *kkok* 'firmly' we saw above so far. A quick scrutiny of these adverbs shows that the generalization is both semantic and phonological in nature: they are all manner adverbs and monosyllabic as well. Recall in the meantime that a manner adverbial more than monosyllabic such as *yelshimhi* 'diligently' and *yelcengcekulo* 'passionately' are left adjoined as we already saw above in (13). If the present claim for the existence of right-adjoined adverbs is on the right track, the paradigm above in (14a) and (18a-20a), where the verb appears to the right of these adverbs strongly suggests that Korean verb raises overtly to a functional projection out

number plays an important role in phonology. It plays an important role in syntax as well. Comparative construction in English is one wellknown example, where syllable number matters.

- (ii) a. Mary is smarter than John.
 b. Mary is more intelligent to John.

of VP. The question then is: do these manner adverbs constitute the only evidence for the overt raising of the verb in Korean? Below, it will be shown that there is another piece of evidence for the overt verb raising.

4.2. Negation *ani* not as Right-adjoined Adverb

One common way of expressing negation in Korean is to place the negative form *ani* 'not' right before the verb as illustrated below in (24), which is known as a short form negation.

- (24) John-i swukcey-lul ani hayssta.
 John-NOM homework-ACC NOT did
 'John did not do his homework.'

There has been an extensive body of research regarding the structure of negation as in (24), witnessing various proposals as in Song (1971), Yang (1976), Han (1987), Choe (1988), Yoon (1990), Ahn (1992), Cho (1994), Choi (1999), and Hagstrom (2000), among many others. The central issue with regard to (24) is whether *ani* 'not' is base-generated as part of the verbal morphology or not.⁷⁾ Yoon (1990), Cho (1994), and Sells (1995) suggest base generation of it as part of the verbal morphology, whereas Chung (1995), Choi (1999) and Hagstrom (2000) take the view that it is not part of base generated verbal morphology but part of a separate functional projection. In fact, the example in (25) crucially argues against the view of *ani* 'not' as part of the base generated verbal morphology, since the plurality marker *tul* can be affixed to it.

7) One can express the same idea as (24) with another form of negation, which is known as a long form negation below in (i).

- (i) John-i swukcey-lul haci ani hayssta.
 John-NOM assignment-ACC do NOT did
 'John did not do his assignment.'

I assume the present discussion on *ani* 'not' in the short form negation also extends to *ani* 'not' in the long form negation as well.

- (25) John-kwa Mary-ka swukcey-lul ani-tul hayssta.
 John-and Mary-NOM homework-ACC NOT-PL did
 'John and Mary did not do their homework.'

Also, the example in (26) where one can give *ani* 'not' as an answer to the question further suggests that *ani* 'not' is not a bound morpheme.

- (26) A: John-i Mary-lul chotayhayss-ni?
 John-NOM Mary-ACC invited-QM
 'Did John invite Mary?'
 B: ani.
 not
 'No.'

With the status of *ani* 'not' as a free morpheme in mind, let us move on to the question of where it is base generated syntactically. Choi (1999), for example, suggests that *ani* 'not' is in the Spec of NegP cliticizing to the verb at the overt syntax, assuming universal NegP hypothesis across languages (Pollock 1989, Ouhalla 1990, 2002, Chomsky 1991, Benmamaun 1997, Lasnik 2000).⁸⁾ The claim, however, does not seem to be correct, since the plurality marker *tul* can intervene between the verb and the negation in (25). This state of affairs suggests that *ani* 'not' does not undergo cliticization to the verb.⁹⁾ Chung (1995) suggests that *ani* 'not' heads NegP, which is not plausible, either, especially given the fact that the plurality marker *tul*, a phrasal affix, can be attached to *ani* 'not' in (25), suggesting that *ani* 'not' is phrasal in nature. Recall the plurality marker *tul* is a phrasal affix, thus not able to attach to

8) It is quite a controversy whether NegP is universal in nature. Pollock (1989) and Chomsky (1991) try to incorporate negation into the principles and parameters of the universal grammar, suggesting that NegP is part of the clausal architecture across languages (also see Ouhalla 1990, 2002, Lasnik 2000). There is also an opposing view suggesting that NegP is language particular (see Baker 1991, among others).

9) Jung (1991) and Lee (1993) in the mean time suggest that *ani* 'not' is in the Spec of NegP to the right of Neg,' the intermediate projection of NegP. However, this proposal should address the question of why only the Spec of NegP is on the right while the other Specs are all on the left of its intermediate projection.

heads including V, T and I as in (17), repeated as (27).

- (27) a. *John-kwa Mary-ka swukcey-lul ha-yess-tul-ta.
 John-and Mary-NOM assignment-ACC do-PAST-PL-IND
 'John and Mary did their assignments.'
 b. *John-kwa Mary-ka swukcey-lul ha-tul-ess-ta.
 John-and Mary-NOM assignment-ACC do-PL-PAST-IND
 'John and Mary did their assignments.'

As an alternative, one may suggest *ani* 'not' is an adverbial left adjoined to VP. If so, it invites the question of why the object should always undergo scrambling in (28), given that scrambling is an operation that is completely optional, as shown above in (13).

- (28) a. John-i yenkwu-lul ani hayssta.
 John-NOM research-ACC NOT did
 'John did not do his research.'
 b. *John-i ani yenkwu-lul hayssta.
 John-NOM NOT research-ACC did
 'John did not do his homework.'

In the meantime, once *ani* 'not' is taken as a right adjoined VP adverb, it can explain naturally the contrast in grammaticality in (28). (28b), in contrast to (28a), is a violation of the directionality of modification, assuming that *ani* 'not' is an adverbial right adjoined to VP. Moreover, the present proposal can also account for the contrast in grammaticality in (29).^{10) 11)}

10) Then the prediction is: *ani* 'not' can switch positions freely with right adjoined manner adverbials. The prediction does not seem to go through as below in (i).

- (i) a. *John-i swukcey-lul ani cal hayssta.
 John-NOM assignment-ACC NOT well did
 'John did not do his assignment well.'
 b. John-i swukcey-lul cal ani hayssta.
 John-NOM assignment-ACC well NOT did
 'John did not do his assignment well.'

- (29) a. John-i ppali ani wassta.
 John-NOM fast NOT came
 'John did not come fast.'
- b. *John-i ani ppali wassta.
 John-NOM NOT fast came
 'John did not come fast.'

Ani 'not' is right adjoined to VP, whereas *ppali* 'fast,' not being a monosyllabic manner adverb, is a left adjoined VP adverbial. Thus (29b) is a violation of directionality of modification of either *ani* 'not' or *ppali* 'fast.'¹²⁾ If the present

(ia) does not necessarily falsify the present proposal. The contrast in grammaticality in (i) suggests that the grammar requires that negation should be higher in structure than manner adverbials. As a matter of fact, the same is true across languages. See Zanuttini 1996, 1997 for the universally fixed NegP position (also see Cinque 2001 for the rigid hierarchy of functional projections).

- 11) An anonymous reviewer wonders whether *mos* 'not' behaves in the same way as *ani* 'not' The former is different from the latter in that the plural marker *tul* cannot be attached to it (also see section 4.2).

- (i) a. John-kwa Mary-ka swukcey-lul ceyttay mos hayssta.
 John-and Mary-NOM assignment-ACC in time NOT did
 'John and Mary could not do their assignment in time.'
- b. *John-kwa Mary-ka swukcey-lul ceyttay mos-tul hayssta.
 John-and Mary-NOM assignment-ACC in time NOT-PL did
 'John and Mary could not do their assignment in time.'

- 12) Korean also has *an* 'not' as a reduced form of *ani* 'not' as shown in (i).

- (i) John-i an wassta.
 John-NOM NOT came
 'John did not come.'

The plurality marker cannot be attached to *an* 'not.' Nor can it serve as an answer to the question as shown below in (ii-iii).

- (ii) *John-kwa Mary-ka an-tul wassta.
 John-and Mary-NOM NOT-PL came
 'John and Mary did not come.'
- (iii) A: John-i Mary-lul chotayhayss-ni?
 John-NOM Mary-ACC invited-QM
 'Did John invite Mary?'

proposal that *ani* 'not' is a right adjoined VP adverbial is on the right track, the examples above in (24) and (28a-29a), where the verb appears to the right of the negation *ani* 'not' strongly suggest that the verb in Korean raises overtly to check its \emptyset -feature against the functional head out of VP. The structure in (30) schematically represents the right adjoined monosyllabic manner adverbials, negation *ani* 'not' and the overt verb raising.¹³⁾

(30) [IP [VP [VP [V' t_i]] manner adverbs/negation] V_i-I]

5. Conclusion and Theoretical Implications

I claimed that the past proposals in the literature as in Otani and Whitman (1991) and Yoon (1994) for the issue of the verb raising in Korean are not convincing, based on the wrong analysis of the irrelevant data. Instead, I suggested that monosyllabic manner adverbs and the negation *ani* 'not' are right adjoined VP adverbs and thus constitute strong evidence for overt verb raising. This also means that Korean is not a strict head final language as most widely assumed in the literature in that certain manner adverbs and negation *ani* 'not' are right adjoined. Future research may yet reveal us the existence of

B: *an.
NOT
'No.'

Given the examples in (ii-iii), one may suggest that *an* 'not' is part of the verbal morphology based on the fact that the plurality marker *tul* cannot be attached to it nor can it serve as an answer to the question. When we look at the cross-linguistic data, it does not seem to be the right direction to pursue, though, since in English the negation *not*, which is a free morpheme, is affixed to the verb when it is weakened.

- (iv) a. John did not come to the party.
b. John didn't come to the party.

The same seems to be true for *an* 'not.' When negation *ani* 'not' is weakened as *an*, it is cliticized to the verb.

- 13) An anonymous reviewer suggests that the monosyllabic manner adverbs and negation *ani* 'not' fall into emphatic focus adverbs.

another class of the right adjoined adverbs in Korean. The question one may ask is then: why does the verb raise overtly in Korean? One obvious way to answer this question is that the Φ -feature of the verb is strong and it should be checked off at the functional head I by Spell out. I suggest there is another driving force for overt movement, which has to do with clausal typing. Descriptively, clauses in Korean should be typed into the relevant clause type by the overt syntax with the verbal morphology marking the relevant clause type as in (31).

- (31) a. John-i Mary-lul mannass-**ta**.
 John-NOM Mary-ACC met-IM
 'John invited Mary.'
- b. John-i Mary-lul mannass-**ni**?
 John-NOM Mary-ACC met-QM
 'Did John invite Mary?'

Korean types the clause with a verb final morpheme including *ta*, an indicative morpheme, and *ni*, a question morpheme. The clausal typing proposal is reminiscent of Cheng (1991)'s proposal of clausal typing, according to which every clause should be typed at the overt syntax. Hence in case of a wh-question in (32), it is typed either by the overt displacement of a wh-word, or a question morpheme.

- (32) a. Who did John invite?
- b. John-i nwukwu-lul chotayhayss-**ni**?
 John-NOM who-ACC invited-QM
 'Who did John invite?'

(32a) is typed as a wh-question by the displacement of the wh-word *who* in English at the overt syntax, whereas Korean in (32b) types a wh-question with the question morpheme with the wh-word staying in situ. In our system, the verb should raise at the overt syntax to the functional head of I, where it checks the clausal type feature to type it as a question. If the present proposal for the driving force for the overt verb raising in Korean is on the right track,

it has a nontrivial theoretical implication for languages such as Japanese that are typologically akin to Korean in marking clause types with the relevant verbal morphology.

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