

Some Distributional Differences Between Adjectives and Verbs in Korean: A reply to Yeo (2004)*

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In this paper, I discuss distributional differences between “adjectives” and “verbs” in Korean to show that Korean employs the category Adjective in addition to the category Verb. I first examine three distributional differences between “adjectives” and “verbs,” which have been discussed as controversial in Yeo (2004). I then discuss that “adjectives” and “verbs” are in fact distributionally different, and that a suggestion that Korean does not employ the category Adjective may not be viable. During the discussion, I discuss two further distributional differences between adjectives and verbs and the nature of the distributional differences discussed here. Finally, I also discuss some controversial cases from the present perspective.

Key words: Adjective, Verb, tense/aspect markers, degree adverbs, distributional differences, predicates

1. Introduction

While it has been implicitly or explicitly assumed in the literature that Korean employs the two categories A and V, some recent studies such as Yeo (2004) and Yoo (1998) suggest that Korean may not employ the category Adjective. Yoo (1998:325) suggests that since “adjectives” have properties of “intransitive” verbs in many respects,¹⁾ and “adjectives”

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1) However, given that some transitive “adjectives” may select an NP complement, as shown in (i), strictly speaking, “adjectives” are not always “intransitive” in Korean (as in English).

(i) na-nun ku sacin-i coh-ass-ta
I-top the picture-sub fond-past-M ‘I was fond of the picture.’

have some semantic and syntactic properties of “verbs,”²⁾ it would be plausible to assume that “adjectives” belong to a subclass of V. Yeo (2004) also suggests that Korean does not employ the category A, by giving two types of arguments: First, the distributional diagnoses of the categories A and V discussed in the literature are not “consistent” enough to distinguish between “adjectives” (“A”s) and “verbs” (“V”s). Second, “adjectives” are similar to “verbs” in some respects and some observed differences are not due to categorial properties but due to semantic properties.

In this paper, I do not attempt to argue directly against Yoo (1998)’s approach or Yeo (2004)’s second argument (but cf. fns. 1 and 2), but by examining some distributional differences between “adjectives” and “verbs,” I show that “adjectives” and “verbs” are distributionally different, and that it would be difficult to explain the distributional differences between “adjectives” and “verbs,” without assuming that Korean employs the category Adjective in addition to the category Verb.

The organization of the paper is: In Section 2, I discuss three distributional diagnoses of A and V, which are rejected by Yeo (2004), and suggest that the three (distributional) diagnoses can in fact properly distinguish between adjectives (As) and verbs (Vs). In Section 3, I discuss that there are two further distributional differences between “verbs” and “adjectives.” In Section 4, I discuss the disjunctive nature of the distributional properties of A and V. In Section 5, from the perspective suggested in Section 4, I discuss some controversial cases, and in Section 6, a conclusion is given.

2. Distributional Differences between “adjectives” and “verbs”

2.1. Three Diagnoses of the Categories A and V

There are many distributional differences between “adjectives” and “verbs” or “diagnoses” of the categories V and A discussed in the literature (cf. Choe, 1929/1989; Seo, 1996; Kim, 1998; ...). Among them, Yeo (2004), for example, examines the following three distributional differences in (1a-c), which she assumes have been used to distinguish between the two categories under consideration, without closely examining

2) This is, however, not surprising, given that both “adjectives” and “verbs” are used as predicates in Korean (cf. also Section 4).

their (empirical) appropriateness.

- (1) a. “V”s may come before the marker *-(nu)n* that comes before *-ta* (M), but “A”s may not. (cf. Choe, 1929/1989, p. 539; Kang, 1988; Kim, 1998)
- b. “A”s may be modified by the degree adverb *maywoo* (‘very’) while “V”s may not. (cf. Choe, 1929/1989, pp. 488-9; Seo, 1996, pp. 868-9)
- c. “V”s may come before the (progressive) aspectual auxiliary *-ko iss-* while “A”s may not. (cf. Choe, 1929/1989, p. 539)

The relevant data are shown below.^{3,4)}

- (2) a. *ilk(-nun)-ta; sulphaha(-n)-ta* (“V”)

read-T/A-M grieve-T/A-M
- b. *alumtap(*-nun)-ta; kunmyenha(*-n)-ta* (“A”)

beautiful-T/A-M diligent-T/A-M
- (3) a. **con-un chayk-ul maywoo ilk-nun-ta* (“V”)

John-top book-obj very read-T/A-M

‘*John reads books very.’
- b. *con-un maywoo kunmyenha-ta* (“A”)

John-top very diligent-M

‘John is very diligent.’

(cf. (2) in Yeo (2004))
- (4) a. *con-un chayk-ul ilk-ko iss-ta* (“V”)

John-top book-obj read-C be-M

‘John is reading a book.’
- b. **con-un kunmyenha-ko iss-ta* (“A”)

John-top diligent-C be-M

‘John is being diligent.’

(cf. (3) in Yeo (2004))

3) Without arguments, I gloss *-(nu)n-* as T/A, mostly because it has the information of present tense and some aspectual meaning (cf. Seo, 1996; Lee, 2001). The exact nature of *-(nu)n-* (which can also be analyzed as *-o-(nu)n-* (‘T-A’)) is beyond the present discussion. Note also that I do not gloss a covert (present tense) morpheme, unless it is necessary (cf. (3b) and (4) for example).

4) Here I do not discuss the distribution of the manner adverb *cal* (‘well’), whose distributional property can also be used to identify a distributional property of V: While “adjectives” are not modified by the manner adverb *cal* (‘well’), “verbs” can be modified by it as long as they are semantically compatible with it.

Yeo (2004) discusses that the three diagnoses in (1a-c) cannot properly distinguish between “adjectives” and “verbs” in Korean, because there are some “adjectives” and “verbs” which may not satisfy all the three diagnoses at the same time. She thus concludes that “adjectives” and “verbs” cannot be distributionally distinguished, and therefore that they need not be categorially classified in Korean. However, Yeo (2004)’s argument is not without logical and empirical flaws: Yeo (2004) does not give any direct counter-examples in relation to the diagnosis in (1a), but she simply notes that the diagnosis in (1a) is a negative one in relation to “adjectives,” and therefore that it may not make a proper diagnosis of A. However, if (1a) can properly function as a diagnosis of V, it can be said that it can also properly function as a diagnosis of A for the following reason: Given that “adjectives” and “verbs,” but not “prepositions” and “nouns,” can function as predicates in Korean, one may suggest that if a predicate X can come with $-(nu)n$, then it is a V, and if it does not come with $-(nu)n$, then it is an A. If so, then one can suggest that in Korean, predicates are categorially divided into two by (1a), since they are distributionally divided into two. Given that there have been no semantic or (morpho-)phonological approaches, which can properly explain the distributional difference between “adjectives” and “verbs,” it seems plausible to suggest that the distributional difference is due to the categorial difference (cf. also Section 6). In fact, word classification has been assumed to be obtained, based mainly on distributional/syntactic criteria. In addition, if some of (1a-c) are in fact not empirically correct, Yeo (2004)’s argument may not go through that “adjectives” and “verbs” cannot be categorially distinguished because they are not distributionally distinguished: In other words, if some of (1a-c) have not been properly understood in Yeo (2004), her argument becomes groundless or unjustified, from the empirical point of view.

In the following three subsections, I thus reexamine the three diagnoses examined in Yeo (2004), and show that (1a-b) are empirically correct, although (1c) needs to be revised. I show that as long as (1a-c) are understood properly, distributional properties can in fact properly differentiate between the “adjectives” and “verbs” in Korean. In addition, I also show in Section 4 that a word need not have all the distributional properties of a category X in order to belong to the category X, unlike what Yeo (2004) implicitly assumes.

2.2. The tense/aspect marker *-(nu)n-* that comes before *-ta* (M)

Consider first (1a). In general, the predicates that are considered as As in the literature, which are shown in (5), may not come with *-(nu)n-ta*, while those that are considered as Vs may.

- (5) a. phulu- ('blue'), tal- ('sweet'), palk- ('bright'), sikkulep- ('noisy'),
noph- ('high'), ttatusha- ('warm'), chwup- ('cold'), ilu- ('early'),
mel- ('far'), khu- ('large'), kippu- ('happy'), chakha- ('good-natured'),
sulkilop- ('wise'), ppalu- ('fast'), saylop- ('new'), pisusha- ('similar'),
talu- ('different'), ...
b. -ko siph- ('anxious/desirous'), -tus ha-/mcik ha- ('likely'), ...
(cf. Choe 1929/1989)
c. philyo-ha- ('necessary'), kanung-ha- ('possible'), ...
(cf. also Yoo 1998)

The ambiguous cases clearly show that (1a) may be empirically correct. As Seo (1996) notes, there are some predicates which are ambiguous between A and V, as shown in (6-7): In some contexts, a predicate can appear before *-(nu)n-ta*, but in some other contexts, the same predicate is not allowed to appear before *-(nu)n-ta*. The predicates in (6-7a) and those in (6-7b) are interpreted differently, and consistent with (1a), in the literature, the predicates in (6-7a) are classified as Vs but those in (6-7b) are classified as As.

- (6) a. {uykeyn-i mac-(nun)-ta/keysan-i cenhye thuli-(n)-ta}
opinion-sub agree-T/A-M/calculation-sub totally be.mistaken-T/A-M
'The opinions agree well/The calculation is totally mistaken.'
(V)
b. ku tap-i {mac/thuli}(*-(nu)n)-ta
the answer-sub right/wrong-T/A-M
'The answer is [right/wrong].'
(A)
(7) a. ai-ka cal khu-n-ta
child-sub well grow.up-T/A-M
'The child is growing up well.'
(V)
b. i os-i na-eykey khu(*-n)-ta
this clothes-sub me-to big-T/A-M
'This piece of clothing is big for me.'
(A)

There are further ambiguous cases which exhibit the same pattern as (6-7), as shown in (8a-d). The predicates *palk-*, *nuc-*, *huli-* and *kut-* in (8a-d) are semantically ambiguous, and depending on their meanings, they may or may not appear before *-(nu)n-ta*. As in the cases of (6-7), when a predicate can come with *-(nu)n-ta*, it is classified as V, but when it cannot, it is classified as A:⁵⁾

- (8) a. *palk-* ('dawn/break'(V); 'bright' (A))
 b. *nuc-* ('be delayed' (V); 'late/slow/...' (A)) (cf. Seo, 1996, p.725)
 c. *huli-* ('equivocate/muddy/...' (V); 'blurred/muddy/...' (A))
 d. *kut-* ('harden/...' (V); 'firm/...' (A)) (cf. Hankulhakhoy, 1991)
- (9) a. i. *nal-i palk-nun-ta* ('day-sub break-T/A-M')
 ii. *pyosong-i palk-(*nun-)ta* ('facial expression-sub bright-T/A-M')
 b. i. *pesu-ka nuc-nun-ta* ('bus-sub be delayed-T/A-M')
 ii. *meli hoycen-i nuc-(*nun-)ta* ('brain calculation-sub slow-T/A-M')
 c. i. *malkkuth-ul huli-n-ta* ('end of one's words-obj equivocate-T/A-M')
 ii. *mwul/phandanlyek-i huli-(*n-)ta*
 ('water/judgement-sub muddy/blurred-T/A-M')
 d. i. *(pi o-n twy) ttang-i kut-nun-ta*
 ('rain come-C after ground-sub harden-T/A-M')
 ii. *uyci-ka kut-(*nun-)ta* ('will-sub firm-T/A-M')

To summarize, the ambiguous cases shown in (5-9) seem to suggest the following generalization:

- (10) a. If a predicate can appear before *-(nu)n-ta*, then it is a V.
 b. If a predicate cannot appear before *-(nu)n-ta*, then it is an A.

Given that (10a-b) may explain the categorial status of the predicates shown in (5-9), at least, it can be suggested that (10a-b) properly differ-

5) Seo (1996) notes that *himtul-* is also ambiguous between A and V: When it is used as V, it can be replaced with or is interpreted as *him-i tul-* ('effort-sub require-'), but when it is used as A, it cannot. Thus, in the cases where *himtul-* tends to be interpreted as *difficult*, not as *require (much) effort*, as predicted, it can hardly come with *-(nu)n-*, as shown in (i).

(i) *ku kes-un ihayha-ki-ka [himtu(l)-(*n-)ta/*?him-i tu-n-ta]*
 the thing-top understand-to-sub difficult-T/A-M/effort-sub require-T/A-M
 'It is difficult to understand.'

entiate between As and Vs, both of which can function as a predicate in Korean.⁶⁾

2.3. The Degree Adverb *maywoo* ('very')

Consider now (1b). Given the data like (11a-b) where *maywoo* comes either with an "adjective" or with a "verb," (1b) might be considered as an improper or incorrect diagnosis of the categories A and V. Yeo (2004) in fact suggests that because some "verbs" can also come with the adverb *maywoo* ('very'), the distributional property of the adverb *maywoo* does not properly distinguish between "adjectives" and "verbs."

- (11) a. ku-nun maywoo kipp(*-n)-ta ("A")
 he-top very glad-T/A-M
 'He is very glad.'
- b. ku-nun maywoo kippeha-n-ta ("V")
 he-top very rejoice-T/A-M
 '*He rejoices very.'

A version of (1b) holds in English, as the grammaticality of the English translations of (11a-b) shows: Degree adverbs such as *very*, *quite* and *extremely* modify (gradable) adjectives, but not (any) verbs. However, the data like (11b) might suggest that (1b) does not hold in Korean, and that degree adverbs in Korean can modify any predicate, as long as the semantic compatibility between a degree adverb and a predicate is satisfied.

However, it seems that some counter-examples against (1b) such as (11b) seem to be apparent ones, for the following reasons: First, in Korean, null elements are (optionally) allowed. The adverb *maywoo* ('very') may thus be interpreted as *maywoo manhi* ('very much') (as Seo (1996) also notes), as if *manhi* ('much') were "dropped." Second, degree adverbs in Korean tend to be lexically ambiguous between a degree adverb and a manner adverb. The adverb *maywoo*, for example, can also be used as a manner adverb, meaning *severely*, *badly*, *intensively*, or *considerably*,....⁷⁾ Thus,

6) In Section 4, I, however, suggest that (10a-b) do not exhaustively explain the distributional properties of A and V.

7) Other degree adverbs in Korean such as *taytanhi* ('very/extremely'), *kkoey* ('pretty/quite') etc.... behave in the same way: they can be interpreted as degree adverbs when they come with gradable adjectives, while they can be interpreted as {*very/quite*} *much*

- (13) a. ku-nun kunye-lul maywoo (manhi) {salangha/sileha}-n-ta
 he-top her-obj very much love/hate-T/A-M
 'He {loves/hates} her {very *(much)/considerably},'
- b. ku-nun {maywoo (manhi)/kkoey}
 he-top very much/considerably
 {nol-ass/kel-ess}-ta
 have.a.spree-past/walk-past-M
 'He {had a spree/walked {very *(much)/considerably}.'
- (14) a. ku-nun senha-n pwulywu-ey (*maywoo (manhi)) sokha-n-ta
 he-top good-C class-to very much belong-T/A-M
 'He belongs to a class of good-natured persons (*very
 much/*serverly/*considerably/...).' (cf. (6) in Yeo (2004))
- b. ku-nun (*maywoo (manhi)) iky-ess-ta
 he-top very much win-past-M
 'He won (*very much/*severly/*considerably...).' (o.k.: 'He won (too) many times.')

Given the data like (12-4) which show that the adverb *maywoo* as a degree adverb cannot modify a V, it is reasonable to suggest that (1b) also holds in Korean (cf. also fns. 7-8).

To confirm (1b), consider the ambiguous predicate *palk-* in (8a), for example. As (10a-b) suggest, with *-(nu)n-*, the predicate *palk-* can only be interpreted as *dawn(V)* or *break(V)* (cf. 15a). Given that *palk-* as a verb ('dawn/break') cannot be modified by *much* or by the manner adverb *maywoo*, (1b) predicts that the predicate *palk-* can be modified by *maywoo*, only when it is interpreted as *bright (A)* so that it may not come with *-(nu)n-*. The prediction seems to be borne out, as shown in the contrast between (15a) and (15b).

- (15) a. nal-i (*maywoo) palk-nun-ta (V)
 day-sub very break-T/A-M
 'Day (*very/*serverly/...) breaks/Morning (*very/*severly/...)
 dawns.'
- b. tal-i (maywoo) palk-(*nun)-ta (A)
 moon-sub very bright-T/A-M 'The moon is (very) bright.'

In short, the data in (15a-b) further confirm that (1b) can properly differ-

entiate (gradable) As from Vs.

2.4. The Progressive Aspectual Auxiliary *-ko iss-*

Consider now the third diagnosis shown in (1c): *-ko iss-* can be considered as an aspectual auxiliary, given that it means either ‘be in a state of’ or ‘be-ing,’ and it seems true that “verbs,” but not “adjectives,” can come with *-ko iss-*, as shown in the contrast between (16a) and (16b).

- (16) a. nal-i palk-ko iss-ta (V)
 day-sub break-C be-M
 ‘(Day is breaking/Morning is dawning!).’
- b. tal-i (maywoo) palk-(*ko iss)-ta (A)
 moon-sub very bright-C be-M
 ‘*The moon is being (very) bright.’

However, it also seems true that not every “verb” can come with *-ko iss-*, as discussed in Yeo (2004) (cf. also Choe (1929/1989)). Some cases of the “verbs” that cannot come with *-ko iss-* are shown in (17-8) (cf. also (12a, 14a)).⁹⁾

- (17) a. *ku-nun ekkey-ka kyelli-ko iss-ta.
 he-top shoulder-sub feel.stiff-C be-M
 ‘He is feeling stiff in the shoulders.’
- b. *hu-nun ce pwulywu-ey sokha-ko iss-ta
 he-top that class-to belong-C be-M
 ‘He is belonging to that class.’ (cf. (4b, 6b) in Yeo (2004))

9) A reviewer (Reviewer C) has pointed out that *anc-ko iss-* is marginally acceptable, as shown in (i). The sentence in (i) improves when it is embedded, as shown in (ii), which means that *anc-ko iss-* is not impossible.

(i) ?haksayngtul-i chalyeylo anc-ko iss-ess-ta
 students-sub one.by.one sit-C be-past-M ‘Students were sitting one by one.’ (cf. 18a)

(ii) haksayngtul-i chalyeylo anc-ko iss-nu-n sangwhang-i-ess-ta
 students-sub one.by.one sit-C be-T/A-C situation-be-past-M
 ‘It was a situation that students were sitting one by one.’

Note also that *kyelly-ko iss-* seems possible in some restricted contexts such as (iii), but it seems that in any contexts, *sokha-ko iss-* is rarely possible.

(iii) ekkey-ka yecenhi kyelly-ko iss-nu-n sangtyay-la-myen o-sio
 shoulder-sub still feel.stiff-C be-T/A-C condition/state-be-M-if come-M
 ‘If (you) are still in the state of feeling stiff in the shoulders, come (to visit me).’ (cf. 17a)

- (18) a. *anc-ko iss-ta, *cichi-ko iss-ta
 sit-C be-M tire-C be-M
 b. *se-ko iss-ta, *cwuk-ko iss-ta
 stand-C be-M die-C be-M (cf. Nam, 1996)

Because of the data like (17-8) where the “verbs” can come with *-(nu)n-* but cannot come with *-ko iss-*, Yeo (2004) suggests that (1a-c) together do not make a correct diagnosis of the categories A and V. However, as shown in (19), the “verbs” in (17) and (18) may instead come with *-(e/a/o/y) iss-* (= *-e iss-*), which I suggest is another aspectual auxiliary that can come with some (not all) Vs, but not with As.¹⁰⁾

- (19) a. sokha-y iss-ta (‘belong-C be-M’), (?)kyelly-e iss-ta
 (‘feel.stiff-C be-M’) (cf. 17)
 b. anc-a iss-ta (‘sit-C be-M’), cichy-e iss-ta (‘tire-C be-M’)
 c. se-o iss-ta (‘stand-C be-M’), cwuk-e iss-ta (‘die-C be-M’) (cf. 18)

Note that one may predict what “verbs” cannot come with *-e iss-*. The (aspectual) auxiliary *-e iss-* whose meaning is roughly ‘be in a state of’ may not come with “verbs” with an agent in subject position, as shown in the contrast between (20a-bi) and (20a-bii); and as shown in (21a), when “verbs” take an objective complement, they may not come with it. Thus, typical unergative “verbs” shown in (21b), which are considered to be agentive, cannot come with the auxiliary *-e iss-* but non-agentive “verbs” may, as shown in (21c).¹¹⁾

- (20) a. i. sil-li-e iss-ta (‘load-pass-C be-M’),
 ii. *sil-e iss-ta (‘load-C be-M’)
 b. i. cap-hi-e iss-ta (‘catch-pass-C be-M’),
 ii. *cap-e iss-ta (‘catch-C be-M’)

10) *kyelly-e iss-* seem also possible in some restricted contexts such as (i) (cf. also (iii) in fn.9).

(i) ekkey-ka yecenh-i kyelly-e iss-nu-n sangtyay-la-myen o-sio
 shoulder-sub still feel.stiff-C be-T/A-C condition/state-be-M-if come-M
 ‘If (you) are still in the state of feeling stiff in the shoulders, come (to visit me).’

11) The verbs in (20) and (21) all can come with *-ko iss-*. Thus, it seems that the occurrence of *-ko iss-* is less restricted.

- (21) a. *cwukum-ul sulphaha-y iss-ta ('death-obj grieve-C be-M'),
 *elum-ul nok-i-e iss-ta ('ice-obj melt-caus-C be-M'),...
- b. *ca-0 iss-ta ('sleep-C be-M'), *wus-e iss-ta ('laugh-C be-M'),
 *malha-y iss-ta ('talk-C be-M'), *kel-e iss-ta ('walk-C be-M'),
 *ttuy-e iss-ta ('run-C be-M'), ...
- c. tochaktoy-e iss-ta ('arrive-C be-M'), ka-0 iss-ta ('go-C be-M'),
 phi-e iss-ta ('bloom-C be-M'), nok-a iss-ta ('melt-C be-M'), ...

Although there are some restrictions in relation to which “verbs” can come with *-ko iss-* or with *-e iss-*, it seems true that “verbs” can come either with *-ko iss-* or with *-e iss-* but “adjectives” cannot. (1c) need thus be revised as: verbs can come with *-ko iss-* or with *-e iss-*, while adjectives cannot (cf. the “adjectives” in (5)). Given that “verbs” can come either with *-e iss-* or with *-ko iss-*, it can be said that the revised version of (1c) can properly differentiate Vs from As.¹²⁾

2.5. An Interim Conclusion

In the three previous subsections, I've shown that (1a-b) are empirically correct while (1c) need be revised, and I've also shown that “adjectives” and “verbs” in Korean are not distributionally overlapped (unlike what Yeo (2004) suggests), and therefore that it can be suggested that Korean predicates are categorially divided into two: A and V. Given the present discussion based on empirical data, Yeo (2004)'s argument does not go through, and it seems reasonable to conclude that Korean employs the category Adjective in addition to the category Verb since they can be distributionally distinguished from each other. In the next section, I discuss more distributional differences, which can differentiate between As and Vs in Korean.

12) Choe (1929/1989:526) has one example where *-e iss-* comes with an “adjective.”

(i) pwulk-e iss-ta ('red-C be-M')

According to my informants, (i) is not acceptable (or very marginal at best); It thus seems that *pwulk-* is used as an A in (Modern) Korean, while it was used as a V or as an A in an earlier version of Korean, like the word *yellow* in English that is ambiguous between A and V.

3. Some Further Distributional Differences between A and V

It's been discussed that there are some (further) distributional differences between As and Vs (cf. Choe, 1929/1989; Seo, 1996; Kim, 1998, p. 40), for example).¹³⁾ In this section, I focus on distributional differences in relation to the distribution of the tense/aspect marker *-nun-* (that comes before *-kwuna*) and in relation to the distribution of the tense/aspect marker *-nu-* (that comes before *-nya(Q)*, *-n(C)* or *-nka {siph/po}-ta*). However, here I do not discuss their exact semantic nature of the markers *-nun-* and *-nu-*, which I leave open for further researches.

3.1. The Distribution of the Tense/Aspect Marker *-nu-*

There are at least three contexts where the tense/aspect marker *-nu-* can appear: It may come before *-nya(Q)*, *-n(C)* or *-nka {siph/po}-ta*. The empirical data seem to suggest that the distributional properties of the marker *-nu-* can properly differentiate between As and Vs. Consider first relative clauses in relation to the distribution of the marker *-nu-*. In relative clauses, when the past tense marker *-{e/a/o/y}ss-* appears, both As and Vs can be followed by *-te-n* where *-te-* is interpreted as a perfective aspectual auxiliary and *-(u)n* as the relative complementizer. The relevant data are shown in (22) and (23).

- (22) a. *nolayha-yss-te-n salam* ('sing-T-A-C person'), *ss-ess-te-n salam* ('write-T-A-C person'), ...
 b. *ilk-ess-te-n salam* ('read-T-A-C person'), *nwuw-ess-te-n salam* ('lie-T-A-C person'), ... (Vs)
- (23) a. *chakha-yss-te-n salam* ('good-natured-T-A-C person'), *tall-ass-te-n uykeyn* ('different-T-A-C opinion'),...
 b. *sengkyek-i phalk-ass-te-n salam* ('personality-sub bright-T-A-C person'), *chwuw-ess-te-n nalssi* ('cold-T-A-C weather'),... (As)

13) Kim (1998:40) notes that As cannot come with an imperative marker. However, it is not always the case, as shown below:

(i) *kenkangha-hapsita*
 well-let's
 'Let's be well.'

(ii) *kenkangha-(yla/seyyo)*
 well-imp
 'Be well!'

However, when the past tense marker does not overtly appear before $\text{-}(u)n$, Vs may have two different markers before $\text{-}(u)n$: $\text{-}nu$ - and $\text{-}0$ -. As shown in (24-5), before $\text{-}(u)n$ -, either $\text{-}nu$ -(24) or $\text{-}0$ -(25) can appear, triggering different aspectual and/or tense information.¹⁴⁾ Unlike the marker $\text{-}(nu)n$ - (cf. Section 2.2.), whether the verb ends with a consonant or with a vowel, it is always $\text{-}nu$ -, as shown in (24a and b).¹⁵⁾

- (24) a. $nolayha$ - nu - n *salam* ('sing-T/A-C person'), ssu - nu - n *salam* ('write-T/A-C person'), ...
 b. ilk - nu - n *salam* ('read-T/A-C person'), $nwup$ - nu - n *salam* ('lie-T/A-C person'), ...
- (25) a. $nolayha$ - 0 - n *salam* ('sing-T/A-C person'), ssu - 0 - n *salam* ('write-T/A-C person'), ...
 b. ilk - 0 - un *salam* ('read-T/A-C person'), $nwuw$ - 0 - un *salam* ('lie-T/A-C person'), ...

On the other hand, $\text{-}nu$ - does not directly come with As, whether they end with a consonant or with a vowel, as shown in (26) (cf. also see Seo, 1996, p. 1297).

- (26) a. $chakha$ -(* nu)- n *salam* ('good-natured-T/A-C person'), $talu$ -(* nu)- n *uykeyn* ('different-T/A-C opinion'),...
 b. $sengkyek$ - i $phalk$ -(* nu)- $(u)n$ *salam* ('personality-sub bright-T/A-C person'), $chwu$ [p/w]-(* nu)- n *nalssi* ('cold-T/A-C weather'),...

As shown in (27), As can come with $\text{-}0$ -, which may be interpreted as present tense with or without some aspectual meaning. Thus, I suggest that the (tense) marker $\text{-}0$ - that comes after As differs from the (tense) marker $\text{-}0$ - that comes after Vs, since their meanings are different (cf. (25,27) and fn. 14).

14) $\text{-}nu$ - is interpreted as present tense, or as present progressive aspect in (24), while $\text{-}0$ - is interpreted as past tense or as present perfective aspect in (25). As for further discussions on the semantics of the tense/aspect markers in Korean, I leave them for further researches (but see Choe, 1929/1989; Seo, 1996; Nam, 1996; Lee, 2001; etc...).

15) $\text{-}nu$ - (before $\text{-}(u)n$ (C)) and $\text{-}(nu)n$ - (before $\text{-}ta$ (M)) are morphologically different, but their semantics may or may not be related (cf. Nam, 1996), but whether they are morphologically related is immaterial for the purpose of the present discussion.

- (27) a. *chakha-0-n* *salam* ('good-natured-T/A-C person'), *talu-0-n*
uykeyn ('different-T/A-C opinion'), ...
 b. *sengkyek-i phalk-0-un* *salam* ('personality-sub bright-T/A-C
 person'), *chwuw-0-un* *nalssi* ('cold-T/A-C weather'), ...

Given the empirical data discussed so far, one generalization I can arrive at is that either *-nu-* (as its present tense/aspect marker) or *-0-* (as its past tense/aspect marker) can appear between the relative complementizer *-(u)n* and a V, while *-0-* (as its present tense/aspect marker), but not *-nu-*, can appear between the complementizer *-(u)n* and an A. This generalization also holds of the A-V pairs which are derivationally related (cf. Seo, 1996, pp. 737-741)

- (28) a. *A-e ci-* \Rightarrow V
 i. *yeyppu-{0/*nu}-n* *ai* ('pretty-T/A-C child') (A)
 ii. *yeyppeci-{0/nu}-n* *ai* ('get.pretty-T/A-C child') (V)
 b. *A-e ha-* \Rightarrow V
 i. *yeysnal-i kuli-{0/*nu}-n* *salam* ('old days-sub beloved-T/A-C
 person') (A)
 ii. *yeysnal-ul kuliweha-{0/nu}-n* *salam* ('old days-obj miss-T/A-C
 person') (V)
 c. *A-causative morpheme* \Rightarrow V
 i. *nelp-{0/*nu}-n* *kil* ('broad-T/A-C road') (A)
 ii. *kil-ul nelp-hi-{0/nu}-n* *salam* ('road-obj broad-caus-T/A-C
 person') (V)

Given the data discussed above, I suggest that while the marker *-nu-*, whose semantics is beyond the present discussion, is compatible with Vs in general, it is not with As, as Choe (1929/1989: 482) also notes (cf. also Seo, 1996).

Second, consider the distribution of the marker *-nu-* that appears before the question maker *-nya*. When the past tense marker *-ess-* shows up, as shown in (29a-b), the marker *-nu-* can optionally appear before *-nya*, whether the predicate is an A or a V. However, when the past tense marker *-ess-* does not show up, the distribution of the (tense/aspect) marker *-nu-* is sensitive to whether the predicate is an A or a V, as shown in the contrast between (30a) and (30b): When the predicate is a V, the marker *-nu-* can appear (30a), but when it is an A, it cannot (30b).

- (29) a. ai-ka cal {ca/mek}-ess-(nu)-nya? (Vs)
 child-sub well sleep-Q
 'Did the child sleep/eat well?'
 b. ai-ka cham {chakha/yeyppu}-ess-(nu)-nya? (As)
 child-sub really good/pretty-Q
 'Was the child really good/pretty?'
- (30) a. ai-ka cal {ca/mek}-(nu)-nya? (Vs)
 child-sub well sleep-T/A-Q
 'Does the child sleep/eat well?'
 b. ai-ka cham {chakha/yeyppu}-(*nu)-nya? (As)
 child-sub really good/pretty-T/A-Q
 'Is the child really good/pretty?'

The ambiguous case shown in (31) also shows that the distribution of the marker *-nu-* is diagnostic.

- (31) a. nal-i palk-(nu)-nya? ('day-sub break-T/A-Q') (cf. 8a)
 b. pyoseng-i palk-(*nu)-nya? ('facial expression-sub bright-T/A-Q')

Third, when the past tense marker *-{e/a/o/y}ss* appears, before the complex predicates such as *-(u)nka siph-ta* ('C guess/suppose-M') or *-(u)nka po-ta* ('C seem/be likely-M'), the marker *-nu-* may optionally appear whether the predicate is an A or a V:¹⁶⁾

- (32) a. ku-ka {iky/cy}-ess-(nu)-nka {siph/po}-ta (Vs)
 he-sub win/be.defeated-past-T/A-C guess/seems-M
 '[I guess/It seems] that he {won/was defeated}.'
 b. i os-i com {kh-ess/cak-ass}-(nu)-nka {siph/po}-ta (As)
 this clothes-sub slightly big-past/small-past-T/A-C guess/seems-M
 '[I guess/It seems] that this piece of clothing was slightly {big/small}.'

However, when the past tense marker does not appear, the tense/aspect marker *-nu-* appears after Vs, but not after As, as shown in the contrast

16) *-nka* may be considered as the combination of *-n-ka* ('C-sub'). The exact nature of *-nka* is beyond the present discussion.

between (33a) and (33b).¹⁷⁾

- (33) a. ai-ka pang-eyse {ca/mek}-nu-nka {siph/po}-ta (Vs)
 child-sub room-in sleep/eat-T/A-C guess/seem-M
 'I guess/It seems that the child {sleeps/eats} in the room.'
 b. ai-ka {chakha/yeppu}-(*nu)-nka {siph/po}-ta (As)
 child-sub good/pretty-T/A-C guess/seem-M
 'I guess/It seems that the child is {good/pretty}.'

The ambiguous case in (34) also shows that the distributional properties of the marker *-nu-* are sensitive to whether the predicate is an A or a V.

- (34) a. nal-i palk-nu-nka {siph/po}-ta
 ('day-sub break-T/A-C guess/seem-M')
 b. phyoseng-i palk-(*nu)-(u)nka {siph/po}-ta
 ('facial expression-sub bright-T/A-C guess/seem-M') (cf. 8a).

To summarize, I've shown that the distributional properties of the (tense/aspect) marker *-nu-* can distinguish A from V: It can appear between a V and *-{nya/n/nka {siph/po}-ta}*, but not between an A and *-{nya/n/nka {siph/po}-ta}*.

3.2. The Distribution of the Marker *-nun-*

The distributional properties of the marker *-nun-* also seem diagnostic: The marker *-nun-* may appear in some limited contexts, but its distributional properties can tell us whether a predicate is A or V. Consider (35a-b). Both Vs and As can appear before the exclamatory or the perceptive ending *-kwuna*, as shown in (35).¹⁸⁾

- (35) a. ai-ka cham cal {ca/mek}-kwuna (Vs)
 child-sub really well sleep-see/feel
 'I see/feel that the child sleeps/eats really well{./!}'

17) *-nci* (Q) also behaves the same as *-nka* in (33a-b) (cf. Seo (1996:1025) for example).

18) A reviewer (Reviewer C) has pointed out that (35a) is acceptable only with *-nun-*. However, (35a) seems acceptable when it is used as an exclamatory sentence in informal speech.

- b. ai-ka cham {chakha/yeyppu}-kwuna (As)
 child-sub really good/pretty-see/feel
 'I see/feel that the child is really good/pretty{./!}'

However, the marker *-nun-* can appear before the exclamatory or the perceptive ending *-kwuna*, only when it comes with Vs, but not with As, as shown below.¹⁹⁾

- (36) a. ai-ka cham cal {ca/mek}-nun-kwuna (Vs)
 child-sub really well sleep-T/A-see/feel
 'I see/feel that the child {sleeps/eats} really well{./!}'
 b. ai-ka cham {chakha/yeyppu}-(*nun-)kwuna (As)
 child-sub really good/pretty-T/A-see/feel
 'I see/feel that the child is really {good/pretty}{./!}'

To summarize, I've shown that the tense/aspect marker *-nun-* can come between a V and *-kwuna*, but not between an A and *-kwuna*. Given the data, I suggest that the distributional properties of the marker *-nun-* can also properly differentiate V from A.

3.3. The Nature of Distributional Differences between the Categories A and V

Given the data discussed in Section 2 and in the two previous subsections (3.1. and 3.2.), I suggest that in Korean "adjectives" and "verbs" are distributionally distinguished from each other. The distributional differences between the two categories discussed here are summarized in (37-8), which I suggest can be used as diagnostic tools.

- (37) a. Vs may come before the tense/aspect marker -(nu)n- (that comes before *-ta* (M)), but As may not.
 b. (Gradable) As may be modified by the degree adverb may-woo ('very') while Vs may not.

19) It may be that *-nu-* and *-nun-* are not morphologically related, given that the marker *-nun-* does not come with the past tense marker *-ess*, unlike *-nu-*, as shown in (i-ii).

(i) mek-ess-(*nun-)kwuna ('eat-past-T/A-see/feel')

(ii) chakha-yss-(*nun-)kwuna ('good-past-T/A-see/feel')

- c. Vs may take either the (progressive) aspectual auxiliary *-ko iss-* or the aspectual auxiliary *-e iss-* while As may not.
- (38) a. In certain contexts (i.e., before *-{n/nya/nka {siph/po}-ta}*), the tense/aspect marker *-nu-* may appear directly after Vs, but not directly after As.
- b. The tense/aspect marker *-nun-* may appear between a V and *-kwuna*, but not between an A and *-kwuna*.

Given the distributional differences between A and V shown in (37-8) and the empirical data discussed here, I arrive at: In Korean, “adjectives” are distributionally or syntactically distinguishable from “verbs” (cf. Stassen, 1997, p. 566), which may mean that Korean employs the categories A and V, and a suggestion that “adjectives” form a subclass of V (cf. Yoo, 1998; Yeo, 2004) may not be on the right track (especially see (37b); cf. also Section 6 below).

4. The Disjunctive Nature of the Distributional Properties of A and V

At this point, one may ask a question: What is the nature of the distributional properties in (37-8)? To answer the question, consider the nature of the distributional properties of A in English, first. There are three well-known distributional properties of A in English, as shown in (39a-c).

- (39) a. As can appear before (or after) an N modifying the N.
 b. As can appear after a linking verb (e.g., the copular verb *be*).²⁰
 c. As can be modified by degree adverbs such as *very* and *quite*.

However, none of (39a-c) can exhaustively explain the distribution of the As in English, which means that the distributional properties in (39a-c) distinguish As from Vs in the disjunctive fashion. Consider (39a

²⁰ The verbs shown in (i) can be considered as linking verbs. Linking verbs are verbs that take a predicative complement, whose category may be AP, NP or PP, as shown in (ii).

(i) *be, become, look, smell,...*

(ii) *John is happy/John became a doctor/John looks at a loss/This food smells great,...*

and b), first. Most adjectives can be used either attributively or predicatively, but some adjectives such as *lone*, *drunken*, *utter*, *main*,... can appear only before an N (i.e. in the attributive position), and some such as *ill*, *asleep*, *alive*, ... can appear only after a linking verb (i.e. in the predicative position). Thus, one should say that As can appear either before an N or after a linking verb. (39c) also does not exclusively explain the distribution of the As in English, since only gradable As can be modified by a degree adverb. Although (39a-c) can explain the distribution of As in the disjunctive fashion, they can certainly differentiate As from Vs, since all the Vs do not have distributional properties in (39a-c).

Consider now whether the distributional properties of Vs and As in (37-8) can also be used disjunctively to distinguish As from Vs or Vs from As in Korean. There are two differences between Korean adjectives and English adjectives: First, Korean adjectives can be inflected, having a finite form, like verbs (cf. (23, 27, 29b, 32b), for example). Second, Korean adjectives can modify Ns only in the form of a relative clause, like verbs (cf. (23, 27), for example).²¹ These differences suggest that Korean adjectives are used predicatively only. While Korean adjectives function as a predicate, other categories (such as PP and NP) can function as a predicate only when they come with the copular *be* (a linking verb)) (cf. fns. 20 and 21). Given that all the markers mentioned in (37a,c and 38a-b) are related to tense/aspect, and given that only adjectives and verbs can constitute a predicate in Korean, I suggest that the distributional properties of Vs and As are diagnostic in the disjunctive fashion, as shown in (40a-b).

- (40) a. If a predicate appears in one of the positions of (41a-d), then it is a V.
 b. If a predicate does not appear in any of the positions of (41a-d), then it is an A.

21) In fact, there seem to be no categories that can directly modify N in Korean. For example, unlike English PPs, Korean PPs may hardly directly modify N freely, as shown in (i) where a PP either takes the possessive marker or appears inside the relative clause.

(i) chayksang (wy-ey iss-nu-n/wy-uy/(*)wyey) chayk-ul po-ala
 desk-on-at be-T/A-C/on-gen/on book-obj look.at-imp
 'Look at the book on the table'

- (41) a. before the tense/aspect marker *-(nu)n-* that comes before *-ta* (M)
 b. before the (progressive) aspectual auxiliary *-ko iss-* or the aspectual auxiliary *-e iss-*.
 c. immediately before the marker *-nu-* (present) or the marker *-o-* (past), which comes before *-(n(C)/nya(Q)/nka {siph/po}-ta)*.
 d. before the tense/aspect marker *-nun-* that comes before *-kwuna*.

In addition, I also suggest that there are two different types of adverbs: adverbs that can modify A, but not V, and adverbs that can modify V, but not A. As for the former cases, I've discussed that degree adverbs can modify a gradable A, but not a V. As for the latter cases, consider manner adverbs. As cannot be modified by manner adverbs whose semantics are compatible with activity. For example, the manner adverb *ppalli* ('fast') or *chenchenhi* ('slowly') can modify only Vs. Thus, one may suggest (42).

- (42) a. (Some) Vs (but not As) may be modified by a manner adverb whose semantics is compatible with activity.
 b. (Gradable) As (but not Vs) can be modified by a degree adverb.

Given (40) and (42), one predication is that if a predicate can be modified by a manner adverbs such as *ppalli*, then it should appear at least in one of the positions of (41a-d), but if a predicate can be modified by a degree adverb, then it should not appear in any of the positions of (41a-d). This prediction seems to be borne out. Consider *nulk-* and *nas-*, which Seo (1996) suggests to be ambiguous:

- (43) a. *nulk-* ('grow/get old' (V); 'old' (A))
 b. *nas-* ('get well' (V); 'better' (A)) (cf. Seo, 1996, p. 725)

When they are modified by the manner adverb *ppalli* ('quickly'), which means that they are used as verbs, the marker *-(nu)n-* should appear:²²⁾

22) Hankulhakhoy (1991) classifies *nas-* as a V or as an A, but *nulk-* only as a V. Two reviewers (Reviewers B and C) have also pointed out that *nulk-* is used only as a V, noting that it is used only in the past form. However, as shown in (44), it is not the case. Given

- (44) a. *cal swuy-myen kamki-nun ppalli nas-*(nun-)ta*
 enough rest-if cold-con quickly get.well-T/A-M
 'If you take a rest enough, the cold is quickly cured.'
- b. *cacwu kwulm-umyen ppalli nulk-*(nun-)ta*
 often fast-if quickly get.old-T/A-M
 'If you fast often, you get old quickly.'

In addition, when *nulk-* and *nas-* can be modified by the manner adverb *ppalli*, they can come with *-nu-*, as shown in (45), but when they can be modified by a degree adverb, they cannot appear with *-nu-*, as shown in (46).²³ The empirical facts shown in (45-6) suggest that the predicates *nulk-* and *nas-* are categorially ambiguous, and that the present approach is on the right tract.

- (45) a. *ppalli nulk-nu-n salam*
 quickly get.old-T/A-C person
 'a person who gets old quickly'
- b. *ppalli nas-nu-n pyeng*
 quickly be.cured-T/A-C disease
 'a disease which gets cured quickly'
- (46) a. *acwu nulk-(*nu-)(u)n salam*
 extremely old-T/A-C person
 'a person who is extremely old'
- b. *acwu na-(*nu-)(u)n uykyen*
 very better-T/A-C opinion
 'an opinion that is much better'

To summarize, I've discussed that the two types of the predicates in Korean can be distributionally differentiated, in the way suggested in (40), and that the distributional differences observed here suggest that

the present approach, I suggest that *nulk-* and *nas-* should be considered as categorially ambiguous.

23) The marker *-nun-* behaves the same as the marker *-(nu)n-*, as shown in (i).

(i) a. *ppalli nas-nun-kwuna* b. *acwu nas-(*nun-)kwuna*
 fast be.cured-T/A-see/feel very better-T/A-see/feel

Note that (ib) with *-nun-* is o.k. when *nas-* and *acwu* are interpreted as *be cured* and *completely* (manner adverb), respectively.

Korean employs the two categories A and V. In the following section, I discuss how the present view deals with some predicates which can be considered as controversial in relation to their categorial status.

5. Categorial Classification Based on Distributional Properties

5.1. Some Controversial Cases

In the literature, disjunctive diagnostic tools such as (40) have not been suggested to categorially identify predicates in Korean, and some predicates have been differently understood in relation to their categorial status. However, (40) seems to provide a criterion to categorially identify such controversial predicates. For example, consider the predicate *kimakhi*. While Kim (1998) classifies *kimakhi*- as an A, hankulhakoy (1991) classifies it as a V. Given present approach, I suggest that it is ambiguous between A and V: As shown in (47a), *kimakhi*- can come with *-nu*-, which means that it is used as a V at least, but when it does not come with *-nu*-, as shown in (47b), past tense is not implied, which means that it can also be used as an A (cf. Section 3.1. and fn. 14).²⁴

- (47) a. *kimakhi-nu-n saken*
 be.dumfounded-T/A-C event
 ‘an event which is dumfounded’
 b. (acwu) *kimakhi-n sayngkak*
 very splendid-C idea
 ‘an idea which is very splendid’

Consider the two predicates shown in (48a-b), which a reviewer (Reviewer C) suggests to be verbs while hankulhakoy (1991) classifies as As.

- (48) a. *mosna*- (‘dull/ugly’)
 b. *mostoy*- (‘wicked/unfinishe’ or get worse’)

24) (47a-b) can be considered as derived from (ia-b), respectively.

(i) a. <i>ki-ka makhi-nu-n saken</i> energy-sub be.blocked-T/A-C event ‘an event which is dumfounded’	b. <i>ki-ka makhi-n sayngkak</i> energy-sub be.blocked-C idea ‘an idea which is very splendid’
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According to (40), *mosna-* should be considered as an A, since it cannot appear in any of the positions of (41a-d). On the other hand, *mostoy-* should be considered as ambiguous: As shown in (49a), when the predicate can be modified by a degree adverb, the marker *-nu-* cannot appear. On the other hand, as shown in (49bi-ii), when it can be modified by the manner adverb *chenchenhi* ('slowly'), it comes optionally with *-nu-*, and when it does not come with *-nu-*, tense is interpreted as past, which means that it can be also used as a V.

- (49) a. (acwu) mostoy-{n/*nu-n} sayngkak (A)
 very bad/wicked-C/T/A-C idea
 'an idea which is very wicked'
- b. i. chenchenhi mostoy-nu-n hoysa (V)
 slowly get.worse-T/A-C company
 'a company which gets worse slowly'
- ii. chenchenhi mostoy-n hoysa (V)
 slowly get.worse-C company
 'a company which got worse slowly'

Consider finally the predicate *i-*, whose English counterpart is *be*. The predicate *i-* has been classified either as a V (cf. hankulhakoy, 1991) or as an A (cf. Kim, 1998). However, according to (40), it should be classified as an A, since as shown in (50a-c), it cannot appear in any of the positions of (41a-d):

- (50) a. ce kes-un chayk-i-(*n/*ko iss/*e iss)-ta
 that thing-top book-be-T/A/C be/C be-M
 'That is a book.'
- b. chayk-i-(*nu)-n ce kes
 book-be-T/A-C that thing
 'that thing that is a book'
- c. *chayk-i-nu-{nya/nka} {siph/po}-ta
 book-be-T/A-Q/C guess/seem-M/
 'Is it a book?/It seems that it is a book.'
- d. *chayk-i-nun-kwuna
 book-be-T/A-see/feel
 'I see that it is a book.'

Given that it should select a predicative complement, the predicate *i-* can be called a linking adjective, not a linking verb, unlike English *be* (cf. fn. 20).²⁵⁾ From the present perspective, the reason of why the As in Korean can not come with the adjectival predicate *i-* is because (due to its lexical properties) the adjective *i-* does not select an AP complement, although it can select an NP complement (and also a PP complement in a restricted way).²⁶⁾

5.2. *iss-* and *eps-*

Consider now the following predicates, which are classified as As in Choe (1929/1989: 486) (cf. also Yoo, 1998, p. 199) and references therein): *iss-* and *eps-*. Both *iss-* and *eps-* are ambiguous between location {*iss/eps-* possession {*iss/eps-*}, as shown below.

- (51) a. *iss-* ('stay/be') or ('have')
 b. *eps-* ('not.stay/not.be') or ('not.have')

Although many suggest that the predicates in (51a-b) are As, from the present perspective, location {*iss/eps-* should be classified as Vs. Although they may not appear in the positions of (41a,b,d), as shown in (52a-c), they may appear in the positions of (41c), as shown in (53a,b). In addition, like the verb *be* in English, it cannot be modified by the degree adverb *maywoo* ('very'), as shown in (53c). Thus, I suggest that location {*iss/eps-* are Vs.²⁷⁾

25) The same logic applies to the predicative morpheme *ani-* ('not.be'): it is an A since it does not appear in any of the positions of (41a-d).

26) The predicate *i-* ('be') selects only a limited set of PPs, unlike English *be*, as shown in the contrast between (i) and (ii).

(i) a. *kukes-un con-ttaymwun-i-ta*
 it-top John-due.to-be-M
 'It is due to John.'

b. {*eti/encay/way*}-*i-nka?*
 where/when/how/why-be-Q
 '{Where/When/Why} is (it)?'

(ii) **kukes-un {con-leykey/ulopwuthe}/chayksang-wyey-i-ta*
 it-top John-to/from desk-on-be-M
 'It is {to/from} John/on the desk.'

One-word locative, temporal and causal *wh*-phrases are considered as PPs, since they can be replaced by a PP. For example, *way* can be replaced by *mwusun iywu-ttaymwun(-ey)* ('what reason-for').

- (52) a. (??/*) *na-nun cikum-pwuthe pang-ey* {*iss/eps*}-*nun*-ta
 I-top now-from room-in stay/not.stay-T/A-M
 'I am (not) staying in the room from now on.'
- b. **kutul-un pang-ey* {*iss/eps*}-*e iss/iss/eps*-*ko iss*-ta
 they-top room-in stay/not.stay-C be/stay/not.stay-C be-M
 '*They are (not) being in the room.'
- c. (??/*)*an-ey* {*iss/eps*}-*nun-kwuna*
 inside-in be/not.be-T/A-feel/see
 'I see/feel that (he) is (not) in.'
- (53) a. *pang-ey* {*iss/eps*}-*nu*-n {*salam/chayk*}
 room-in stay/not.stay-T/A-C person/book
 'The {person/book} that is (not) in the room.'
- b. *pang-ey* {*iss/eps*}-*nu*-*nya/nka* {*po/siph*}-ta?
 room-in be/not.be-T/A-Q/C guess/seem-M
 'Are you (not) in the room?/{I guess/It seems} that (he) is
 (not) in the room.'
- c. **kutul-un pang-ey* *maywoo* {*iss/eps*}-ta
 they-top room-in very stay/not.stay-M
 '*They are very (not) in the room.'

In addition, the honorific forms of {*iss/eps*}- (*keys*- and *an keys*-) can appear in all the positions of (41a-d), as shown in (54-5), which strongly suggests that they are verbs.

- (54) a. *apenim-un an-ey* (an) *kyeysi-n*-ta
 fatherH-top inside-at not stayH-T/A-M
 'Father is (not) in.'
- b. (?)*apenim-un an-ey* (an) *kyeysy-e kyeysi*-pnita
 fatherH-top inside-at not stayH-C beH-M
 'Father is (not) in.'

27) There are further cases, which have been considered as As, but should be classified as Vs from the present perspective. Consider the following predicates, for example: *ssulali*-; *ssuli*-; *sili*-; *ppyeceli*-. Given that the above four predicates can appear in the position of (41a) at least, as shown in (i), they should be classified as verbs, from the present perspective, although they are often classified as As in the literature (cf. Kim, 1998, for example):

(i) *ssulali-n*-ta ('smart/sore-T/A-M'); *ssuli-n*-ta ('tingle/smart-T/A-M');
sili-n-ta ('chill/cold-T/A-M'); *ppyeceli-n*-ta ('pierce one's bone/acute-T/A-M')

- (55) a. an-ey (an) kyesi-nu-n pwun-tul
inside-at not stayH-T/A-C personH-pl
'The persons who are (not) in'
- b. an-ey kyesi-{nu-nya/nu-nka {po/siph}-ta}
inside-at stayH-T/A-Q/T/A-C guess/seem-M
'Is (he) in?/I guess/it seems that (he) is in.'
- c. halmenim-i an-ey (an) kyeysi-nun-kwuna
grand.motherH-sub inside-in not stayH-T/A-see/feel
'I see/feel that Grandmother are (not) in.'

Thus, I conclude that *{iss/eps}-* (and their honorific forms) are all verbs, unlike a traditional assumption that *{iss/eps}-* are not verbs (especially see Choe (1929/1989)).

Consider now the data with possession *{iss/eps}-*. As in the cases of location *{iss/eps}-*, they may not appear in the positions of (41a-b), but they can appear in the positions of (41c-d) (cf. (56-7)). As shown in (58), the degree adverb *maywoo* ('very') does not come with them, unless the adverb is interpreted as a non-degree adverb.

- (56) a. (??/*)na-nun ton-i kot {iss/eps}-nun-ta
I-top money-sub soon have/not.have-T/A-M
'I will (not) have money soon.'
- c. *kutul-un ton-i {iss/eps}-e iss/{iss/eps}-ko iss}-ta
they-top money-sub have/not.have-C be/have/not.have-C be-M
'they (do not) have money.'
- (57) a. ton-i {iss/eps}-nu-n salam-tul
money have/not.have-T/A-C person-s
'the persons who (do not) have money'
- b. ton-i {iss/eps}-nu-{nya?/nka {siph/po}}-ta
money-sub have/not.have-T/A-Q/C guess/seem-M
'Do you (not) have money?/I guess/It seems that (he) {does not have/has} money.'
- c. (*)ton-i {iss/eps}-nun-kwuna
money-sub have/not.have-T/A-feel/see
'I see/feel that (you) (do not) have money.'

- (58) **kutul-un ton-i maywoo* {*iss/eps*}-*ta*
 they-top money-sub very have/not.have-M
 ‘*They (do not) have money very.’
 (o.k: ‘They have much money/They are awfully broke.’)

Thus, I also suggest that possession {*iss/eps*}- are also verbs.²⁸⁾

Consider finally two predicate types, which have been considered as A in the literature: predicates that end with *iss* (59a) and predicates that end with *eps* (59b).²⁹⁾

- (59) a. *masiss-* (‘taste good’); *mesiss-* (‘fancy oneself/be chic’); *caymiiss-* (‘feel interested’)
 b. *eieps-* (‘feel dismayed’); *soyongeps-* (‘be useless’); *kkunheps-* (‘be ceaseless’), ...

The predicates in (59a-b) never appear in the position of (41a), but they may in the positions of (41b-d). Thus, from the present perspective, I suggest that the predicates in (59a-b) are verbs or that they are ambiguous between A and V. Assuming that the present discussion is empirically correct, I suggest that predicates that contain either *iss* or *eps* are all verbs (at least).

6. Conclusion

When a particular lexical item is changed categorially, its theta-structure does not seem to be changed, although its property of Case marking/checking changes, as shown in (60) and (61). It seems that the same holds of Korean, as shown in (62).³⁰⁾

28) Note also that the categorial status of *iss-* in *-e iss-* and *-ko iss-* should be V, from the present perspective (cf. (ii-iii) in fn. 9, for example).

29) There are equivalents of the predicates in (59a): *masna-*, *mesci-*, and *caymina-*. According to the present perspective, the first two (*masna-* and *mesci-*) should be considered as As, since they cannot appear in any of the positions of (41a-d); but the last one (*caymina-*) should be considered as a V since it can appear in the positions of (41a,c,d).

30) As a reviewer (reviewer C) notes, in (62c), with *-uy*, the sentence does not sound acceptable. However, with *-ulo inhan*, it is acceptable. Thus, the ungrammaticality of (62c) with *-uy* does not affect the present argument. The distributional property of the possessive marker *-uy* is beyond the present discussion.

- (60) a. He appreciates good food.
 b. He is appreciative of good food.
 c. his appreciation of good food
- (61) a. He envies his friend.
 b. He is envious of his friend.
 c. his envy of his friend
- (62) a. ku-nun ku sosik-[i/ulo inhay] {kippu/sulphu}-(*n)-ta
 he-top the news-sub/at happy/sad-M
 'He is {happy/sad} about this ordeal.' (A)
- b. ku-nun ku sosik-[ul/ulo inhay] {kippeha/sulpheha}-n-ta
 he-top the news-obj/over be.pleased/grieve-M
 'He {is pleased/grieves} {with/over} the news.' (V)
- c. i. ku sosik-[ulo inhan/*uy] {kippum/sulphum}
 the news-gen/at happiness/sadness
 'the {joy/sorrow} over the news' (N)

Given that the theta-structures of As and Vs in (62a-b) are basically the same, it would be very hard to semantically differentiate between {kippu/sulphu}- in (62a) and {kippeha/sulpheha}- in (62b). Unless they are considered categorially different, it would be hard to explain why one of them can come with *-(nu)n-* (62b) and the other cannot (62a). In addition, the notion of stativity may not play a role given that some verbs are stative (cf. Yoo (1998)).³¹⁾ Thus, I conclude that it may be hard to find some semantic accounts of the distributional differences discussed here.

Note finally that phonological or morphological factors may not play a role in differentiating between As and Vs in Korean. Consider (63). From the present perspective and also from the traditional perspective, the predicates in (63a) are Vs and the predicates in (63b) are As, but the predicates in (63a-b) share the same phonological property: They all end

31) This is not surprising, given that both As and Vs are used as predicates in Korean. Kim (1998), for example, suggests that adjectives and verbs can be semantically differentiated from each other. However, some of the words, which he suggests to be an adjective, may be considered as a verb or as ambiguous (cf. (47) for example; cf. also fn. 27), which arguably suggests that semantics cannot categorially distinguish between words, as has been widely assumed in the literature.

with /p/, which is phonologically changed into [w] before the past tense marker *-{e/a}ss*, as shown in (63a-bii). Consider also (64a-b) where the predicates share the same morphological property. The predicates in (64a-b) all end with *ha-* ('do'), but the predicates in (64a) and those in (64b) are considered as categorially different.

- (63) a. i. kwup-ta ('bake-M'), nwup-ta ('lie-M') (Vs)
 ii. kwuw-ess-ta ('bake-past-M'), nwuw-ess-ta ('lie-past-M')
- b. i. kop-ta ('fair-M'), mayp-ta ('pungent-M') (As)
 ii. kow-ass-ta ('fair-past-M'), mayw-ess-ta ('pungent-past-M')
- (64) a. sayngkakha-ta ('think-M.'), kiekha-ta ('remember-M') (Vs)
 b. camyengha-ta ('obvious'-M'), hayngpokha-ta ('happy-M') (As)

The predicates in (63-4a) can appear in all the positions of (41a-d) while those in (63-4b) cannot. This distributional differences cannot be attributed to phonological or morphological differences, but they can be attributed to categorial difference. In fact, given that categorial classification has traditionally been motivated mainly by distributional (or syntactic) differences among words, and given that Korean predicates can be divided into two by distributional differences, it would be unreasonable to suggest that Korean does not employ the category A, unless the distributional differences between "adjectives" and "verbs" in Korean can be shown to be explained by some other differences other than categorial difference.

Finally, consider Baker (2003)'s suggestion: Baker (2003) closely examines many languages (e.g., Choctaw, Mohawk, Mojave, ...) where (like Korean adjectives) "adjectives" are "verbal" in that they do not need a copular particle to be a predicate, and argues, based on some distributional differences between "verbal adjectives" and "verbs," that they all employ the category Adjective in addition to the category Verb. He thus suggests (65).

- (65) The adjectival-verb distinction is universal.

The present discussion suggests that Korean provides one more piece of evidence in favor of (65).

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