Does Korean have adjectives?*

Min-Joo Kim
University of Massachusetts-Amherst

This paper presents arguments that Korean lacks the category of Adjective. I claim that what have been traditionally analyzed as adjectives are stative verbs. I demonstrate that apparent noun-modifying adjectives in Korean are predicates inside relative clauses. The proposed analysis predicts that adnominal adjectives in Korean will only be interpreted intersectively. I show that this prediction is borne out. Confronted with the challenge that Korean abounds in subsective predicates like *skillful*, I propose new lexical entries for them and show that the new analysis can readily overcome the challenge.

1. Introduction

Traditional grammarians (e.g., Choy 1971, Sohn 1996, and Sohn 1999) claim that Korean has a distinct category of Adjective. As they argue, adjectives in Korean apparently occur both attributively and predicatively, as shown in (1a) and (1b), respectively.[1]

(1) a.   Ce **yeppu-n**   yeca
          that pretty-??   woman
          'that pretty woman'

     b.   Ce yeca-ka   **yeppu-ta**
          that woman-NOM   pretty-IND
          'that woman is pretty'

In recent years, the claim that Korean has the category Adjective has been questioned by generative linguists (e.g., Maling and Kim 1998 and James Yoon personal communication). To the best of my knowledge, however, there has been no work published on this subject which offers clear evidence against the presence of Adjective in Korean.

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[1] For the transcription of the Korean data presented in the paper, the Yale Romanization has been adopted. For abbreviations, the following will be used:

   ACC: accusative case; IND: Indicative sentence; NOM: nominative case; PRT: past tense; PRST: present tense; REL; relative clause marker; TOP: topic.

This paper is an attempt to show that Korean indeed lacks a distinct class of Adjective. I argue that what have been traditionally analyzed as adjectives are in fact stative Verbs, and those that seemingly occur attributively are predicates inside relative clauses (RCs)

This paper is organized as follows. In Section 2, I briefly review how traditional grammarians distinguish adjectives from nouns or verbs. In Section 3, I refute the traditional analysis, by providing evidence against the presence of Adjective in Korean. Section 4 discusses the predictions of the new claim. This Section particularly focuses on the function of adjectives as noun-modifiers and how diverse adjectival meanings such as "intersectivity" and "non-intersectivity" (Kamp 1975, Partee 1995) are expressed in Korean, in the absence of Adjective. Section 5 presents and discusses a problem that potentially challenges the new analysis: namely, the difficulty of expressing a subsective meaning through the medium of RCs. I propose a new denotation for subsective adjectives and show that the proposed analysis can readily overcome this challenge. Lastly, Section 6 concludes the paper.

2. Traditional Criteria for Adjectives

Traditional Korean linguists such as Choy (1971), Suh (1996), and Sohn (1999) assume that Korean has a distinct lexical and syntactic category of Adjective. More recently, Yu (1999) claims that Korean abounds in adjectives, which are distinct from verbs.

How do traditional Korean linguists determine the adjectivehood of a lexical item? Sohn (1999) uses two criteria for this purpose. First, he notes that inflection for tense or aspect is a crucial property of adjectives that distinguishes them from nouns (p. 209). It is important to note that the property of inflection makes adjectives fall under the rubric of "Predicate", which includes verbs (p. 209). Sohn states, however, that one can nevertheless distinguish adjectives from verbs, since they take different non-past morphemes to mark indicative sentences. While verbal stems take the suffix -*nun* (or its allomorph -*n*), adjectival stems take a zero morpheme ($\varnothing$), as illustrated in (2).

(2)   a.   John-un   ppang-ul   ***mek-nun-ta***
              J-TOP   bread-ACC   eat-PRST-IND
              'John eats bread.'

       b.   John-un   holangy-ka   ***musep-$\varnothing$-ta***
              J-TOP   tiger-NOM   scary-PRST-IND
              'John is scared of tigers.'

When the tense is non-past or present, the verbal stem takes -*nun*, as shown in (2a). But, under the same context, the adjectival stem takes a zero morpheme, as shown in (2b).

2

The two criteria that Sohn uses to distinguish adjectives from nouns or verbs seem to suggest that Korean does not lack the Adjective category. What then would be the reasons for thinking that it does? The answer to this question is offered in Section 3, to which we now turn.

3. Why Adjectives in Korean are not

In this Section I offer arguments against the presence of a productive Adjective category in Korean. I draw on morphological and syntactic distributional facts surrounding "adjectives" as evidence against their presence.

The first argument comes from the fact that adjectives in Korean (KAs) lack adnominal function, which is regarded as one of the defining properties of the Adjective class across languages. At the outset of this paper, I illustrated that KAs seem to occur attributively (See (1a) above). But as a matter of a fact, they cannot directly modify a noun, and hence cannot occur attributively.

Evidence for this claim comes from the fact that that KAs can modify a noun only when they are followed by the morpheme $-n$ (or its allomorphs), which is a RC-marker in Korean (Henceforth, I will dub $-n$ a relativizer (REL)). This fact is exemplified by (3). (3b) is an instantiation of a nominal modified by a putative adjective, and (3a) is an instantiation of a typical RC containing an intransitive verb.

(3)　a.　　　[e_1 ece ttena]-**n$_1$**　　　namca　　　(e = an empty category)
　　　　　　[　　yesterday left]-**REL**　　man
　　　　　　'the/a man who left yesterday'
　　　b.　　　[e_1 yeppu]-**n$_1$**　　　yeca
　　　　　　[　　pretty]-**REL**　　woman
　　　　　　'the/a pretty woman'

A comparison of (3a) and (3b) reveals that a RC containing an intransitive verb and a noun phrase containing an adnominal adjective have an identical syntactic structure. Hence, a correct analysis of adnominal KAs should treat them as predicates inside RCs. The fact that KAs can modify a noun only when they occur inside a RC strongly suggests that they lack attributive modificational function. Hence, it is concluded that they are not adjectives.[2]

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[2] One might argue that the ability to directly modify nouns is not a reliable diagnostic to tell whether a lexical item in Korean is an adjective or not, because Korean is an agglutinative language and hence predicates are bound morphemes. Note that in Korean, an adjective can only modify a noun when it is attached to another morpheme. But this line of thinking is problematic; if the agglutinative aspect of Korean is wholly responsible for the inability of KAs to directly modify a noun, then it is puzzling why KAs are not free morphemes, to start with. Note that nouns in Korean, which are also predicates, are free morphemes, and hence they can directly modify another noun. Given that it is conceivable to have predicates that can stand alone, namely nouns, I conclude that the agglutinative aspect of Korean does not provide an argument against my claim.

Additional support for the present claim comes from the fact that when used "attributively", KAs can take tense-marking, as shown in (4) (From now on I treat adnominal KAs as predicates inside RCs):

(4) a. Ce [e_1 yeppu-$\emptyset$]-n$_1$ yeca
         that [pretty-**PRST**]-REL woman
         'that woman who is pretty'

     b. Ce [e_1 yeppu-**ess**]-ten$_1$ yeca
         that [pretty-**PRT**]-REL woman
         'that woman who used to be/was pretty'

(4b) exemplifies a case in which an attributively used adjective takes an overt tense marker. Given that the adjective *yeppu-* 'pretty' in (4) occurs inside a noun phrase, it would not be possible for it to take tense-marking unless it occurs inside a clause. Since the examples in (4) represent noun phrases, the most likely candidate for this clause is a RC. Hence, it is concluded that adnominal KAs are predicates that occur inside RCs.

Another argument that KAs are not real adjectives comes from the fact that when used predicatively, they can occur without the copular verb *-i*. Note that nominal predicates such as *haksayng* 'student' must co-occur with the copular verb. Compare (5) with (6):

(5) a. *Ce yeca-ka   **yeppu-i**-ta
          that woman-NOM   **pretty-COP**-IND

     b. Ce yeca-ka   **yeppu**-ta
         that woman-NOM   **pretty**-IND
         'that woman is pretty'

(6) a. Ce yeca-ka   **haksayng-i**-ta
         that woman-NOM   **student-COP**-IND
         'that woman is a student'

     b. *Ce yeca-ka   **haksayng**-ta
          that woman-NOM   **student**-IND

The fact that KAs do not need to co-occur with a copula, in contrast to predicate nominals, suggests that KAs are inherently verbs. If they were indeed typical adjectives, they would then behave similarly to adjectives in English, which <u>do</u> need copular support when occurring predicatively. Consider (7) in comparison with (5) and (6):

(7) a. That woman is pretty.
     b. *That woman pretty.
     c. That woman is a student.

4

        d.   *That woman a student.

The last argument for the absence of adjectives in Korean is that they do not inflect for comparison. Inflection for comparison is one of the standard diagnostics for determining the adjectivehood of a lexical item (cf. Beck 1999:11). As shown above, KAs inflect for tense/aspect-marking. They also inflect for honorification. So it is expected that they will inflect for comparison. But surprisingly enough, they do not. A comparative meaning is instead expressed by inserting a lexical item *te* 'more', which is also used for comparing verbal meanings. Consider (8).[3]

(8)   a.   Mali-ka   Susan   pota   **te**   **yeppu-ta**
               Mary-NOM Susan   than   **more** **pretty-IND**
               'Mary is prettier than Susan'

        b.   Mali-ka   Susan   pota   Jeni-ul   **te**   **chohaha-n-ta**
               Mary-NOM Susan   than   Jenny-ACC **more** **like-PRST-IND**
               'Mary likes Susan more than (she likes) Jenny.'

The arguments presented thus far strongly suggest that KAs are not adjectives. What category would they then belong to? I argue that given that they denote states and they inflect for tense/aspect, they are mostly likely to be stative verbs. Interestingly enough, the Korean grammars noted above either do not list a distinct category of Stative Verb (e.g., Sohn 1999) or mention only in passing that "KAs could be viewed as stative verbs" like *al-* 'to know' or *memul-* 'to stay' (Suh 1996:726). I suspect that the lack of stative verbs in some Korean grammars is not a sheer accident. I believe that this absence is due to the fact that a large portion of stative verbs in Korean has been misanalyzed as adjectives.

To summarize, in Section 3, I have argued that in Korean, what have been classified as adjectives are stative verbs. I have provided four pieces of evidence in support of this claim. Most importantly, I have demonstrated that KAs cannot directly modify nouns, and hence must appear as the predicates inside RCs. In the next section, I discuss the predictions of this new analysis.

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[3] Note that *te* is also used for comparing adverbs:

(i)   Mali-ka   Susan   pota   **te**   **ppali**   tali-n-ta
         Mary-NOM Susan   than   more   quickly run-PRST-IND
         'Mary runs faster than Susan'

I am not sure whether *ppali* 'quickly' in the above example is indeed an adverb or not but I leave settling this issue to further research.

4. Predictions of the New Analysis

In this Section, I discuss some predictions that follow from the new analysis. I particularly focus on how Korean, in the absence of adjectives, expresses various adjectival meanings such as "non-intersective" and "modal" meanings (Kamp 1975, Kamp and Partee 1995).

The proposed analysis makes the following predictions. First, it predicts that every putative KA will be able to occur predicatively. Second, it predicts that putative KAs will not occur as resultative state or depictive predicates. The third prediction is that putative KAs will only have an intersective reading, because they are predicates inside RCs. The last prediction is that modal predicates (e.g., *alleged* and *arguable*) will not find counterparts in Korean. In what follows, I discuss each of these predictions in detail.

4.1 Non-existence of Non-predicative "Adjectives" in Korean

One of the predictions of the proposed analysis is that every lexical item that has been analyzed as an adjective by traditional grammarians will be able to occur predicatively. The reason is that, under the new analysis, KAs are stative verbs, and they occur predicatively inside a RC when modifying a noun. Consequently, it is predicted that in Korean, predicates that can only occur attributively will have to belong to a category other than Stative Verb.

An example of a real adjective that occur only attributively and not predicatively is *former* in English, as shown in (9).

(9)   a.   A former senator
       b.   *A senator who was former.

(9b) shows that *former* cannot occur as the predicate in a RC. Hence, it is predicted that the Korean counterpart of *former* will not be a stative verb. The prediction is borne out. The Korean counterpart of *former* is a noun, not a stative verb, and being a noun, it can directly modify another noun without having to be followed by a relative marker, as shown (10). (10a) illustrates a case where the noun *cencik* 'former' modifies another noun. On the other hand, (10b) shows that *cencik* cannot occur predicatively and hence cannot occur as the predicate of a RC.

(10)   a.   cencik   sangwonuywon
              former   senator

       b.   *[cencik-i]-n   sangwonuywon
              [former-COP]-REL   senator

4.2 Non-occurrence of "Adjectives" as Resultative State or Depictive Predicates in Korean

In the literature, among the characteristic properties of adjectives is their ability to occur as resultative state or depictive predicates (e.g., Baker To appear). The following examples from English illustrate this point.

(11) a. I made the soup **spicy**.   (*Spicy* denotes a resultative state)
      b. I always drink milk **hot**.   (*Hot* denotes depiction)

The proposed analysis predicts that secondary predicate positions in Korean will not be filled by putative adjectives. The reason is that RCs do not denote resultative states or depiction, as shown in (12).

(12) a. I made the soup which was spicy.
      b. I always drink milk which is hot

The examples in (12) show that when adjectives like *spicy* and *hot* appear inside a RC, they do not convey a resultative state or depictive meaning. Hence, it is predicted that Korean will not express resultative states and depiction by RCs which contain putative adjectives.

This prediction is borne out. In Korean, resultative states or depiction are expressed by lexical items that have been analyzed as adverbs, which involve the -*key* affixation. To illustrate, consider (13).

(13) a. Na-nun kwuk-ul   **mayp-key**   mantul-ess-ta
          I-TOP   soup-ACC   **spicy-AFF**   make-PRT-IND
          'I made the soup spicy'

      b. Na-nun encena uwyuw-ul   **ttukep-key**   masi-n-ta
          I-TOP   always   milk-ACC   **hot-AFF**   drink-PRST-IND
          'Lit. I always drink milk in a hot state.'

However, the traditional analysis which treats *mayp-key* and *ttukep-ke*y as adverbs is problematic in that -*key* can also be attached to agentive verbs when it occurs in causative constructions. (14) illustrates this point.

(14) a. Na-nun John-lul   **ttena**-**key**   mantul-ess-ta
          I-TOP   John-ACC   **leave-AFF**   make-PRT-IND
          'I made John leave.

      b. Na-nun John-ul uwyuw-ul   **masi-key**   mantul-ess-ta
          I-TOP   John-ul milk-ACC   **drink-AFF**   made-PRST-IND
          'I made John drink milk'

If -*key* is indeed an adverbializer, whose function is to change nouns or adjectives into adverbs, it then becomes curious why it can sometimes attach to adjectives but other times to verbs.

If we refute the traditional treatment of -*key* and reanalyze it as some sort of aspectual marker which combines with verbs, then the problem seems to disappear. If–*key* carries an aspectual meaning such as causation, a resultative state or depiction, the data in (13) and (14) can receive a uniform account. That is, the secondary predicates in (13) and (14) are verbs and the suffix -*key* on them brings in slightly different aspectual meanings to seemingly identical syntactic structures.

4.3 The Intersective Interpretations of RCs

Restrictive RCs are standardly analyzed as of type <et>, which combine with their head nouns via *Predicate Modification or Conjunction*[4] (cf. Quine 1960). Hence, the new analysis predicts that adnominal KAs will only have an intersective meaning, for they are predicates of RCs. In a similar vein, it is also predicted that Korean will not have non-intersective noun-modifiers. A comparison of a couple of English examples with their Korean counterparts will illustrate this point.

Certain adjectives in English can be used both predicatively and attributively and when used attributively, they can be ambiguous between intersectives and non-intersectives. For example, *beautiful* in (15) can have two interpretations, as in (16) and .

(15)   Olga is a beautiful dancer.
(16)   a.   Ogla is beautiful and is a dancer.   (Intersective reading)
         b.   Olga dances beautifully.   (Non-intersective reading)

If *beautiful* modifies the noun *dancer*, an intersective reading (16a) obtains. On the other hand, if it modifies the event in which Olga dances, we get a non-intersective reading (16b).

The proposed analysis predicts that the Korean counterparts of adjectives like *beautiful* will not be ambiguous, since it occurs inside a RC, and, hence, will only have an intersective interpretation. This prediction is borne out. The Korean counterpart of *beautiful* only has an intersective interpretation, as shown in (17a), and the non-intersective reading of (15) is expressed by a totally different structure, as shown in (17b).

(17)   a.   Olga-nun   [e_1 alumta]-wun$_1$ mwuyong-su-i-ta
            Olga-TOP   [beautiful]-REL   dance-person-COP-IND
            'Olga is beautiful and is a dancer'   (Intersective reading only)

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[4] Heim and Kratzer (1998:126) offers the following as a formal definition of *Predicate modification*:

 Predicate modification: If α is a branching node, {β, γ} is the set of α's daughters, and [[β]]
 and [[γ]] are both in $D_{<e,t>}$, then [[α]] = [λx. x: [[β]](x) = 1 and [[γ]](x) = 1].

b.　　Olga-nun　　alumtap-key　　mwuyong-ha-n-ta
　　　Olga-TOP　　beautiful-KEY　dance-do-PRST-IND
　　　'Olga dances beautifully'[5]　　(Non-intersective reading only)

Another important case in point is adjectives like *occasional* in English. Larson (1999) has argued that *occasional* can be directly predicated of (or quantify over) events introduced outside the noun phrase in which it occurs, as shown in (18).

(18)　[DP An occasional sailor] passed by.

If *occasional* takes scope over the sentence and hence quantifies over the set of events the VP denotes, then (18) can be interpreted as something like (19a). On the other hand, if the adjective stays inside the noun phrase in LF, then an intersective reading (19b) results:

(19)　a.　　Occasionally, a sailor passed by.
　　　b.　　A person who occasionally sailed passed by.

The proposed analysis predicts that Korean will lack a predicate corresponding to *occasional*, because it cannot occur as the predicate of a RC. To illustrate, consider (20):

(20)　*John is a sailor who is occasional.

This prediction is also borne out. Korean lacks a lexical item that corresponds to *occasional*. The only way in which the two readings in (19) can be expressed in Korean is by using two entirely different structures.

(21)　a.　　Ttayttaylo　senwon-i　　cinaka-ess-ta
　　　　　　occasionally　sailor-NOM　　pass.by-PRT-IND
　　　　　　'Occasionally, a sailor passed by.'
　　　　*'a person who occasionally sailed passed by.'

　　　b.　　[e_1 ttayttaylo　　senwon-i-ess]-ten$_1$　salam-i cinaka-ess-ta
　　　　　　[　occasionally　sailor-COP-PRT]-REL person pass.by-PRT-IND
　　　　　　'Someone who occasionally sailed passed by'

Lastly, the new analysis predicts that Korean will lack "modal" predicates (e.g., *alleged, arguable*, and *potential*) in the sense of Kamp (1975) and Kamp and Partee (1995), because it would be hard to imagine a way in which RCs can

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[5] Under the proposed analysis of –*key* as an aspectual marker, *alumtap-key* in (17b) sentence can be analyzed as a secondary predicate denoting a depictive state. Under this view, the sentence can be interpreted as: 'Ogla dances beautiful' or 'When she dances, Olga is beautiful'.

express modal meanings. This prediction is also borne out. At first glance, Korean seems to have modal predicates that correspond to *alleged, arguable*, and *potential* in English. However, the following data (22b-c) reveals that in Korean, it is impossible to express these adjectival meanings by using the same structure as English.

(22) a.   an alleged murderer

     b.   *[e_1 cwucengtye]-nun$_1$ salinca
        [alleged]-REL   murderer

     c.   [e_1 salinca-lo   cwucengtye]-nun$_1$ salam
        [murderer-as   alleged]-REL   person
        'a person alleged to be a murderer'

As (22b) shows, no direct translation of the English example (22a) is possible into Korean. Hence, Korean instead uses a more complicated structure (22c).

To summarize, in Section 4, I have discussed the predictions of the new analysis. The first prediction was that adjectives like *former*, which cannot occur predicatively, would not be verbal predicates in Korean. It turned out that they belong to the category Noun. The second predication was concerned with the non-occurrence of "adjectives" as resultative state or depictive predicates in Korean. It turned out that they are verbs. The third prediction was that putative KAs would only have an intersective interpretation, since they occur as the predicates of RCs. This prediction turned out to be correct, since putative KAs are interpreted only intersectively. The last prediction was that Korean would not have modal adjectives such as *alleged*. This prediction was also borne out, since modal adjectives do not find their counterparts in Korean.

5. A Challenge for the New Analysis: Presence of Subsectives in Korean

In the previous Section, I deliberately left out one important subclass of adjectives, namely subsectives, in the sense of Kamp (1975).[6] In this Section, I discuss the problem they pose for the current analysis. I show that this problem stems from the incorrect assumptions about the lexical entries of subsectives. In order to solve this problem, I propose new lexical entries for subsectives.

The proposed analysis predicts that adnominal modifiers in Korean will not have predicates corresponding to subsective adjectives in English (e.g., *skillful* and *good*). This is because RCs are standardly interpreted intersectively and the following argument is predicted to be valid:

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[6] (1) Subsectivity: [[AP NP]] ⊆ [[NP]] (i.e., the set of the combined set of an AP and the NP it modifies is a subset of the set denoted by that NP (Kamp 1976, Partee 1995).

(23) a.   John is a surgeon who is tall.
      b.   John is a violinist.
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      c.   Therefore, John is a violinist who is tall   (VALID).

If John is a tall surgeon and John is also a violinist, one can conclude that John is a tall violinist. That is, the adjectival meaning of *tall* can be inherited from one sentence to another in the syllogism.
      Given the validity of the argument (23), one would expect (24) to be valid, contrary to the fact.

(24) a.   John is a surgeon who is skillful.
      b.   John is a violinist.
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      c.   Therefore, John is a violinist who is skillful   (INVALID).

Oddly enough, this time, the syllogism fails, but the reason for this failure seems to be rather simple: the fact that John is a skillful surgeon does not entail that he is a skillful violinist.
      The invalidity of (24) poses a problem for the current analysis; if adnominal "adjectives" in Korean are indeed stative verbs, they will always have to occur inside RCs when modifying a noun. Since RCs are always interpreted intersectively, it will be difficult to capture the subsective meaning of a predicate inside them. This syllogism failure in fact can cause a problem for analyzing any language that allows subsective predicates to occur as the predicates inside RCs. This is because RCs are ubiquitous across languages.
      How do we fix this problem? I suspect that what is truly responsible for the syllogism failure in (24) is the peculiar semantics of subsective adjectives. As Siegel (1976, ch. 2) points out, some adjectives in English can have a "as a reading" as opposed to "for a reading". For example, *beautiful* in English can have various meanings, as illustrated below:

(25) Context: We know that Mary is a four-year old. Suppose someone says,

      a.   "Mary is a beautiful dancer,"

This sentence can mean any of the following:

      b.   Mary is beautiful (as a four-year old girl) and she is a dancer.
      c.   Mary is beautiful as a dancer: i.e., she is beautiful when she dances.
      d.   Mary is beautiful for a dancer (on the assumption that dancers in general have different standards for beauty)
      e.   Mary is beautiful as a dancer for a four-year old.

Based on the observation that attributively used *beautiful* can be as ambiguous as in (25), Siegel claims that even when the adjective is used predicatively, it takes an implicit argument. She posits that the actual structure for *Mary is beautiful* will therefore be something like (26):

(26)   Mary is a beautiful $\varnothing$, where $\varnothing$ indicates an implicit argument.

Under Siegel's proposal, adjectives like *beautiful* are of type <<s<et>, <et>>, which means they take the "intension" of the implicit argument, prior to taking the external argument. Heim (1999) extends Siegel's idea to subsective or *skillful*-type adjectives, by assuming that they always take an implicit argument of type <et>, which is supplied by context. Along the lines of Heim, I propose (27) as the lexical entry for *skillful*. [7]

(27)   T(**skillful**) = $\lambda P \lambda x[x$ is P & x is skillful as a P], where P is the implicit argument of the adjective and x is its external argument. P is a free variable, whose value is supplied by context.

Now let us apply this new proposal to a Korean sentence and see whether it can give the correct meaning for it. To illustrate, let us derive the truth-condition for (28a):

(28)   a.   John-un   [e_1 nungswukha]-n$_1$ uysa-i-ta
                John-TOP   [skillful-REL   doctor-COP-IND
                'John is a doctor who is skillful'

        b.   **LF representation of (28a):**

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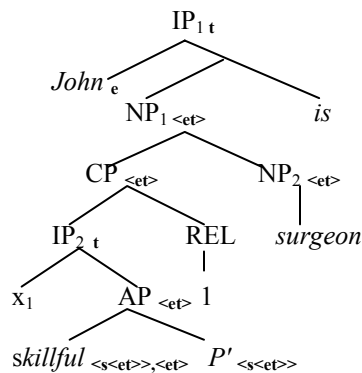
[7] See Landman 2001 for a slightly different approach. She posits that subsectives not only take individuals but also an ordered set of degrees. It is an interesting proposal but is rather complex. Hence, for the current purpose, I stick to my own proposal.

c.   Deriving the truth-condition for (28a):

T(**skillful**) ≡ λPλx[x is P & x is skillful as a P]
T(AP) ≡ λPλx[x is P & x is skillful as a P](P′) ≡ via λ-reduction
            λx[x is P′ & x is skillful as a P′]
T(IP₂) ≡ via *Functional Application (FA)*
            λx[x is P′ & x is skillful as a P′](x₁) ≡ via λ-reduction
            [x₁ is P′ and x₁ is skillful as a P′]

At this point, we can assign a value to the free variable *P*. Suppose that in the given context, its value was surgeon. Then we would get,

    [x₁ is a surgeon and x₁ is skillful as a surgeon]

Now we can work on the denotation for the whole relative clause:

T(CP) ≡ via *PA*
            λx₁[x₁ is surgeon and x₁ is skillful as a surgeon]
T(NP₂) = λy[y is a surgeon]
T(NP₁) ≡ via *Predicate Modification (PM)*
            λx[λx₁[x₁ is surgeon and x₁ is skillful as a surgeon′](x) &
            λy[y is a surgeon](x)] ≡ λ-reduction
            λx[x is surgeon and x is skillful as a surgeon and x is a surgeon]

Finally, to saturate the variable *x* by plugging in **John**,

T(IP₁) ≡ λx [x is surgeon and x is skillful as a surgeon and x is a
            surgeon](John) ≡ λ-reduction
        ≡ John is a surgeon and John is skillful as a surgeon and John is a
            surgeon.

The truth-condition we have derived for sentence (28a) is relative to the context in which it was uttered. The derived truth-condition seems to be compatible with a native speaker's intuition about what the sentence means.

       Let us now consider a case where the value of *P* is a bit more context-bound than in (28a). The following scenario is the point in case: John is a surgeon, and he is playing a game of chess with someone. John is very good at chess. So in the given context, one can say that *John is a skillful surgeon*, in order to mean that *John is a surgeon who is skillful as a chess player*. In this case, the value of the implicit argument of *skillful* will be a chess player rather than a surgeon. Hence, the truth-condition for *John is a surgeon who is skillful* would be something like the following:

(29)   T(*a surgeon who is skillful*)
          ≡ λx[x is a chess player and x is skillful as a chess player and x is a

surgeon](John) ≡ via λ-reduction

≡ John is a chess player and John is skillful as a chess player and John a surgeon.

It seems that (29) is also compatible with a native speaker's intuition about the meaning of the sentence in the given scenario. Hence, I conclude that the new denotation for subsective adjectives is on the right track.

Let us now go back to the syllogism failure in (24). Given the new denotation for *skillful*-type adjectives, it is now clear what is responsible for the invalidity of argument. The problem stems from the fact that the implicit argument of *skillful* in (24a) is different from that in (24c), the former being something like *a surgeon*, while the latter being something like *a violinist*. Hence, the conclusion from the two premises is bound to be invalid.

We can now fix the syllogism failure in (24), by filling in the implicit arguments in the first premise and the conclusion. It is now clear that the syllogism failure results from not assuming the presence of the implicit arguments inside the RCs.

(30) a. John is a surgeon who is skillful as a surgeon.
     b. John is a violinist.

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     c. Therefore, John is a violinist who is skillful as a surgeon (VALID).

In this Section, I have demonstrated that subsective predicates do not pose a problem for an intersective analysis of RCs. I have shown that under the new proposal, subsectives can keep their meanings intact even if they occur inside RCs.

6. Concluding remarks.

In this paper I have claimed that Korean lacks a distinct Adjective category. I have argued that what have been traditionally analyzed as adjectives are stative verbs, and those that seemingly occur attributively are predicates inside relative clauses (RCs).

The claim that Korean lacks the category Adjective raises one important question: why is it that Korean does not have Adjective, which is supposed to be among the universal lexical categories (cf. Chomsky 1970, Baker To appear)? I want to answer this question by pointing to the literature. Dixon (1982) has demonstrated that quite a number of languages in the world (e.g., Chinese, Bantu languages, and Amerindian languages) lack adjectives (or have a very limited number thereof). Recently, Beck (1999) has maintained that languages with few or no adjectives are in fact a "typological commonplace" and there is something marked about the Adjective class in comparison with Noun and Verb classes. If these claims are correct, it then becomes curious why some languages do have adjectives.

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Department of Linguistics
South College
University of Massachusetts, Amherst
Amherst, MA 01003

minjoo@linguist.umass.edu