Do "Transitive Adjectives" Really Exist?

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Abstract

I argue that the so-called psychological predicates like *komapta* 'thankful,' *mwusepta* 'fearful,' *silhta* 'loathsome,' or *kulipta* 'missing' require a nominative subject and a locative or dative complement, challenging the claim, a conventional wisdom originated from Kuno(1973), that they are two-place "transitive adjectives" requiring a nominative direct object. I also show that those adjectives are subject to having the locative-dative complement extracted, which is ultimately realized as a focused subject or a topic. Thus, in this type of double nominative constructions, the first nominative is a focused subject, and the second nominative forms an embedded clause with the psychological predicate, which functions as the predicate of the whole sentence.

1   Introduction

Since Kuno(1973), it seems to have become part of the conventional wisdom of Korean and Japanese syntacticians that certain stative verbs like *silhta* 'dislike' or *cohta* 'like', which are often called "psychological" predicates (or psych-verbs in short), take a nominative direct object such as *ton-i* 'money-NOM':[1]

(1) Okca-ka/nun **ton-i/*ton-ul** silhta/cohta/komapta.
    Okcha-NOM/TOP money-NOM/money-ACC loathsome/good/thankful
    'It is to Okcha that money is loathsome/good/thankful. (lit.) (=Okcha dislikes/likes/appreciates money.)'

According to this view, the first nominative is the subject and the second nominative is the direct object. Considering that ordinary transitive verbs require accusative direct objects, we can ask why these stative verbs take nominative direct objects. An answer was offered by Kuno (1973): they take nominative objects because they are adjectives. But this answer begs a question: why do adjectives require nominative objects? I am not aware of any answer to this question.

In this paper, I challenge the claim that the so-called psychological predicates require a nominative direct object. I argue that those adjectives in (1) requires no direct object (or no patient argument in semantic terms), and that the nominative NP *ton-i* 'money-NOM' is the subject of the sentence, not the direct object.

I will examine all the arguments for the notion of "transitive adjectives,"[2] some of which are attributed to Kuno (1973), in some detail and show that none of them are convincing, suggesting that the notion itself is misguided and can be eliminated from Korean syntax. This will lead us to argue for a more traditional, a more common sense view concerning the syntactic nature of the second nominative of a double nominative construction such as (1): the second nominative is the subject. As for the first

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[1] The conventional wisdom was accepted by even Kim(2000), one of the most up-to-date, constraint-based approaches to multiple nominative constructions. (See Footnote 5 in Section 3 for my critical comment on it on other accounts.)

[2] Kuno(1973) did not use the term « transitive adjective », but I will use it in this paper to refer to stative verbs which Kuno claimed required a nominative direct object.

nominative, then, I suggest that it is the "focused" subject. I will mention how focusing is different, in "packaging" information in the sense of Chafe (1976), from topicalization (i.e. *Okca-nun* as opposed to *Okca-ka* in (1)), though I do not go deeply into the issues involving focus and topic in this paper.

My new analysis is a constraint-based, lexical approach couched in terms of HPSG developed by Sag and Pollard(1991), Pollard and Sag(1994), Sag(1997), and Sag and Wasow(1999). I will show that the so-called psychological predicates have an option of taking an extracted (or "SLASHed" in HPSG terms) locative-dative or, more simply, "loca-dative" complement,[3] which is ultimately realized as a focus or a topic.

2   Problems in the Previous Arguments

2.1   Honorific Agreement

One of the most familiar arguments for the claim that the first but not the second nominative is the subject involves honorific agreement:

(2) halapeci-ka ton-i silh-**usi**-ta.
    Grandfather-NOM(honorific) money-NOM hateful-HONORIFIC-DECL
    'Grandfather dislikes money.'

Since the honorific verb *silhusita* 'dislikes' agrees with the honorific noun *halapeci* 'Grandfather' but not with the nonhonorific *ton* 'money,' and therefore the former, but not the latter, is the subject, as the argument goes.

But this argument is based on a claim that honorific verbs agree with subjects, with nothing else. And as a corollary of the claim, given an honorific main verb, an element is the subject if and only if the element agrees with the verb in honorificity. However, the claim (together with its corollary) is false. It is true that honorific verbs agree with subjects, but it is also true that they can agree with other elements that are not subjects as well:

(3) a. halapeci-uy ankyeng-ı mesci-**si**-ta.
        Grandfather's glasses good-looking-HON-DECL
        'Grandfather's glasses are good-looking.'
    b. wuri sensayngnim-un cip-i khu-**si**-ta.
        our teacher-TOP house-NOM big-HON-DECL
        'As for our teacher, his house is big.'

Notice that the honorific predicate in (3a) agrees with the possessive specifier *halapuci-uy* 'Grandfather's' of the subject NP *ankyeng-i* 'glasses-NOM', but not with the subject itself. In (3b), the honorific predicate *khusita* agrees with the topic *wuri sensayngnim-un* 'our teacher-TOP', but not with the subject *cip-i* 'house-NOM'. So honorific verbs do not necessarily agree with subjects. Hence, it does not necessarily follow from the fact that the honorific verb does not agree with the second nominative *ton-i* in (2) that the second nominative is not the subject. It is possible that the second nominative in (2) is the subject without agreeing with the honorific predicate verb, just as the nominative in (3a) or (3b) is.

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[3] Hereafter, I will use the term « loca-dative » when I refer to nominals marked by the case markers *ey* or *eykey*, to conflate the two notions « locative » and « dative » into one. The marker *ey* is attached to inanimate nouns (e.g. *i hoysa-ey huymang-i issta* 'There is a hope in this company (=The company is promissing.)') and the marker *eykey* to animate nouns (e.g. *sacang-eykey yongki-ka issta* 'There is courage in the president(=The president is courageous.)')

I agree with the position that the first nominative is the subject because it agrees with the honorific predicate, but I do not agree with the claim the second nominative is not the subject because it does not agree with the honorific verb in (2). I will in fact argue that the second nominative is the subject and I discuss this matter in Section 3. And yet it is a different question why the second nominative does not agree in honorificity with the predicate verb even if it is honorific (as in *na-nun halapeci-ka cohta/*coh-usi-ta.* 'I like Grandfather.' vs. *halapeci-nun nay-ka silh-usi-ta/*silhta.* 'Grandfather dislikes me.'). I also discuss this matter in some detail in Section 3.

2.2   The reflexive pronoun *caki*

Anaphoric binding has been frequently appealed to in establishing subjecthood:

(4) Okca$_i$-ka Swuni$_j$-ka caki$_{i/*j}$-cip-eyse ceyil mwusewessta.
    Okcha-NOM Swuni-NOM most fearful (PAST)
    'Okcha was most afraid of Swuni in her family.'

The reflexive pronoun *caki* is bound by the first nominative but not by the second, and therefore, as the argument goes, the first nominative but not the second nominative is the subject.
But in a different context, the reflexive pronoun CAN be bound by the second nominative:

(5) halapeci$_i$-nun Swuni$_j$-ka caki$_{i/j}$ pan-eyse ceyil cohusita.
    Grandfather-NOM Swuni-NOM self's class-in most good
    'Grandfather likes Swuni the most among his/her classmates.'

Given the background situation in which Swuni is a granddaughter of the grandfather and Swuni but not her grandfather goes to school, the reflexive *caki* is more naturally bound by the second nominative. So conditions on anaphoric binding constitute neither a necessary nor a sufficient condition on subjecthood.

2.3   The *aru/iru* Distinction in Japanese

By appealing to the *aru/iru* distinction in Japanese, Kuno (1973) attempted to show that the second nominative was the direct object.

(6) a. kono machi-wa daigaku-ga mitsu **aru**/*iru.
       this town-TOP college-NOM three exist (or possess)
       'There are three colleges in this town.'
    b. kono machi-wa nihonjin takusan *aru/**iru**.
                      Japanese   many
       'There are many Japanese in this town.'

As is shown in (6), the verb *aru* is used if the subject is inanimate, and the verb *iru* if the subject is animate.
    Now consider the following sentences:

(7) a. Boku-wa kodomo-ga **aru**.
       I-TOP child-NOM
       'I have children.'
    b. Boku-wa kodomo-ga **iru**.
       'I have children.'

The sentence (7a) is surprising, as the nominative NP *kodomo* 'kid' is animate.

Kuno pointed out that sentences like (7a) would be a serious problem as long as one took the animate nominative *kodomo* to be the subject: it would fly against the fact that *aru* allows only an inanimate subject. So in order to account for the grammaticality of (7a), Kuno argues that the nominative *kodomo-ga* 'child-NOM' is not the subject, but the direct object of the verb *aru*, and rhat it means "possess" rather than "exist." Hence the notion of what we have called "transitive adjective." Under this view, *aru* in (7a) is not the same verb as the *aru* in (6a): the former is a transitive verb meaning "possess" while the latter is an intransitive verb meaning "exist." And the *aru* of possession takes a nominative direct object, while the *aru* of existence takes a nominative subject, he argues. Now that the animate nominative in (7a) is the direct object, but not the subject, of the *aru* of possession, its grammaticality is not surprising any longer. So sentences like (7a) support Kuno's view that there is a transitive adjective requiring a nominative direct object.

However, Kuno's argument runs into difficulty when it comes to the following type of sentences:

(8) a. *Watakushi-wa untenshu-ga **aru**.
       I-TOP chauffeur-NOM
       'I have a chauffeur.'
    b. Watakushi-wa untenshu-ga **iru**.
       'I have a chauffeur.'
(9) a. *Watakushi-wa haha-ga mo **arimasen**.
                    mother-NOM not
       'I don't have my mother now.'
    b. Watakushi-wa haha-ga mo **imasu**.
       'I don't have my mother now.'

The sentences (8a) and (9a) are unacceptable, despite the fact that the second nominatives *untenshu* 'chauffeur' and *haha* 'mother' are animate just as in the acceptable (7a). Why are they unacceptable? The only difference between sentences like (7a) and sentences like (8a) or (7a) seems to be that the second nominative (*kodomo* 'kid') in the former is nonhonorific while that in the latter (*haha* 'Mother' or *untenshu* 'chauffeur') is honorific. This difference might lead one to propose that there is a selectional restriction imposing on the nominative direct object of the verb of possession: it must be nonhonorific. Then one would say that (8a) and (9a) are unacceptable because they violate this selectional restriction. In this way, Kuno's argument might appear to be rescued.

However, the argument faces a problem in (8b) and (9b). Why are they acceptable? Are they exempt from the selectional restriction because the verb *iru* there is not a verb of possession? Perhaps, but is it really the case that the *iru* does not mean "possess" in (8b) or (9b)? If so, then, how is it possible that (8b), for example, means "I **have** a chauffeur" after all? For that matter, how come (7b) means "I **have** a kid" if the *iru* does not mean "possess"? We seem to face a bunch of unproductive questions, and we are only getting more confused.

I would like to propose a different solution to the problem posed by (8) and (9), from a different perspective. It seems to me that what is going on here is not a matter of distinguishing between the verb of existence and the verb of possession, but some kind of semantic coercion occurring in the second nominative NPs. Under certain circumstances, human nouns can be "de-personified" by a process of semantic coercion. So we can assume, in (7a), that the nonhonorific animate noun *kodomo* 'kid has been de-personified and accordingly has become inanimate. By contrast, this semantic coercion does not apply to honorific nouns such as *haha* 'mother' or *untenshu* 'chauffeur'. Thus *aru* can take the de-personified nonhonorific *kodomo* 'child' as its subject (as in (7a)), but it cannot take the honorific nouns like *untensha* 'chauffeur' or *haha* 'mother' as its subject (as in (8a) and (9a)) since such nouns cannot be coerced into inanimate nouns. As for the verb *iru* in (7b), (8b), and (9b), nothing happens as far as semantic coercion is concerned, and it has an animate subject as usual.

Under my de-personification analysis, then, instead of flip-flopping between "existence" and "possession" as in Kuno's analysis, the meaning of *aru*, as well as the meaning of *iru*, is constant, meaning "existence" only. And the traditional description of the *aru/iru* distinction depending on the

animate/inanimate distinction remains intact. The verb *aru* only appears to mean "possess" as a result of a particular human condition: if a thing exists in a person (or to a person) for a considerably long time, then the thing tends to belongs to (or to be possessed by) the person. In other words, the apparent possessive interpretation of the *aru/iru* is a derivative of its existential meaning, determined by some pragmatic conditions. If something exists in an inanimate open space like a room or a table, we say that it exists there; if something exists in a person, we say that the person possesses it. Possession is a special mode of existence in human society. (We will look into some similar examples in Korean in Section 3.)

In any event, I remain unconvinced that the second nominative *kodomo-ga* 'kid-NOM' is the direct object, in sentences like (7a).

2.4 A semantic argument: on Subjectivity vs. Objectivity

Under the "transitive adjective" analysis, the psychological adjectives *cohta* or *silhta* have a special meaning that ordinary adjectives do not have. This view is also originated from Kuno (1973).

(10) a. watakushi-wa Mary-ga suki-da.
  I-TOP Mary-NOM fond-of
  'I like Mary."
 b. watakushi-wa kono inu-ga kowai.
      this dog-NOM fearful
  'I am scared of this dog.'

(11) a. na-nun Mary-ka cohta.
  'I like Mary.'
 b. na-nun I kay-ka mwusepta.
  'I am scared of this dog.'

The psychological adjectives such as *suki* or *kowai* in (10), *cohta* or *mwusepta* in (11), do not express the attributes of the person or the animal in question, but refer to the speaker's (or the subject's) subjective feelings about them. For example, as the claim goes, *mwusepta* 'fearsome' is not an attribute of the dog; it is an expression of the speaker's emotional reaction to the dog. If correct, these psychological predicates may be said to have a patient argument, which in turn allegedly supports the syntactic notion of nominative direct object.

However, this "psychological predicate" argument is untenable. There is no reason to believe that adjectives can be neatly classified into two: between psychological and nonpsychological predicates, with the former expressing the speaker's reaction to a thing and the latter expressing the attribute of it. If adjectives like *mwusepta* 'fearsome' or *suki* 'fond-of' are psychological, all adjectives are psychological in one way or another. Consider the following examples:

(12) I kay-ka ttokttokhata/mengchenghata/khuta/cakta.
    smart/stupid/big/small
  'This dog is smart/stupid/big/small.'

We might say that each of the predicates here expresses an attribute of the dog. But dose it? Does the predicate express an objective attribute of the dog? Is it free of any subjective judgment? Are there any adjectives that express an attribute of a thing objectively, without being influenced by the speaker's subjective judgment? Is it a subjective judgment or an objective fact that the dog is smart or stupid or that it is big or small? I don't think we can answer any of such questions for sure. We would have to ask one question after another before it can be answered.

The "psychological" predicate argument cannot hold without an assumption that there is a clear distinction between the objective and subjective attributes of a thing, but we are reminded again and

again that such a distinction is only imaginary. The property of a thing more or less depends on human perception, which in turn depends on the perceiver's physical and psychological environment at a given time and place. Human reality may be a reciprocal and recursive interaction between an observer's interpretations of the perceived reality and the external world. If a dog is smart or stupid, it is only so with respect to the belief of an observer of the dog. It would be futile to classify adjectives into psychological and nonpsychological ones, according to whether they refer to subjective judgment about things or objective attributes of them. All adjectives are more or less psychological, relatively subjective or objective.

Thus, when the claim about the putative existence of "nominative direct object" appeals to such an illusory notion of subjective, psychological predicates, will it get anywhere?

3   A New Analysis

So far we have examined the four arguments--three syntactic and one semantic--for the claim that the second nominative of a double nominative construction like (1) or (13a) below is not the subject. We have found out that the two syntactic arguments--one using subject honorification and the other using anaphor binding--are counterfactual and that the argument that depends on the *aru/iru* distinction is logically questionable and can be replaced by an alternative analysis. The semantic reasoning behind the notion of the so-called "psychological" and "subjective" predicates is shaky since it is based on a murky distinction between subjectivity and objectivity in human perception.

3.1   The Psychological Predicates in Double Subject Constructions

(13) a. nay-ka i **kay-ka** mwusepta.
       I-NOM this dog-NOM fearsome
       'I am scared of this dog.'
    b. na-nun i **kay-ka** mwusepta. (=(11b))
       I-TOP
       'As for me, I am scared of this dog.'

Before I present arguments for my thesis that the second nominative is the subject in (13), let me make it clear that the burden of proof is on whoever claims that the second nominative is not the subject. As we saw in the previous section, the claim has not been bone out and furthermore, I know of no independent evidence showing that the second nominative is a direct object. Hence I can simply reject the claim and contend that the second nominative is the subject of the sentence. However, there are two reasons to believe that the second nominative is a subject, supporting my contention. First, it is marked by the nominative marker *i/ka*. It is true that nominative NPs are not always the subjects, but they usually are. Consider some of the cases in which the nominative is not the subject:

(14) a. kwulum-i **pi-ka** toynta.
       cloud-NOM rain-NOM become
       'Clouds become rain.'
    b. san-un **mwul-i** anita.
       hils-TOP water-NOM not
       'Hills are not streams.'
    c. **Swuni-ka** ttal-i yeypputa.
       Swuni-NOM daughter-NOM pretty
       'It is Swuni whose daughter is pretty.'
    d. **Swuni-ka** ton-i manhta.
       Swuni-NON money-NOM much
       'It is Swuni whose money is much (=Swuni has much money).'

Regarding (14 a and b), Korean grammarians are generally agreed that the second nominative is the complement of the intransitive copula verb *toyta* 'become' or *anita* 'not.' The second nominative in (13a) cannot be a subject complement because those adjectives (*mwusepta, cohta, silhta* etc.) are not a copula verb.

It is somewhat controversial exactly how sentences like (14 c and d) are analyzed, particularly with regards to the status of the first nominative. Le us assume that the first nominative is a focused phrase, which I will deal with shortly. In such focus constructions, the first nominative is always understood as the possessive specifier of the second nominative. Now, the second nominative in (13a) cannot be anything like a focused phrase: there is no reading in (13a) in which the second nominative is semantically focused. Nor is the first nominative in a possessive specifier relation with the second.

As the construction like (13a) corresponds with none of the cases in which the second nominative is not the subject, we can be quite confident that the second nominative in (13a) is the subject (although we may not have exhausted all the cases in which the nominatives are not the subject.). [4]

Secondly, the so-called psychological predicates, for example, *mwusepta* 'fearsome' or *cohta* 'fond of' do express the properties of the things referred to by the nominative, as I argued in the previous section. So, there seems to me to be nothing to prevent us from taking the nominative *kay-ka* 'dog-NOM' to be the subject of the predicate adjective in (13a), as predicate adjectives usually express the properties of the subjects.

As a conclusion, I suggest that the so-called psychological predicate constructions are basically double subject constructions as is shown in (15) next page.[5]
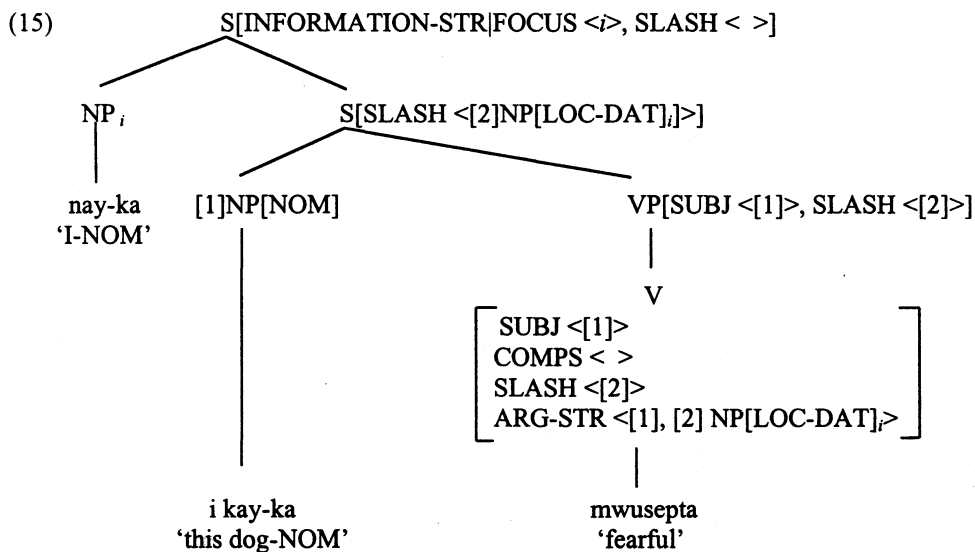
This is essentially an extraction construction: the loca-dative complement is extracted from the predicate. Note that the extracted loca-dative complement must be coindexed with the first nominative.

To account for the top S of the double subject construction (15), we need to introduce a schema in (16). The schema accounts for essentially three properties of the double subject construction. First, the first nominative is the subject as well as the focus of the construction. Secondly, the second nominative plus the predicate form a clause and crucially, the clause expresses a property of the first nominative. The RELATION *is-characterized-by* in the RESTRICTION feature is intended to represent this property. Thirdly, there is a nonempty SLASH feature in the lower S and the SLASH value must be coindexed with the first nominative, so that the focused subject may be understood as the loca-dative complement of the psychological predicate. (See Park (2001) for more about double and multiple nominative constructions.)

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[4] As one more example showing that a nominative may not be the subject, consider a complex predicate construction like *Swuni-nun ttal-i poko siphta* 'Swuni is eager to see her daughter.' It has been a controversy how the complex predicates like *poko siphta* 'eager to see' are analyzed, but I now would suggest that the nominative NP *ttal-i* 'daughter-NOM' is indeed the subject of the complex predicate *poko siphta*. If correct, the complex predicate constructions like this support my thesis here.

[5] I have had this view of double subject constructions since Park(1973, 1981, 1987). A similar view has been proposed by Teng (1974) with regard to Chinese double nominative constructions. However, note that I add a new feature to account for the structure of a psychological predicate: the mechanism handling the extracted loca-dative complement, utilizing the SLASH feature (i.e., [SLASH <[2]NP[LOC-DAT]>] in (15)). Furthermore, concerning the first nominative NP of a double nominative construction, the present analysis is different from Kim's(2000) at several crucial points, although I borrow from his ideas about « focus ». First of all, while he considers the first nominative to be the focus, but not the subject, I take it to be the subject as well as the focus in harmony with my theory of « clausal predicate ». (See below.) In addition, under Kim's analysis, the first nominative is licensed directly by a lexical property of the psychological predicate. I have argued against this analysis because it does not work as intended when it deals with multiple occurrences of nominatives and also because it violates the principle of locality. (See Park(2001).) Under the present anlaysis, the first nominative is only potentially licensed by the lexical property of the predicate, by seeing to it that the predicate has a loca-dative complement SLASHed, as mentioned above, and it is to be coindexed with the focus-subject by a schema dealing with focus which I present shortly in (16).

(15)

$$\text{S[INFORMATION-STR|FOCUS } <i>, \text{ SLASH} < >]$$

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        NP_i              S[SLASH <[2]NP[LOC-DAT]_i>]

      nay-ka      [1]NP[NOM]              VP[SUBJ <[1]>, SLASH <[2]>]
      'I-NOM'                                      |
                                                   V
                              ┌                                        ┐
                              │ SUBJ <[1]>                             │
                              │ COMPS < >                              │
                              │ SLASH <[2]>                            │
                              │ ARG-STR <[1], [2] NP[LOC-DAT]_i>       │
                              └                                        ┘
                                                   |
                    i kay-ka                    mwusepta
                'this dog-NOM'                  'fearful'
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(16) Focus-Clausal-Predicate Schema

$$\text{S[[INFO-STR|FOCUS [1]], [SLASH < >]]}$$

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[1]NP[ka]_i      ┌                                                                      ┐
                 │                      S[+PRD]                                         │
                 │ SLASH <NP_i >                                                        │
                 │           ┌                        ┐                                 │
                 │           │ RELN is-characterized-by│                               │
                 │ RESTR {   │ SIT v                   │ ,  ┌ RELN [2] ┐ }             │
                 │           │ ARG1 i                  │    │ SIT [3]u │               │
                 │           │ ARG2 [3]u               │    └          ┘               │
                 │           └                        ┘                                 │
                 └                                                                      ┘
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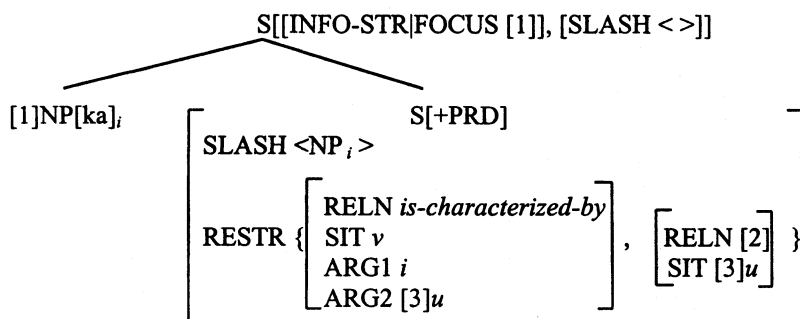
Returning to (15), we see that the second nominative *kay-ka* 'dog-NOM' and the predicate *mwusepta* 'fearsome' form a clause and the clausal predicate describes an attribute of the first nominative *nay-ka* 'I-NOM.' The predicate verb *mwusepta* canonically requires a nominative subject NP and a loca-dative NP, as is indicated by the ARGMENT-STRUCTURE value <[1], [2]>, so that a sentence like (17) may be accounted for.[6] (The structure of (17) would be basically identical to (19a) on the next page.) But in (15), the loca-dative complement is missing in the structure and is realized only semantically through coindexing with the first nominative *nay-ka*. (The subscript i indicates this coindexing.)

(17) i kay-ka na-eykey mwusepta
     this dog-NOM I-DATIVE fearful
     'This dog is fearful to me.'

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[6] There are four variations of this canonical (17) altogether; we have already considered (13a) and (13b), and the two remaining vaiations are:

(i)   *na-eykey i **kay-ka** mwusepta.*
     to-me   this dog-NOM fearful
     'To me, this dog is fearful.'

(ii) *na-eykey-nun i **kay-ka** mwusepta.*
     To-me-TOP
     'As for (to) me, this dog is fearful.'

In (i), the loca-dative complement is fronted, and the analysis of this pattern is given in (21). In (ii), the fronted complement is topicalized.

As for the first nominative, it is also the subject, but in a special way: it is the subject of the whole sentence and the predicate of the whole sentence is the clause consisting of the second nominative and the predicate adjective. The extracted loca-dative complement is coindexed with the first nominative.

The first nominative is a focused phrase, as well as the subject, following Kim (1999) and Kim and Park (2000), who have suggested that the marker *i/ka* is the focus marker as well as the subject marker. Focused phrases in general express new information. And so in (13a), the fact that the person to whom the dog is fearful is "me" is new information. If the marker *un/nun* occurs in place of the focus marker *i/ka* as in (13b), the subject of the sentence becomes a topic about which the speaker intends to talk about.

So the first nominative may be interpreted either as a focus or as a topic depending upon its marker. However, in either case, the second nominative is the subject of the predicative clause, which in turn plays the role of a predicate, expressing a property of the thing denoted by the focus or topic phrase. This notion of clausal predicate is accounted for by the Focus-Clausal-Prediate-Schema (16).
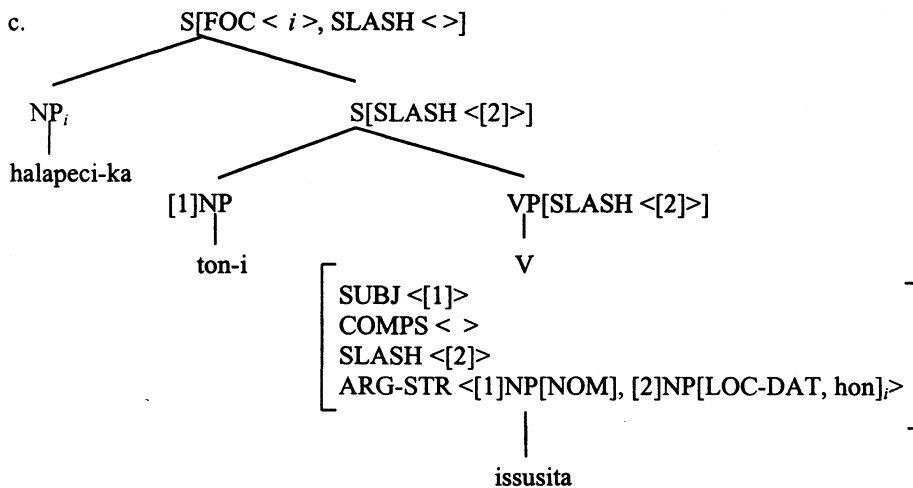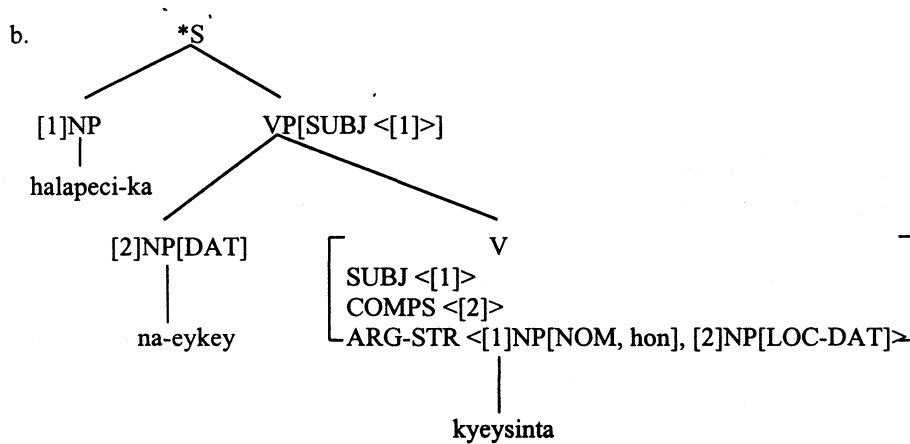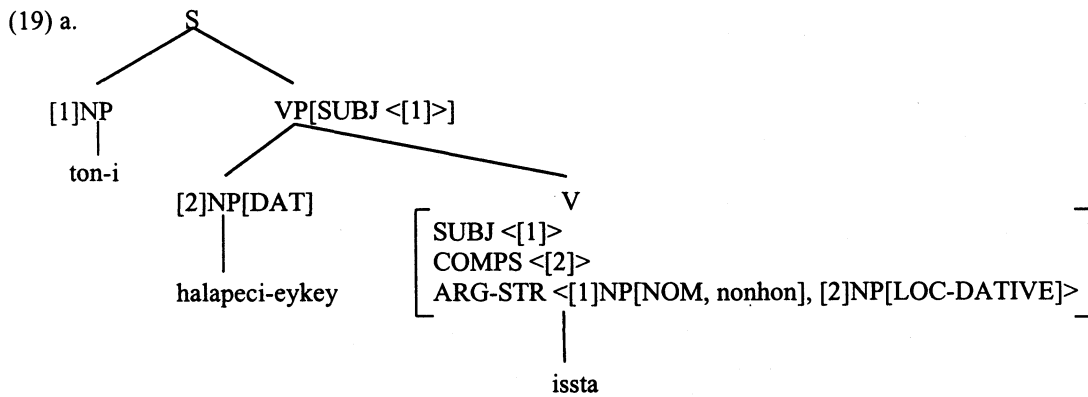
3.2   Honorific Predicates

As we observed above, subject honorification has been appealed to whenever subjecthood is an issue in Koran and Japanese syntax and semantics. Moreover, psychological predicates are interacted with honorification in a very interesting way, as we observed when we treated the Japanese *aru/iru* distinction in Section 2. Our discussion of psychological predicates cannot be completed without addressing this interesting phenomenon.

In terms of honorificity, there are three different Korean words corresponding to the Japanese *aru/iru*: *issta*, *kyeysita*, and *issusita*. The first word is nonhonorific, while the next two are honorific. The following three sentences illustrate them.

(18) a. ton-i halapeci-eykey issta/*issusita.
money-NOM Grandfather-DAT exist
'There is money in Grandfather.'
b. halapeci-ka na-eykey kyeysinta.
I-DAT
'There is Grandfather to me.(lit.)' (I have Grandfather.')
c. halapeci-ka ton-i iss-usi-ta.
exist-hon
'To Grandfather, money exists.(lit.)' (Grandfather has money.)

I argue that the argument structure feature [ARG-STR <NP[NOM], NP[LOCA-DATIVE]>] is shared by the three words, so that they all basically mean the same thing: something exists in somewhere or to somebody. (See the ARG-STR feature inside the attribute-value matrix showing the lexical properties of the main verb in (19a, b, c) next page.) And yet each has its own distinct way of realizing the argument structure value as its subject and complement. First, in the case of *issta* in (18a), the two arguments are realized as usual: one becomes the subject and the other becomes a loca-dative complement as shown in (19a). The honorific *issusita* can not occur because the subject is not honorific. Secondly, *kyeysita* is different from *issta* only in that the former requires an honorific subject.

In (19c), the structure of the sentence (18c), note that the loca-dative complement is extracted in the same way as in (15) above. This complement shows up only referentially: it is coindexed with the focus-subject *halapeci-ka* 'Grandfather-NOM' of the double subject construction. Then, the clause *ton-i issusita* 'money exists' becomes a predicate in accordance with the Focus Clausal Predicate Schema (16) and expresses a property of the focus-subject *halapeci-ka* 'Grandfather-NOM,' meaning "Grandfather has money or Grandfather is rich."

(19) a.

```
                    S
          ┌─────────┴─────────┐
       [1]NP              VP[SUBJ <[1]>]
         │            ┌────────┴────────┐
       ton-i      [2]NP[DAT]            V
                      │          ┌──────────────────────────────────────────┐
                 halapeci-eykey   │ SUBJ <[1]>                               │
                                  │ COMPS <[2]>                              │
                                  │ ARG-STR <[1]NP[NOM, nonhon], [2]NP[LOC-DATIVE]> │
                                  └──────────────────────────────────────────┘
                                               │
                                             issta
```

b.

```
                   *S
          ┌─────────┴─────────┐
       [1]NP              VP[SUBJ <[1]>]
         │            ┌────────┴────────┐
     halapeci-ka  [2]NP[DAT]            V
                      │          ┌──────────────────────────────────────┐
                   na-eykey       │ SUBJ <[1]>                           │
                                  │ COMPS <[2]>                          │
                                  │ ARG-STR <[1]NP[NOM, hon], [2]NP[LOC-DAT]> │
                                  └──────────────────────────────────────┘
                                               │
                                           kyeysinta
```

c.

```
              S[FOC < i >, SLASH < >]
          ┌───────────┴───────────┐
        NP_i                S[SLASH <[2]>]
          │            ┌──────────┴──────────┐
     halapeci-ka    [1]NP              VP[SLASH <[2]>]
                      │                      │
                    ton-i                    V
                              ┌──────────────────────────────────────┐
                               │ SUBJ <[1]>                           │
                               │ COMPS < >                            │
                               │ SLASH <[2]>                          │
                               │ ARG-STR <[1]NP[NOM], [2]NP[LOC-DAT, hon]_i> │
                               └──────────────────────────────────────┘
                                          │
                                       issusita
```

The lexical properties of each verb correctly block all the honorific mismatches shown in the following unacceptable sentences:

(20) a. *nay-ka ton-i issusuta
      'I(NONHON) have money.'
    b. *halapeci-ka ton-i kyeysinta.
      'To Grandfather, money(NONHON) exists.'
    c. *ton-i halapeci-eykey issusita.
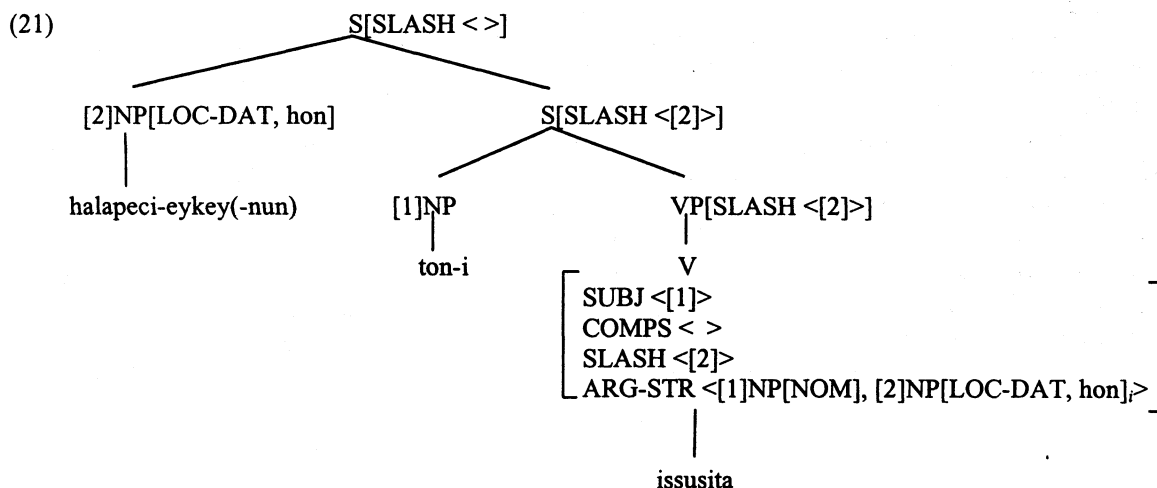   money-NOM Grandfather-DAT exist(HON)
      'Money exists in Grandfather.'

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d. halapeci-eykey(nun) ton-i issusita.
   'To Grandfather, money exists (=Grandfather has money.)'

The unacceptable (20a) violates one of the constraints of the word *issusia* 'exist(HON)' dictating that the missing loca-dative complement of the verb *issusita* must be honorific (as is indicated in the second argument of the ARG-STR value of the verb in the tree (19c)). The unacceptable (19b) violates the constraint that the subject of the verb *kyeysita* must be honorific. (See (19b).) And (20c) is unacceptable because it violates the constraint about the SLASH feature: the loca-dative complement must be missing in the lower clause (or the SLASH feature must have a nonempty value or the COMPS value must be empty), but there is no complement missing in (20c). It is interesting to note that (20d), which appears to be different from the ungrammatical (20c) merely in word order, is perfect because the loca-dative complement is extracted, thereby satisfying the SLASH constraint. This is represented in (21) below.

Notice that (20d) is structurally different from (18c) above. The difference is shown in (21) and (19c): the SLASH value, NP[LOC-DAT, hon], is realized as the preposed (topicalized) loca-dative complement in (21) through the SLASH mechanism, whereas in (19c) the SLASH value is coindexed with the focus-subject--with the SLASH value being discharged--by the schema (16).

Under Kuno's "transitive adjective" analysis, since the verb *issusita* in (18c), for example, would be a transitive verb meaning "possession," it would agree with its honorific subject *halapeci-ka* 'Grandfather-NOM' but not with its nominative direct object *ton-i* 'money-NOM' and this much seems all right. But I don't see how the "transitive adjective" analysis will account for the unacceptable (20c) as opposed to the acceptable (20d). Presumably, the *issusita* in (20c) would be an intransitive verb of existence, and the *issusita* in (20d) would be a transitive verb of possession. But then there would be no explanation of why the verb of possession disallows word order variation.

(21)
```
                          S[SLASH < >]
             _____/_____
            /                                  \
   [2]NP[LOC-DAT, hon]                     S[SLASH <[2]>]
            |                             ____/\____
            |                            /          \
   halapeci-eykey(-nun)              [1]NP          VP[SLASH <[2]>]
                                       |                  |
                                     ton-i                V
                                            ┌─                            ─┐
                                            │  SUBJ <[1]>                   │
                                            │  COMPS < >                    │
                                            │  SLASH <[2]>                  │
                                            └─ ARG-STR <[1]NP[NOM], [2]NP[LOC-DAT, hon]ᵢ>┘
                                                        |
                                                     issusita
```

Under the present analysis, we now can explain the honorific phenomena we observed in Section 2 in a more systematic way. Consider some typical examples, including (2), again:

(21) a. halapeci-ka [ton-i silh-**usi**-ess-ta/*silh-ess-ta]. (Cf. (2))
     Grandfather-NOM money-NOM loathsome-HON/loathsome-NONHON
     'Grandfather dislikes money.'
   b. na-nun [halapeci-ka cohta/*coh-**usi**-ta].
     I(NONHON) Grandfather(HON) fond-of-NONHON/fond-of(HON)
     'I like Grandfather.'
   c. halapeci-nun [nay-ka silh-**usi**-ta/*silhta].
     Grandfather(HON) I(NONHON) loathsome(HON)/loathsome(NONHON)
     'Grandfather dislikes me.'

d. ton-i halapeci-eykey *coh-**usi**-ta/cohta.
'Money is good to Grandfather.(lit.)'

An honorific psychological verb like *silhusita* or *cohusita* agrees with its extracted loca-dative complement, not with its subject, just as the verb of existence *issusita* agrees with its extracted loca-dative complement, as we observed above. Thus in (21a), the loca-dative complement (*halapeci-eykey* 'to Grandfather') of *silhusita* 'loathsome' is SLASHed and its value is coindexed with the honorific subject-focus *halapeci-ka* 'Grandfather-NOM.' Basically the same thing happens in (21c). By contrast,. in (21b), the nonhonorific *cohta* but not the honorific *cohusita* can agree with the nonhonorific extracted dative complement *na-eykey* 'I-DAT. In (21d), where no complement is extracted, the nonhonorific *cohta*, but not the honorific *cohusita*, can agree with the nonhonorific subject *ton-i* 'money-NOM.'

In general, the lexical constraints on psychological adjectives are responsible for the fact that honorific agreement holds between the predicate and the first nominative, not between the predicate and the second nominative in a double nominative construction whose main verb is a psychological adjective

4 Conclusion

I have shown that all the previous arguments for "transitive adjectives" requiring a nominative direct object are untenable: the honorific agreement argument is based on an unfounded assumption, the anaphoric binding argument is counterfactual, the argument using the *aru/iru* distinction is undermined by an alternative view of the distinction, and the semantic argument depending on subjective vs. objective judgment is notionally questionable.

I have argued instead that the second nominative preceding the so-called psychological predicate like *cohta* 'fond-of,' *silhta* 'loathsome,' or *mwusepta* 'fearsome' in a double nominative construction is the subject, not a direct object, and so there is no such thing as a "transitive adjective," contrary to Kuno (1973). Furthermore, those predicates require an extracted loca-dative complement in addition to a subject complement. The first nominative is the first subject, which is coindexed with the extracted loca-dative complement, and the second nominative corresponds with the second subject. So the double nominative construction is a double subject construction.

At the same time, the first nominative is the focus of the whole sentence in the sense of Chafe (1976), the notion revived recently by Engdahl and Vallduvi (1996), enriched to some extent by Kim(2000), Kim and Park (2000) and Park (2001). The second nominative and the predicate constitute a clause and it functions as the predicate of the whole sentence; hence the notion of a clausal predicate. One of the interesting lexical properties of the psychological predicate is that it requires an extracted loca-dative complement when it participates in a double subject construction. Finally, it is also interesting to note that the honorific psychological predicates like *issusuita* 'exist(HON)' or *silhusita* 'loathsome(HON)' are different from their nonhonorific counterparts not just in honorificity, but also in valency: the honorific, but not nonhonorific, predicates require an extracted loca-dative complement.

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