Classifying Adjectives and Noun Movement in Lithuanian

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1. Introduction

Although Lithuanian nominal constructions have attracted little notice from generative linguists, their morphosyntax sheds new light on the internal structure of Determiner Phrases. The present paper discusses some unexpected morphosyntactic and word-order properties of Lithuanian classifying adjectives. They will be argued to support DP-internal noun movement, as well as the postulation of a special functional layer located immediately above the head noun (ClassP or Classification Projection), as proposed in Rutkowski and Progovac (2005) for comparable data in Polish and Serbian.

2. Classification Projection

Classifying adjectives are different from attributive/qualifying ones because they do not merely describe a property of the entity denoted by the noun, but categorize that entity as belonging to a certain class/type (cf. e.g. Warren 1984). Therefore, a classifying adjective is a restrictive modifier: it limits the denotation of the head noun. The distinction between classifying and qualifying adjectives can be illustrated with the following pair of examples:

(1) green tea [classifying](2) green trousers [qualifying]

Trousers are not normally categorized according to their color. Therefore, the adjective *green* in (2) is not a classifying element: it simply expresses a non-restrictive property of the item denoted by the noun. On the other hand, *green tea* is a kind of tea. In this case the most natural interpretation is to

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assume that *green* is a classifying modifier. Examples (1-2) illustrate that the same lexical item may function both as a classifying and qualifying adjective. In languages such as English, the classifying interpretation is to a great extent conditioned pragmatically. Trugman (2005) points out that an adjectival expression can have a classifying (kind-referring) function only if it refers to a "well-established kind" (see also Carlson 1977, among others). However, what counts as "well-established" in a particular language is obviously an extralinguistic question. Therefore, the function of adjectives in languages such as English or Spanish might be ambiguous between classification and qualification. In the following Spanish example (taken from Bosque and Picallo 1996) the modifier *cómico* can be interpreted either as a classifying or attributive element (the two interpretations being: 'comedy actor', i.e. a kind of actor, and 'comic actor', i.e. an actor that happens to be amusing):

(3) actor cómico actor comic 'comic/comedy actor'

As discussed in Rutkowski and Progovac (2005), some languages resolve ambiguities such as the one illustrated in (3) by means of morphosyntax. In Polish, classifying adjectives differ from regular attributive ones in terms of word order, namely they appear in postposition with respect to the head noun:

(4) a. niedźwiedź biały [classifying]
bear white
'a polar bear'
('an animal which belongs to the species Ursus maritimus')
b. biały niedźwiedź [qualifying]
white bear
'a white bear'
('a bear that happens to be white')

In Serbian the classifying/qualifying distinction is reflected morphologically. Note that many masculine adjectives in this language have two inflectional variants, which are usually referred to as "long" (more complex morphologically) and "short". Interestingly, classifying expressions require long adjectival morphology (the labels "LA" and "SA" stand for "long

adjective" and "short adjective", respectively)¹:

('a bear that happens to be white')

(5) a. beli medved [classifying]

white-LA bear
'a polar bear'
('an animal which belongs to the species Ursus maritimus')

b. beo medved [qualifying]

white-SA bear
'a white bear'

Rutkowski & Progovac (2005) unify the two patterns shown in (4) and (5) by postulating that both Polish and Serbian classifying adjectives are base generated in the specifier of NP (a similar proposal is put forward in Bosque and Picallo 1996). Therefore, they are different from regular attributive adjectives, which are located in designated functional projections above NP (see e.g. Cinque 1994). Rutkowski and Progovac (2005) further argue that classifying expressions involve N-movement to a functional projection located above NP (tentatively labeled ClassP – Classification Phrase). This projection is active syntactically when it is associated with a semantic feature responsible for the classificatory reading. In such cases, the element occupying N is forced to move to the head Class to check the classificatory feature. In Polish, this N-raising is overt, which means that it is reflected in surface word order:

(6) $[_{DP} D [_{ClassP} N_i [_{NP} classifying A t_i]]]$ $(t_i - trace of overt movement)$

On the other hand, in Serbian the noun moves covertly but its trace/copy needs to be licensed morphologically:

(7) $[_{DP} D [_{ClassP} N_i [_{NP} classifying A_{LA} \rightarrow t_i]]]$ $(t_i - trace of covert movement; \rightarrow - morphological licensing)$

Note that it is a cross-linguistic characteristic of classifying adjectives that

It should be noted that example (5a) could potentially, although not likely, be interpreted as a definite non-classifying expression, given that long adjectival morphology serves some other functions, in addition to classification; see Rutkowski and Progovac (2005) for an attempt to unify these functions in terms of N movement. On the other hand, (5b) cannot be interpreted as a classifying expression.

they tend to be adjacent to the head noun. This requirement might follow from the fact that such a configuration enables the classifying adjective to license the trace of the noun.

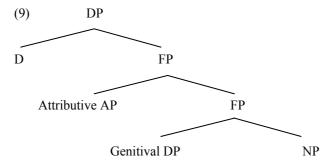
In what follows we will show that the model outlined in this section finds confirmation in the syntax of Lithuanian classifying adjectives.

3. Word Order and Shape of Classifying Adjectives in Lithuanian

The basic unmarked word order of Lithuanian nominal constructions is as shown in (8): adnominal genitives are usually placed immediately before the head noun, which means that they follow attributive adjectives.

- (8) a. žalia Reginos suknelė green Regina-GEN dress 'Regina's green dress'
 - b. *Reginos žalia suknelė Regina-GEN green dress

We treat this word order (A-Gen-N) as base generated. Genitival elements are located in a functional phrase projected above the NP, but below other functional phrases. We propose the following structure:

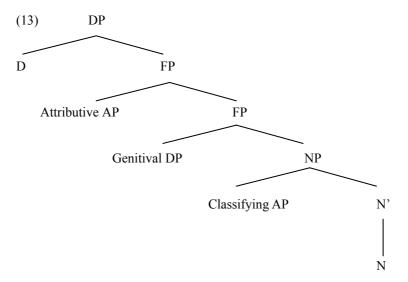


However, examples such as (10a-12a), in which adjectives are bracketed by genitives and nouns, seem to contradict this proposal (note that in terms of morphosyntax ordinal numerals such as *pirmoji* 'first' in (11) behave like adjectives in Lithuanian).

(10) a. Reginos žalioji arbata Regina-GEN green tea 'Regina's green tea'

- b. *žalioji Reginos arbata green Regina-GEN tea
- (11) a. Povilo Pirmoji Komunija Povilas-GEN first communion 'Povilas's First Communion'
 - b. *Pirmoji Povilo Komunija first Povilas-GEN communion
- (12) a. būdvardžių niekatroji giminė adjectives-GEN neuter gender 'the neuter gender of adjectives'
 - b. *niekatroji būdvardžių giminė neuter adjectives-GEN gender

Schmalstieg (1988) briefly discusses this phenomenon and concludes that, although the usual word order of Lithuanian nominals is as shown in (8a), the adjective goes directly before the head noun when they form a "terminological unit." If we adopt the model proposed in Rutkowski and Progovac (2005), such "terminological units" should be understood as expressions consisting of a noun and a classifying adjective. Classifying adjectives are NP-internal (as opposed to attributive/qualifying ones) and therefore they surface below genitival phrases:



Interestingly, the Lithuanian examples in (10-12) pattern with the Serbian

data shown in (5). In both languages classifying adjectives are subject to a morphological restriction: their inflectional shape must be complex. Note that there are two declension patterns of Lithuanian adjectives: the simple (short) declension exemplified in Table 1 and the pronominal (long) declension shown in Table 2. The latter pattern is referred to as "pronominal" because its forms derive historically from a construction which consisted of a simple adjective and the appropriate case form of the third person pronoun *jis* 'he' or *ji* 'she' (depending on the gender of the adjective):

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    (14) a. baltas + jis = baltasis
        white-SA (masculine) + he = white-LA (masculine)
    b. balta + ji = baltoji
        white-SA (feminine) + she = white-LA (feminine)
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The declension patterns of the third person pronouns *jis* 'he' and *ji* 'she' are given in Tables 3 and 4.

Case	Masculine		Feminine	Feminine	
	Singular	Plural	Singular	Plural	
Nominative	baltas	balti	balta	baltos	
Genitive	balto	baltų	baltos	baltų	
Dative	baltam	baltiems	baltai	baltoms	
Accusative	baltą	baltus	baltą	baltas	
Instrumental	baltu	baltais	balta	baltomis	
Locative	baltame	baltuose	baltoje	baltose	

Table 1. Simple (short) declension of the adjective baltas 'white'

Case	Masculine		Feminine	
	Singular	Plural	Singular	Plural
Nominative	baltasis	baltieji	baltoji	baltosios
Genitive	baltojo	baltųjų	baltosios	baltųjų
Dative	baltajam	baltiesiems	baltajai	baltosioms
Accusative	baltąjį	baltuosius	baltąją	baltąsias
Instrumental	baltuoju	baltaisiais	baltąja	baltosiomis
Locative	baltajame	baltuosiuose	baltojoje	baltosiose

Table 2. Pronominal (long) declension of the adjective baltasis 'white'

Case	Singular	Plural
Nominative	jis	jie
Genitive	jo	jų
Dative	jam	jiems
Accusative	jį	juos
Instrumental	juo	jais
Locative	jame	juose

Table 3. Declension of the third person pronoun jis 'he'

Case	Singular	Plural
Nominative	ji	jos
Genitive	jos	jų
Dative	jai	joms
Accusative	ją	jas
Instrumental	ja	jomis
Locative	joje	jose

Table 4. Declension of the third person pronoun ji 'she'

Simple adjectives are generally not admitted in what Schmalstieg (1988) calls "terminological units". This means that only long adjectives are allowed in the Gen-A-N sequences unless the long form does not exist. It should be noted that not all Lithuanian adjectives have distinct pronominal forms. In the following examples (taken from Schmalstieg 1988), the adjectives are clearly classifying (they follow genitives); however, their form is not marked with respect to the pronominal/simple distinction: adjectives such as *vestuvinė* 'wedding-Adj' have only one declension.

(15) motinos vestuvinė suknelė mother:GEN wedding dress 'the mother's wedding dress' (16) arklio priekinės kojos horse:GEN front legs 'the horse's front legs'

Similarly to Serbian (see examples (5a-b)), Lithuanian classifying constructions change to regular attributive ones if the long form of the adjective is replaced with the short one. This is illustrated below (examples (19a-b) are taken from Dambriūnas, Klimas and Schmalstieg, 1980:228):

(17)a.baltasis lokys [classifying] white-LA bear 'a polar bear' ('an animal which belongs to the species Ursus maritimus') b. baltas lokys [qualifying] white-SA bear 'a white bear' ('a bear that happens to be white') (18) a. paprastasis suopis [classifying] ordinary-LA buzzard 'a common buzzard' ('an animal which belongs to the species Buteo buteo') b. paprastas suopis [qualifying] ordinary-SA buzzard 'an ordinary buzzard' (19) a. juodasis gandras [classifying] black-LA stork 'a black stork' ('an animal which belongs to the species Ciconia nigra') juodas gandras [qualifying]

The above examples show that the classifying interpretation is derived morphosyntactically, and not lexically. There is nothing in the semantics of a particular adjective that makes it classifying or qualifying. Dambriūnas, Klimas and Schmalstieg (1980:228) use examples (20a-b) to show how the classificatory interpretation arises. According to them, the use of long morphology in (20b) "implies that there is something in the lesson itself which makes it the first one, i.e. that there is some inherent firstness in the lesson".

(20) a. pirma pamoka first-SA lesson 'a first lesson' b. pirmoji pamoka first-LA lesson 'the first lesson'

black-SA stork 'a black stork'

('a stork that happens to be black')

Note that the Lithuanian pronominal declension has also been labeled

"definite" because one of its functions is to mark a particular object as distinct from other similar elements (see e.g. Otrębski 1956, Dambriūnas, Klimas and Schmalstieg 1980). However, the complex adjectival form itself does not determine the definiteness of a given structure. Instead, as pointed out by Christen (2001:517), it expresses an inherent quality which can be used to identify the denotation of the head noun (a given object within a class of similar objects).

Our analysis of the data shown in (10-12) and (17-19) is parallel to the account of Serbian presented in Rutkowski and Progovac (2005). We argue that both elements which constitute a classifying expression (i.e. a noun and a classifying adjective) are always base generated within the same phrase (namely, NP). The semantics of classification is conveyed syntactically by means of a special feature merged in ClassP (a functional projection above NP). This feature needs to be checked by the noun – thus, N-to-Class movement is required. In languages such as Serbian or Lithuanian the movement in question is covert. Still, it is signaled by long morphology on the classifying adjective. In other words, complex inflectional forms are required in classifying expressions such as (17a-19a) because they license the empty N position at LF. This mechanism may be illustrated in the following may:

(21) [DP [FP attributive A [FP genitive [ClassP N_i [NP classifying A_{LA} \rightarrow t_i]]]]] (t_i – trace of covert movement; \rightarrow – morphological licensing)

Note that adjectival inflection licenses empty categories in many inflectional languages; see e.g. Kester (1996). Additional argument for the interpretation of long adjectival morphology in Lithuanian as a licensing phenomenon comes from the fact that, even in structures which are not derived by movement, the pronominal adjectival form is required when null nominals need to be licensed. This may be illustrated with examples such as (22) (adapted from Dambriūnas, Klimas and Schmalstieg 1980:228): the pronominal form *baltoji* 'white' corresponds to the English structure *the white one*.

(22) Krautuvėje yra daug lempų – geltonų, raudonų, baltų. store-LOC are many lamps – yellow, red, white Man labiau patinka ta baltoji.

I-DAT more pleases that white-LA 'In the store are many lamps – yellow, red, white. I prefer the white one.'

Thus, it could be argued that the empty equivalent of the English element

one must be preceded (licensed/governed) by long morphology, as shown below:

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(23) [_{NP} A_{LA} \rightarrow [e]]
(\rightarrow – morphological licensing)
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Otrębski (1956:111) points out that structures such as (23) may become lexicalized, giving rise to new nouns, as in the case of the following words used in some dialects of Lithuanian:

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(24) juodasis
    black-LA (masculine)
    'devil' (literally 'the black one')
(25) nelabasis
    evil-LA (masculine)
     'devil' (literally 'the evil one')
(26) ilgoji
    long-LA (feminine)
     'adder' (literally 'the long one')
(27) karčioji
    bitter-LA (feminine)
     'bitter vodka' (literally 'the bitter one')
(28) tiesioji
    straight-LA (feminine)
     'straight line' (literally 'the straight one')
(29) kreivoji
    curved-LA (feminine)
     'curve' (literally 'the curved one')
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The structure in (23) can also be used to refer to people and animals or to create nicknames – see (30).²

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(30) juodoji
black-LA (feminine)
a common name for a cow (literally 'the black one')
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All the above cases show that long adjectival morphology is required in Lithuanian whenever an adjective has to license an empty nominal position.

^{2.} Note that long adjectives are also used in this context in Serbian, e.g. *Beli* 'the white one' is a common nickname for a blonde man.

Dambriūnas, Klimas and Schmalstieg (1980:228) suggest that long adjectival morphology "imparts a generic meaning of the noun, because of the fact it denotes a permanent characteristic". However, it should be noted that the model we propose does not imply that classifying expressions are necessarily generic. Therefore, it differs considerably from Trugman's (2005) analysis of Russian. According to her, structures with postnominal adjectives (which are limited to scientific or technical terms in Russian) cannot be object-referring. Trugman (2005) illustrates this observation with the following data:

- (31) a. Ussurijskij tigr sil'noe životnoe. Ussurijsk-ADJ tiger strong animal 'The Ussurijsk tiger is a strong animal.'
 - Tigr ussurijskij sil'noe životnoe.
 tiger Ussurijsk-ADJ strong animal
 'The Ussurijsk tiger is a strong animal.'
- (32)a. Ussurijskij tigr byl ubit včera večerom brakon'erami.
 Ussurijsk-ADJ tiger was killed yesterday evening poachers-INSTR
 'An Ussurijsk tiger was killed by the poachers vesterday evening.'
 - *Tigr ussurijskij byl ubit včera večerom brakon'erami.
 tiger Ussurijsk-ADJ was killed yesterday evening poachers-INSTR

Sentences (31a-b) have generic subjects, whilst in examples such as (32a-b) the subject must be object-referring (because the latter case involves an episodic, stage-level predicate). Trugman (2005) shows that the postnominal placement of adjectives is (optionally) possible in generic contexts only: expressions such as *tigr ussurijskij* 'Ussurijsk tiger' must be generic, whereas expressions such as *ussurijskij tigr*, might be either generic or object-referring. Trugman (2005) assumes that it is the generic reading that drives N-raising in examples such as (31b). Although the analysis proposed in Rutkowski and Progovac (2005) also assumes N-raising in structures such as (4a), its motivation is not connected to genericity. As shown in (33-34), in Polish both generic and object-referring uses of classifying expressions require N-raising (see also Rutkowski 2006):

- (33)a. Tygrys syberyjski to silne zwierzę. tiger Siberian COP strong animal 'The Siberian tiger is a strong animal.'
 - *Syberyjski tygrys to silne zwierzę.
 Siberian tiger COP strong animal

- (34) a. Tygrys syberyjski zastał zabity wczoraj wieczorem przez tiger Siberian was killed yesterday evening by kłusowników.

poachers

- 'A Siberian tiger was killed by the poachers yesterday evening.'
- *Syberyjski tygrys zastał zabity wczoraj wieczorem przez Siberian tiger was killed yesterday evening by kłusowników. poachers

Similarly, the use of long adjectival morphology in Lithuanian is independent from whether the classifying expression is used generically or not:

- Paprastasis suopis tai stiprus gyvūnas. (35)ordinary-LA buzzard COP strong animal 'The common buzzard is a strong animal.'
- Paprastasis suopis vakar vakare buvo brakonierių nušautas. (36)ordinary-LA buzzard vesterday evening was poachers-GEN shot 'A common buzzard was killed by the poachers yesterday evening.'

Therefore, we do not see any motivation for assuming that classifying structures in Lithuanian must be generic.

4. Conclusion

We conclude that the behavior of Lithuanian classifying adjectives provides both morphosyntactic and word-order evidence for ClassP (Classification Phrase), i.e. a special functional layer located immediately above the head noun. In classifying constructions, the head of this projection is targeted by covert (in Lithuanian and Serbian) or overt (in Polish) Nmovement. The fact that Lithuanian (Baltic) and Serbian (Slavic) employ exactly the same morphological mechanism to express the classificatory interpretation provides important cross-linguistic support for the covert Nto-Class raising analysis proposed in Rutkowski and Progovac (2005). Additional evidence for the ClassP model comes from the relative ordering of Lithuanian classifying adjectives and genitives. If ClassP is assumed, the classifying adjective must be analyzed as base generated NP-internally. This account finds confirmation in the fact that Lithuanian classifying adjectives are separated from regular attributive adjectival slots by genitival phrases.

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