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A Note on Bulgarian Numeral Classifiers*

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Abstract

The paper brings up new data highlighting the existence of a restricted numeral classifier system in Bulgarian. Starting from one observation of Greenberg's, we argue that numeral classifiers in Bulgarian behave as a consistent class and share properties with numeral classifiers in standard numeral classifier languages such as Chinese and Thai.

Greenberg (1972, fn.5), in mentioning the existence of languages whose numeral classifier system is 'very marginal', gives as an example Bulgarian, where *dúši* 'souls' is employed in enumerating plural masculine human nouns. An example is given in (1):¹

- (1) Trima dúši studenti/rabotnici/bâlgari
three souls students/workers/Bulgarians
'three students/workers/Bulgarians'

Here, we bring to light additional evidence for Greenberg's original observation, in an attempt to begin exploring the numeral classifier system of Bulgarian, the existence of which, strangely enough, has remained totally unnoticed in traditional grammars of Bulgarian.

Strictly speaking, the form *dúši* in (1) is a suppletive plural form of *čovek* 'person' and is thus better rendered as 'persons' rather than 'souls' (cf. (2)). This is confirmed by the fact that *dúši* has the accent on the first syllable, differently from the regular plural of *dušá* 'soul', which is accented on the second syllable (*duší* 'souls').²

- (2) Kolko dúši imaše tam?
how.many persons were there?
'How many people were there?'

Typically, the numeral classifier co-occurs with nouns indicating profession, some type of occupation or nationality.³

Furthermore, as (3) shows, the corresponding singular noun, *čovek* 'person', can also be used as a numeral classifier.⁴ In addition to *dúši*, *čovek* has other three plural forms – the regular one *čoveci*, which has no numeral classifier usage, and is nowadays felt mostly as archaic; the suppletive form *xora* 'people', also not used in classifier contexts (cf. (4)a), and a special "numeral plural" *čoveka* also used as a numeral classifier (cf. (4)b). The classifiers *čovek/čoveka* and *dúši* appear after all numerals and the quantifiers *njakolko* 'several', (interrogative, but not exclamative) *kolko* 'how many', and *tolkova* 'so many'. It is not possible after multal and paucal quantifiers like *mnogo* 'many' and *malko* 'few', which take the regular plural: *mnogo xora* 'many people', *malko xora* 'few people'). Cf. (4):

- (3) Ot Sofia dojde samo edin čovek aktjor.
 from Sofia came just one person actor
 ‘From Sofia only one actor came’
- (4)a *Trjabvat mi trima čoveci/xora aktjori
 need3PL meDAT three people actors
 ‘I need three actors’
- b Triabvat mi trima dúši/čovek-a aktjori za tova šou.⁵
 need3PL meDAT three persons actors for this show
 ‘I need three actors for this show’

The numeral classifier system of Bulgarian might be taken to contain two types of classifiers: **sortal** (of the type illustrated in (1), (3), (4)b), and by the more archaic expression in (5)), and **mensural** (illustrated by the items in (6)).

- (5) deset glavi ovce⁶
 ten heads sheep.PL
 ‘ten sheep’
- (6) a. dve butilki vino
 two bottles wine
 ‘two bottles of wine’
- b. dve čaši kafe
 two cups coffee
 ‘two cups of coffee’
- c. xiljada akra zemja
 thousand acres earth
 ‘one thousand acres of land’
- d. dva paketa cigari
 two packets cigarettes
 ‘two packets of cigarettes’
- e. tri kila zaxar
 three kilos sugar
 ‘three kilos of sugar’
- f. sto grama rakia
 hundred grams rakia
 ‘one hundred grams of rakia’
- g. dve lâžici sirop
 two spoons syrup
 ‘two spoons of syrup’
- etc.

However, there are difficulties in analyzing the items in (6) as representing a genuine class of numeral classifiers (cf. Cheng and Sybesma 1999: 515f; Kayne 2003: 220fn19). This becomes clear from a comparison of the numeral sortal classifiers *čovek/čoveka*, *dúši*, and *glavi*, on one side, and the items in (6), on the other. For one thing, while the former are extremely limited in number (three, or four, if one counts the archaic form *glavi*), the latter appear to represent an open class.⁷

Second, differently from *čovek/čoveka, dúši* (and *glavi*), which, as noted below, are only licensed in the presence of a numeral, the items in (6) need not be preceded by a numeral (see, for example, *butilkite vino* ‘the bottles of wine’, *tezi čaši kafe* ‘these cups of coffee’).

Third, while the sortal classifiers *čovek/čoveka, dúši* (and *glavi*) cannot be modified by adjectives (see (7)), as is perhaps to be expected of functional heads (Cheng and Sybesma 1999: 516; Kayne 2003: 218; 2005:13; Svenonius 2006), mensural “classifiers” can (see (8)).

(7) **trima dobri dúši studenti*
 three clever persons students
 ‘three clever students’

(8) *dve pâlni lâžici sirop*
 two full spoons syrup
 ‘two full spoonfuls of syrup’

An exact parallel to the contrast between (7) and (8) is provided by (9)-(10) from a typical numeral classifier language like Chinese (Cheng and Sybesma 1999: 516). Here, too, sortal classifiers cannot be modified by adjectives, while mensural classifiers can. Such parallels seem to indicate that in Bulgarian the ‘mensural classifier’ does not have the status of a functional element, but possibly that of an independent nominal head:⁸

(9) **yi da zhi gou*
 one big CL dog

(10) *na yi xiao xiang shu*
 that one small box book
 ‘that (one) small box of books’

Despite the considerable cross-linguistic variation in the order of numerals, numeral classifiers, adjectives and nouns, the base-generation structure of these elements arguably is the one given in (11). See Cheng and Sybesma (1999: 527), Kayne (2003: 219), Simpson (2005: 828), Svenonius (2006).

(11) (Demonstrative >) Numeral > Numeral Classifier > Adjective > Noun.

Indeed, in Bulgarian, as well as in Chinese, adjectives follow the classifier. See (12) and (13):

(12) *Samo dvama dúši novi studenti doidoxa.*
 only two persons new students came3PL
 ‘Only two new students came’

(13) (*wǒ de zhù zài déguó de*) *nà liǎng ge hǎo péngyǒu* (Liu 2003: 27)
 (1sg DE live Loc Germany DE) that two CL good friend
 ‘those two good friends of mine who live in Germany’

Bulgarian however differs from Chinese, and from other numeral classifier languages, since the numeral classifier is compatible with a demonstrative only in the presence of a numeral or of the quantifier *njakolko* ‘several’ – the only quantifier admitted with demonstratives:⁹

- (14) a tezi dvama/njakolko duši studenti
 these two/several persons students
 ‘these two/several students’
 b *tezi duši studenti
 these person students

In addition to *duši*, noted by Greenberg, and *čovek/čoveka* (and *glavi*), which make Bulgarian a “numeral classifier language”, albeit of a limited kind, Bulgarian possesses other classifiers that are found both in traditional “numeral classifier” languages like Thai, or Chinese, as well as in “non numeral classifier” languages like English or Italian. One class of such classifiers is represented by time units (*čas* ‘hour’, *godina* ‘year’, *pât* ‘time’ (as in *many times*, etc.).

Greenberg (1975)¹⁰ notes that “it is generally the case that numeral classifier languages will apparently lack a classifier in nouns indicating periods of time, units of distance and the word ‘time’ in such phrases as ‘five times’. [In Greenberg 1972] it was hypothesized that in these cases the correct interpretation was not that the classifier is omitted but that words like ‘day’, ‘mile’ and ‘time’ are themselves measures of verbal action so that we have to do with a subtype of the overall classifier or measure phrases. In other words, such phrases as ‘five days’ are rather to be identified with (Q <--> Cl) than (Q <--> N).” (p.30).

Certain numeral classifier languages provide direct evidence for this conclusion as the apparently classifier-less N does not occupy the normal position of the noun but that of the “absent” classifier. This is especially evident in Thai, where the noun and the numeral classifier are on opposite sides with respect to the numeral.

As Allan (1977: 306f) notes, nouns like ‘year’, in adverbial constructions, can unexpectedly appear with a numeral and without a classifier:

- (15) nỳn pi•
 one year
 Num N

What is even more striking, Allan says, is that such nouns do not appear in the ordinary position occupied by the noun, i.e., before the numeral, as in (16a), but rather follow the numeral, thus occupying the position normally occupied by the classifier itself, as in (16b):

- (16)a. *mă si tua*
 dog four CL
 ‘four dogs’
 b. *sì tua*
 four CL = ‘four (of them)’ [animals, coats, etc.]

Very insightfully he concludes, citing Haas (1942:204), that in order to accommodate these facts, *pi•* ‘year’ in (15) “must be interpreted as a classifier, and [(15)] must be given a new structural description” (p.307). Namely (17), his (58):

- (17) nỳn pi•
 Q C [=Num CL]

Allan adds that “the alternative, that the labels [Num] and N of [(15)] be swapped, is absurd.” (p.307).¹¹

It is at this point interesting to note that time units like ‘year’ in Bulgarian also lack properties of ordinary nouns, sharing instead properties with the numeral classifiers *čovek/čoveka, duši* (and *glavi*), as well as with the numeral classifiers of other ‘numeral classifier languages’.

For example, it was noted above that the numeral classifiers *čovek/čoveka, duši* (and *glavi*) in Bulgarian cannot be modified by adjectives (see (7) above), and that the same is true for Chinese too (see (9)above).

Now, *godina* ‘year’, when it is used adverbially to express a time measure, behaves in exactly the same way as the other numeral classifiers in Bulgarian, as well as the numeral classifiers of other ‘numeral classifier languages’. Namely, it cannot be modified by an adjective, (18):

- (18) a. *Živjax tri prekrasni godini v London.
lived1SG three wonderful years in London
lit. ‘I lived three beautiful years in London’
b. *Predi tri prekrasni godini bjax v London....
before three beautiful years was(I) in London
‘Three beautiful years ago I was in London’

This suggests that in (18) *godina* is a numeral classifier.¹²

Kayne (2003) has argued for the existence of a non pronounced numeral classifier ‘year’ in English, in expressions like *I am seven, at the age of seven*, etc. Bulgarian also has this silent classifier ‘year’. See (19)-(20):

- (19) Az sâm na petdeset. A ti na kolko si?
I am of fifty. And you of how many?
‘I am fifty years old. And how old are you?’
- (20) Ivan ima tri malki dâšteri. Naj-malkata e na dve.
Ivan has three littlePL daughterPL. smallest.the is of two
‘Ivan has three little daughters. The smallest is two’

The possibility of exploiting a ‘silent numeral classifier’ strategy does not seem to depend on whether the language has or doesn’t have a plural morpheme “on prenominal adjectives or on overt prenominal classifiers without (the equivalent of) *of*” (cf. Kayne 2003: 220). Unlike English, Bulgarian shows a plural morpheme on both prenominal adjectives (cf. 20), and on the prenominal classifiers *duši/čoveka* ‘person.PL’ (cf. e.g. (4)b above); yet it allows a silent classifier. Rather, the possibility may turn out to be related to the fact that both Bulgarian and English use *be* in expressions of time/age, in contrast to French and Italian, which use ‘have’ (cf. Kayne 2003,fn.13). From a small preliminary survey it would seem that this latter factor (choice of ‘be’ vs. ‘have’) might be responsible for the (non)silence of the classifier ‘year’. Polish, and Romanian, which employ ‘have’, pattern with French and Italian in disallowing silent ‘year’, while Finnish, which uses ‘be’, patterns with Bulgarian and English in allowing it. Of course, this conjecture will need to be more systematically checked.

In this paper, we discussed corroborating evidence for Greenberg’s observation that Bulgarian possesses numeral classifiers, and we have identified several properties of what seems to be a consistent class, at the same time excluding some apparent candidates for membership in the numeral classifier system.

*This paper is dedicated to a great scholar and a dear friend – Alexandra Cornilescu. We are happy to know her in both of these aspects and we are deeply grateful for everything her friendship means to us.

¹ Numerals from 2 to 10 (but nowadays most typically from 2 to 6) have a special +plural, +masculine, +human form ending in *-ma* or *-ima* (*dvama* ‘two’, *trima* ‘three’, *četirima* ‘four’, *petima* ‘five’, *šestima* ‘six’; e.g. *trima studenti* ‘three male students, or three students, at least one of which is male’) and an elsewhere form (*dve* ‘two’, *tri* ‘three’, *četiri* ‘four’, *pet* ‘five’, *šest* ‘six’, etc.; e.g. *tri ženi* ‘three women’). Cf. Pašov (1999: 92, GSBE 1983: 183). The special *-ma/-ima* form could itself be considered a suffixal classifier for numerals doubling the features of the numeral classifier, a situation reminiscent of the Akatek Mayan case mentioned in note 8.

² The two may be historically related, a question that we leave aside here.

³ They cannot appear with kinship terms, nor with other types of descriptive nouns (see, for example, the ungrammaticality of (i)), but their precise co-occurrence restrictions need to be studied more carefully.

- (i) *Trima duši bratja/graždani
three persons brothers/citizens

⁴ Bulgarian is similar to many other numeral classifier languages in using the noun for ‘person’/‘people’ as a numeral classifier for human nouns. This is true for example of Vietnamese, Indonesian and Thai (Goral 1978: 16), of Ambulas (Papuan – Wilson 1980: 86), and of many other classifier languages.

As Adams and Conklin (1973), in their study of 37 numeral classifier languages of the Malayo-Polynesian, Austro-Asiatic, Mon-Khmer, Sino-Tibetan, Altaic, Dravidian, and Indo-European families, put it, “the animateness distinction is the most basic categorization in the counting construction. The primacy of animateness for classification can be observed in minimally developed systems (those with only two or three classifiers), where an animateness distinction is always required and may be the only distinction made” (p.3).

⁵ Apart from appearing in the classifier *čovek-a*, the special “numeral plural” in *-a* that we see in (4b) is obligatorily used as the plural form of all *inanimate* masculine nouns when they follow a numeral or one of the quantifiers *njakolko* ‘several’, (non-exclamative) *kolko* ‘how many’, and *tolkova* ‘so many’:

- (i) a. dva/tri/četiri/pet/etc. prozorec-a/xotel-a/metr-a/milion-a
two/three/four/five/etc. windows/hotels/meters/millions
b. njakolko/kolko/tolkova prozorec-a/xotel-a/metr-a/milion-a
several/how many/so many windows/hotels/meters/millions

The numeral plural form in *-a* is a descendant of the now obsolete Nominative-Accusative masculine dual form in *-a* (Mirčev 1978: 195-196). For some further complications see GSBE (1983: 108).

⁶Cf. the Chinese parallel in (i):

- (i) ba tou niu (Cheng and Sybesma 1999,516)
eight CL-head cow
‘eight cows’

⁷ That mensural classifiers, as opposed to sortal classifiers, are an “open-ended class” is also noted in Adams and Conklin (1973: 2).

⁸ The fact, noted in Simpson (2005: 810), that a limited range of adjectives can be inserted between numerals and the classifier position in Chinese (see (i)) has to be looked into:

- (i)a. yi xiao ben shu
one small CL book
‘one small book’
b. liu da jian xingli
six big CL luggage
‘six big pieces of luggage’

Possibly, either the ‘adjective’ fills a special functional projection (like diminutive *little* in English – cf. Cinque 2006), or the classifier in (i) is a lower (nonnumeral) classifier (perhaps corresponding to ‘gender’) of the type found in Thai (see (ii)), and in Kanjobalan (Mayan) languages, for which Grinevald (2000: 70) gives the order Number+classifier > numeral classifier > Plural > classifier > Noun (see for example (iii) in Akatek Maya, from Zavala 2000: 125):

- (ii) mă· tua lég sǝ·ŋ tua nán (Haas 1942, section 3)
dog CL little two CL that
‘those two little dogs’
(iii) kaa-(e)b’ xoyan ‘ixim paat
two-CL numeral CL(for round objects) CL tortilla
‘two tortillas’

⁹ If in *tozi aktjor* ‘this actor’ there is a non pronounced *edin* ‘one’, this is not able to license the numeral classifier (**tozi čovek aktjor* ‘this person actor’). But see Cheng and Sybesma (1999: 525f) for arguments that the corresponding Chinese Dem CL N do not have an unpronounced ‘one’.

¹⁰ Also see Haas (1942,204), Greenberg (1972: 5), Allen (1977,§6), Simpson (2005).

¹¹ Also see Simpson (2005 section 7), where it is suggested that cases like (14) involve raising of N to CL.

¹² The fact that when used as an argument (say as the object of a transitive verb) it may be modified by adjectives (as (i) shows), means that it can also be an ordinary noun:

- (i) Prekarax tri prekrasni godini v London.
spent1SG three beautiful years in London
'I spent three beautiful years in London'

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