## Distributive Numerals in Tocharian B and Balto-Slavic

## Abstract

Although Werner Winter has remarked in his important description of Tocharian B distributive numbers that "no Indo-European parallels seem to be available" (Winter 1992, p.142, cf. also Winter 1987), an exact correspondence to the Tocharian B forms can be found in Balto-Slavic. In Tocharian B, Eastern Baltic (particularly Lithuanian) and Slavic these forms express a collective meaning. They refer to groups of objects and/or human beings (most often to Pluralia tantum). In Tocharian B such distributive derivatives with the suffix  $-\bar{a}r$  (<\*-ar according to Winter's internal reconstruction) are formed from the numerals '1' (som-ār 'one each', for instance som-ār ytārisa makci 'they themselves moved, each along a single way', Adams 1999, p. 702; 'je auf einem Weg sich selbst bewegend', Carling 2000, p. 93; see on the root \* $se[/o/\theta]m$ -'one' in the other Tocharian number forms Blažek1999, pp. 152-153)', '2' (wy-ār truant 'by two measures of capacity'), 4 (*śwer-ār* <\**śtwer-ār* 'by fours'), '6'(*skäs-ār* 'by sixes'), '7' (suk-ār 'by sevens'), '8' (okt-ār tma[ne] 'in groups of eight thousand', Adams 1999, p.111), '9'(ñuw-ār 'by nines'), '10' (śk-ar śk-ār ṣamṣtär 'it is counted ten by ten', Adams 1999, p. 638). In Tocharian B the limits of the use of the suffix may exceed the first ten numerals and can be expanded to decads: '50" (piśäk-ar in känte piśäkar ' by one hundred fifty' with a trace of another word accent in the quantity of the last vowel in the final syllable as also in the following examples for decads), '70' (suktank-ar' by seventies'), '80' (oktank-ar 'by eighties). It is possible that vilts-ār 'by thousands' is formed with the same suffix from the number word *yaltse* '1000' (Winter 1987; 1999; the distributive number form was not included in Adams' dictionary). The same type of a suffix is present in ywarc- ār 'two parts each' (it is supposed that the stem ywar-c 'half, in the midst, divided [in mind]' may go itself back to a similar formation from \*-dw-'2', Adams 1999, p. 520 with references; the form in Tocharian A might have been borrowed from B). Also it was possible to form such a distributive collective Plural from  $k_u$  sane a coin and a measure of weight': kuśan-ār 'by kuśane-s ' in a phrase"[these ingredients measured out] by *kuśane-s'* worth"- in a list of ingredients, Adams 1999, p. 185.

A comparable set of masculine forms of "collective numbers' ("Kollektivzahlen", Leskien 1919, S. 174; "liczebniki zbiorowe", Otrębski 1956, s. 172-173) in Lithuanian is derived with the suffix —*er-ì* from the numerals 1, 4-9: 1 *vien-er-ì* (with Pluralia tantum: *vien-er-ì metai*' ein Jahr', Senn 1966, S.216; Endzelīns/Schmalstieg and Jēgers 1971, p. 185), 4 *ketv-er-ì*, 5 *penk-er-ì*, 6 šeš-er-ì, 7 *septyn-er-ì*, 8 aštuon-er-ì, 9 devyn-er-ì. The forms are used with Pluralia Tantum and refer to collective nouns. Different from Tocharian B and Slavic there are corresponding Feminine Gender forms like *vienerios,... devýnerios*. Also Singular Neuter forms *ketveria,... devýneria* are used in Lithuanian (Stang 1966, S.285). In Southern Lithuanian and some other dialects the suffix appears with-*I*- instead of —*r*-; that is explained by Otrębski as a result of the later influence of a form of the same type *kel-er/l-ì* that is derived from an interrogative pronoun *kel-ì*.

In Slavic the suffix of the distributive Plural has an ablaut change \*-er-/-or-. In a dead Western Slavic Polabian language the following distributive numerals with the suffix-\*or- have been found (Suprun 1961): 4 citv-ăr-ű; 5 pąt-qr-ű: 6 sist-ăr-ű; 7 sidm-ăr-ű; 8 vism-ăr-ű; 9 divqt-ăr-ű; 10 disqt-ăr-ű. Eastern Slavic Old Russian uses a corresponding ablaut form - \*er- (similar to the Eastern Baltic one) together with -\*or- probably borrowed from Old Church Slavic: 4 četv-erű and (borrowed from Southern Slavic?) četv-orű, 5 pjęt-erű (the accusative of which was written also as 5-ry= pjęt-ery, Schmalstieg 2005, p.74 with analyses of this and other contexts), 6 šest-erű; 7 sem-erű; 8 osm-erű. In Southern Slavic Old Church Slavic there are forms with the suffix-\*or-: 4 četv-orű (with a derivation četv-or-ica 'four times' that is similar to sŭt-or-ica 'by one hundred times' from\* sŭt-or-); 7 sedm-or-o (used together with the derived noun sedm-or-ica, a variant sedm-er-ica), 10 desęt-or-o (Ceitlin, Večerka, Blagova 1994, pp. 186-187, 600, 672).

The common Balto-Slavic origin of Lithuanian (Eastern Baltic) and Slavic distributive numerals has been accepted and described in standard textbooks. A possibility of their identification to the Tocharian B distributive numbers is made plausible by the similarity of the suffixes and their functions and by comparable restriction on the main numerals (4-10) to which the suffix can be added. Some Lithuanian and Tocharian B forms of distributive numerals seem almost identical from the historical point of view (as for instance, the forms derived from the numeral'6'). There is one important distinction between the forms derived from the numeral '4': the Tocharian B distributive form is not exceptional, in its structure it is identical to the other derivatives and does not support the view according to which the analogy to this numeral could explain the origin of the whole type. This point of view goes back to Brugmann, but it was repeated by Meillet, Vaiillant, Stang, Otrebski, Szemerényi and other scholars. Although recently an alternative hypothesis has been proposed according to which the suffix can be interpreted as an ancient Indo-European one, this new idea (anticipated already in Skardžius 1943, p. 305) has been rejected by Suprun (1969, s. 83-84) who insisted on the role of analogy defending Brugmann's view. In so far as a derived nominal stem like Sanskrit *catv-āra-m* 'a place of 4 corners' is concerned, one might support its formal identity to Old Church Slavonic četv-orŭ and Lithuanian ketv-er-ì. But its formal difference from Tocharian B śwer-ār <\*śtwer-ār 'by fours' contradicts the main idea of Brugmann and his followers. Recently in the light of the Hittite evidence the importance of a grammatical category of collective nominal forms has been stressed (Eichner 1985; Neu 1992; Hoffner and Melchert 2008, pp.68, 71-72, 240). Their traces in To charian B include nouns with the last element  $-\bar{a}r$ . It appears that the distributive numerals in Tocharian B and Balto-Slavic might go back to special collective numeral forms used to accompany collective nouns (some of which might have been reinterpreted later as Pluralia tantum). Some of the correspondences observed by Brugmann and his followers remain, but we may give them another interpretation in the light of the Tocharian and Hittite facts. The new semantic function that looks identical in all the 3 Indo-European dialects can be viewed upon as a later innovation. Then this grammatical innovation can be added to a number of isoglosses that unite Tocharian and Balto-Slavic. It will be interesting to attempt to find the reasons for the disappearance of this category of numerals in Tocharian A.

## REFERENCES

Adams, Douglas Q. A Dictionary of Tocharian B. Amsterdam/Atlanta: Rodopi, 1999. Blažek, Václav. Numerals. Opera Universitatis Masarykiana Brunensis. Facultas Philosophica. Čislo 322. 1999.

Carling, Gerd. Die Funktionen der lokalen Kasus im Tocharischen. Berlin/New York: Mouton – de Gruyter 2000.

Ceitlin, R.M., Večerka, R., Blagova, E. (eds.) *Staroslavjanskij slovar'* (po rukopisjam X-XI vekov) (An Old Church Slavonic Dictionary [on the base of the manuscripts of X-XI centuries]. Moscow; Russkij jazyk, 1994.

Eichner, H. Das Problem des Ansatzes eines indogermanischen Numerus 'Kollektiv' ('Komprehensiv').-*Akten der VII Fachtagung der Indogermanischen Gesellschaft.* Wiesbaden: Reichelt, 1985; SS.134-169.

Endzelīns, J. *Comparative Phonology and Morphology of the Baltic Languages.*, transl. W.R.Schmalstieg and B. Jēgers. The Hague-Paris; Mouton, 1971.

Hoffner, H. and Melchert, C.H. A Grammar of the Hittite language. Part 1; Reference grammar, Winona Lake, Indiana; Eisenbrauns, 2008.

Leskien, A. *Litauisches Lesebuch mit Grammatik und Wörterbuch*. Heidelberg: Carl Winter. 1919.

Neu, E. Zum Kollektivum im Hethitischen. IN: *Per una grammatical ittita*. Pavia, 1992; pp. 197-212.

Otrębski, J. *Gramatyka języka litewskiego*. Tom I I I. Nauka o formach. Warszawa: Panstwowe wydawnictwo Naukowe, 1956.

Schmalstieg, W.R. *An Introduction to Old Russian*, Journal of Indo-European Studies, Monograph number 15. Washington, DC, 2005.

Senn, A. Handbuch der Litauischen Sprache. Heidelberg: Carl Winter, 1966.

Skardžius, Pranas. *Lietuvių kalbos žodžių daryba*. Vilnius: Lietuvių kalbos Institutas, 1943.

Stang, Chr. Vergleichende Grammatik der Baltischen Sprachen. Oslo, 1966.

Suprun, A.E. Polabskie chislitel'nye (Polabian Numerals, in Russian). Frunze. 1961.

Suprun, A.E. *Slavjanskie chislitel'nye* (Slavic Numerals, in Russian). Minsk; izd. BGU, 1969.

Winter, Werner. Distributive Numbers in Tocharian.- *Tocharian and Indo-European Studies*, vol.1,1987, pp. 238-244.

Winter, Werner. Tocharian. In; J.Gvozdavić (ed.). *Indo-European Numerals*. Berlin: Mouton-de Gruyter, 1992, pp. 96-161.