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LITHUANIAN *keturi*, LATVIAN *četri**With deep respect to the memory of Christian S. Stang*

The morphology of this numeral in Baltic has been dealt with in detail on a number of occasions, and much of the separate developmental history has been assigned a set of presumed sources, in large part no doubt correct. But what has been lacking in prior explanations is a series of motivations to account for the precise choice of forms that the Baltic languages have made.

It has been remarked (Stang *VGBS* 278) that the numerals '5' to '9' have taken on the inflexion of '4', although they were indeclinable in Indo-European. This is clearly a form of analogy, i.e. all these numerals which share a common set of semantic syntaxes have taken on a common set of morphological markers. Moreover, since the Baltic languages typologically have preserved a full declensional inflexion and have tended to make their declensions uniformly non-alternating (**akm̃mi* > *akmenimi*, **duktros* > *dukter(ė)s*, **d̃ntmi* > *dantimi*) and parisyllabic in the stem for the most part, the development of these identically declined nominals conformed to the trend of eliminating minor types from the fully declined system; cf. the parallel regularizing of *tas*, *jis*, *kas*, *kuris*, and *tūkstantis*.

Stang (loc. cit.) also points out, without offering an explanation, that 4–9 have adopted specifically an adjectival *īo-|īā-* stem type. This may be understood as according primary recognition to the modifying/quantifying (i.e. adjectival) rôle of the numerals; of course, as adjectives, they may then become syntactically nominalized.

Moreover, the specific shape of the adjectival *-īo|īā-* stem may be readily understood when we recall the systematically deviant acc. pl. masc. *-is* of these numerals. Here we clearly have a thematization of an *i*-stem, originating in '4', generating an adjectival *-īo-* stem of appurtenance; that is, **-i-o|īā-* > **-īo|īā-*. This apparent *i*-stem is still to be seen in acc. masc. *kėturis*.

At this point we now see that we have a means of understanding the conservation of form that has been claimed (*VGBS* 278, 186) for the adverbial (< *loc. pl.) *keturiese*, Žem. *keturijsu*, Rietavas *katureisus*; this form has been compared, as a relic formation, to OCS *vlbcěxǔ*, Skt. *ṽrkeṣu* < **-oisu*. However, at first glance a reflective consideration of this claim makes one wonder why an original **-oisu* should be preserved precisely in a paradigm that was not really an **o*-stem. The answer seems to be that the pre-form was not exactly **-oisu*, but rather **-īoisu*; a comparable phonetic situation no doubt underlies the dat. pl. *didiem(u)s*, dat. du. *didiem*. I suggest also a like background for *tīem(u)s* (*VGBS* 244; transferred also to the adjectives, on which see *VGBS* 261). In the latter case, rather than an unlikely ablaut in **ei* beside OCS *tēmǔ*, Goth. *þaim*, Skt. *tėbhyaś*, I propose a pre-form **toimus* ~

tjoimus, and for OPruss. *stēimans* etc. **stjoimons* parallel to *dei* < **djoi* (VGBS 242). Here the intrusive **j* would come from conflation with *-imus* etc. of the *i*-stems seen in Žem. *têms*, Mažvydas *tims*, *gimus*. Now just as *stēimans* and *tiem(u)s* were aided by *tims*, *gimus* etc., so **keturjouisu* and its descendant *keturiese* were supported in their *i*-vocalism by *kēturis* and associated forms. It is, then, the apparent *i*-stem value of '4' that permitted the survival of this stray testimony for **-jouisu*.

In turn, we know that in conformity with the regular development in Baltic and Slavic an apparent *i*-stem may reflect an original athematic consonant stem, or root noun; the fulcrum on which this turned was, of course, the phonetics of the syllabic nasal in the acc. sg. and pl. Therefore *kēturis* is earlier to be derived from **keturns*, itself with a levelled first syllable vocalism from the old nom. pl.¹ The derivation of the paradigm must thus have been:

Nom. * <i>ketures</i>	<	* <i>k^wetuores</i>
Acc. <i>keturns</i>		<i>k^wturms</i>
Instr. <i>keturmīs</i>	}	<i>k^w tur + mis + mas</i>
Dat. <i>keturmūs</i>		
Loc. <i>ketur(i)su</i>		<i>k^w tur + su</i>

Thus we have moved backward in time, motivating each step as we went. We see how the original **k^wturms* is the key for the entire development of the *-jō/ā-* stem numerals.

There remains the Latv. *četri*, that is, older *cetire* loc. *zettros*. Endzelīns (CPMBL 1971, p. 181) remarks on the loss of *u*, giving a weak reason alleging analogy on bisyllabism². Since the series also includes *septiņi*, *astuôņi* and *deviņi* unchanged Endzelīn's argument is obliged to rest on the assumption of counting in series. But I have already rejected such arguments elsewhere³ as an important source of unexpected numeral characteristics; numerals are simply used in several notable syntaxes (e.g. the quantifying adjectival one mentioned above) other than that of serial counting. Besides, if such reductions did occur in certain restricted syntaxes (i.e. reduction by a simple grammatical rule) we might expect the underlying form to be preserved in the simple cardinal, as being the forme de fondation.

When however we note such derived forms as *çeturts*, *czeturkort* *czeturpacmytâ* (1753), with *-ur-* between consonants, and when we recall the productive nature of suffixal ablaut in Baltic (which I have discussed *Baltistica* VI(1) 1970, p. 27–32), it is easy to see how the form *cetr-* could become lexicalized; a form such as *çeturts* would be generated by the rule *r > ur / C – C*, or more generally: *zero → u ~ i / C – RC*.

On the other hand, since *ketviřtas* has not yielded to *ketur-* we do not find *keturi* similarly reduced.

¹ See my discussion of the paradigm in: *Studii clasice*. București, 1977, vol. 17, p. 149.

² Czech *čtyři* is not relevant as Endzelīns claims.

³ See *Foundations of Language*, 1974, vol. 11, p. 463, esp. footnote 4.