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### A note on the Tocharian dual

§1 It appears that the PIE word for 'two' was *\*duo* (cf Cowgill 1985) I reconstruct the nom du ending as *\*-H<sub>1</sub>(e)* (cf Oettinger 1988) for animates and *\*-i* for inanimates The fundamental character of the animacy distinction must be recognized since Weitenberg's basic article (1987 225 and passim) Other endings are analogical, e g *\*duoH<sub>1</sub>* 'two (persons)', *\*duoi* 'two (things)', Skt *aksī* < *\*-i-H<sub>1</sub>* 'both eyes', Gk *οσσε* < *\*-i-H<sub>1</sub>* or *\*-i-e*, with addition of the regular ending of the consonant stems at a prehistoric stage

It is usually assumed that the neuter ending was *\*-iH<sub>1</sub>* (e g , Oettinger 1988 355) While the *\*-H<sub>1</sub>* can easily be analogical in this ending, there are several indications that the earlier ending was *\*-i* First of all, PIE *\*duidkmti* 'twenty' contains a dual ending, as opposed to *\*triH<sub>2</sub>dkomt* 'thirty' (cf Kortlandt 1983b 100), e g Skt *vimśatī*, *trimsat*, Gk *ἑκατὶ*, *τριάκοντα* The short *-i* cannot be analogical in these forms because there is no model Secondly, Vedic *ākṣī* 'eye' may represent the original dual form, which was enlarged to *akṣī́*, AV *ākṣinī* The short *-i* of *ākṣī* is difficult to explain otherwise Thirdly, I think that the nom du ending *\*-i* was preserved in Gathic

In his Gathic grammar, Beekes lists eight instances of short *i* for expected long *ī* (1988 42f) If we disregard the YH forms, which have a shortened vowel in an inner syllable of a polysyllabic word followed by the enclitic *-cā* 'and', the five remaining instances are the following (with translation from Insler 1975)

- (30 11b) *x<sup>v</sup>īticā (ānaitī)* 'both a way of easy access (and one with no access)'

- (31.4b) *ašicā (ārmaitī)* ‘also reward (and piety)’  
 (32.10b) *ašibyā* ‘with (his) eyes’  
 (53.5a) *kainibyō* ‘to (these) girls’  
 (53.8c) *šyeitibyō (vīžibyō)* ‘for the (peacefully) dwelling (settlements)’

The first three instances are dual forms while the last two represent analogical shortening before the oblique plural endings, as in the following cases:

- (49.4b) *(x<sup>v</sup>āiš) hizubīš* ‘with (their own) tongues’  
 (43.7e) *(aibī θwāhū gaēθāhū) tanušicā* (read *tanušucā*) ‘(among thy creatures) and (thine) own’

Though the evidence is not conclusive, the prominence of dual forms among the instances of unexpected short *i* and the absence of neuter dual forms with long *ī* suggest that there was a short neuter ending *\*-i* in Gathic.

§2. Turning to the Tocharian languages, I think that an explanation which starts from PIE. *\*duo* and the endings *\*-H<sub>1</sub>(e)* and *\*-i* is preferable to possible alternatives. It follows that I find myself unable to adopt the interpretation which Hilmarsson has recently proposed in his careful analysis of the material (1989). In this note I shall not go into a detailed discussion but limit myself to a few basic points.

As Pedersen pointed out already (1941: 75), “eine Flexionsform, die in B *-ne*, im A *-n* geben sollte, müsste den ieur. Vokal *o* enthalten haben. Für eine solche Flexionsform gibt es aber nirgends eine Stütze. Wir müssen also in *-ne* eine enklitische Partikel sehen, so unklar es auch ist, wie sie dazu gekommen ist, sich mit Dualformen zu verbinden”. I think that this particle can be identified with the deictic particle *\*an* < *\*H<sub>2</sub>en* (cf. Kortlandt 1983a: 320f.) followed by the numeral *\*dwo* in the same way as Lith. *mūdu* ‘we two’, *jūdu*

'you two', fem *mùdvi*, *jùdvi*, OE *wit*, *git*<sup>1</sup> The same particle is found in the 3rd sg suffixed pronoun A *-m*, B *-ne*

The expected reflex of the PIE endings *\*-H<sub>2</sub>e* and *\*-i* is palatalizing *\*-a* in Proto-Tocharian, and this is indeed the regular ending before the dual particle, e.g. A *aśam*, B *eś(a)ne* 'both eyes' < *\*ok<sup>\*</sup>i-ndwo*, which therefore reflects an older stage than Gk *ὁσσε* (which has an analogical *-e*) I think that the expected reflex of *\*-iH<sub>2</sub>* would be *\*-yā* in view of AB *tās* < *\*dhH<sub>2</sub>s-* and A *-mām*, B *-mane* < *\*-mH<sub>2</sub>nos* (cf Klingenschmitt 1975 161f) The objection that we find *-i-* in the optative does not hold because this mood was inflected thematically, as is clear from the 3rd pl ending B *-yem*, *-yentar*, so that the formative *-i-* represents *\*-iH<sub>2</sub>e-* I agree with Ringe (apud Hilmarsson 1989 10) that the dual ending *\*-a* can easily be analogical in the thematic flexion The expected reflex of the original thematic ending is found in A *wu* < *\*dwoH<sub>2</sub>*, *we* < *\*dwoi* 'two', B *tai* < *\*toi* 'the two' (On A *ti-* for *\*te-* in *tīm* 'these two', *tīm* 'those two' see Kortlandt 1983a 319ff)

The neuter dual ending *\*-i* palatalized the preceding *\*w* in B *kenī(ne)* < *\*gónwī(-ndwo)* 'both knees', but not in A *kanwem* (which adopted *-e-* from *we* < *\*dwoi*) The resulting West Tocharian neuter dual ending *-i* < *\*-wī* then spread to *pwān(ne)* 'two fires' because original *\*-i* was lost without a trace after the consonant *r*, which was unique in resisting palatalization, and further to the Buddhist vocabulary (cf Hilmarsson 1989 59) After the loss of final *\*-a*, the West Tocharian ending *-i* < *\*-wī* was the only nonzero dual ending outside the pronouns, and I think that this is why it replaced *\*-u* and *\*-ai* in B *wī* 'two', where the absence of palatalization shows that it cannot have been original, cf A *wikī*, B *ikam* 'twenty' < *\*dwi-*

If Gk *ἐμφί* 'on both sides' represents *\*H<sub>2</sub>nt-bhī* (Jasanoff 1976), Toch A *āmpī*, B *āntpī*, *antapī* 'both' reflect *\*H<sub>2</sub>nt-bhī-H<sub>2</sub>e*,<sup>2</sup> with similar addition of

<sup>1</sup> The genitive forms in A *-nis*, B *-naisañ*, *-naisī* can be compared with Arcadian *-οιuv* (cf Hilmarsson 1989 61f) and Lith locative *mudviese*, *judviese*

<sup>2</sup> More precisely, the initial vowel and the preservation of *t(a)-* show that *\*H<sub>2</sub>nt-* was replaced by the reflex of acc sg *\*H<sub>2</sub>entm* at some stage My colleague R S P Beekes suggests to me that a derivation from *\*H<sub>2</sub>en-* 'that' rather than *\*H<sub>2</sub>ent-* 'face' is preferable from a semantic point of view I disagree, not only because this leaves the *-t-* unexplained but also because a development from 'two face to face, opposite to each other' actually seems more appropriate to me than from 'the two beyond, on the other side' cf also Gk *ἀντα* *ἀντιος*

the regular dual ending as in Gk. ἄμφω, Latin *ambō* < \**H<sub>2</sub>nt-bhoH<sub>i</sub>*. The form A *āmpuk* may reflect \**H<sub>2</sub>nt-bhi-k*\*(e), with -uk < \*-āk\* as in *yuk*, B *yakwe* 'horse', etc.

§3. Pedersen's derivation of B *ikām* 'twenty' < \**wiknt* (1941: 253) cannot "be safely discarded" (Hilmarsson 1989: 121) because short \**i* probably caused palatalization in the same way as the other front vowels, as is especially clear from the 3rd pl. ending A -ñc < \*-nti. The corresponding B ending -ṃ represents the secondary ending \*-nt (cf. Kortlandt 1979: 66 on the A zero ending beside -ñc). The sequence \**wi* gave rise to the B dual ending -i, as was pointed out above. The absence of palatalization in B *wase* 'poison' does not warrant the assumption of a new sound law but rather points to an early borrowing from Indo-Iranian (Skt. *viśám*), as is indeed suggested by its specialized meaning and lack of phonetic congruity with Gk. ἵος and Latin *vīrus*.

Thus, I think that PIE. \**duidkmti* lost its \*-i on the analogy of \**dekm t* and \**triH<sub>2</sub>dkomt* and developed into A \**wikām*, B *ikām*. Though the ending of A *wiki* looks like the regular nom. pl. ending AB -i < \*-eies of the masculines which did not take the nasal suffix -ñ < \*-nes, it seems probable to me that it originated as a copy from the particle -pi in such instances as A *wiki šapi* 'twenty-one', cf. B *ikām še*. In any case this -i must be of recent origin because it did not palatalize the preceding consonant. It cannot be a dual ending because there is no such ending in East Tocharian.

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