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 *-H₁(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., *duoH₁ 'two (persons)', *duoi 'two (things)', Skt aksi < *-I-H₁ 'both eyes', Gk ὀσσε < *-I-H₁ 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 *-IH₁ (e.g., Oettinger 1988 355) While the *-H₁ can easily be analogical in this ending, there are several indications that the earlier ending was *-I. First of all, PIE *dudh₂mti 'twenty' contains a dual ending, as opposed to *trH₂dKōmt 'thirty' (cf. Kortlandt 1983b 100), e.g., Skt vimśati, trimsat, Gk ἄικατι, τριάκοντα. The short -I cannot be analogical in these forms because there is no model. Secondly, Vedic ākṣi 'eye' may represent the original dual form, which was enlarged to ākṣī, AV ākṣinī. The short -I of ākṣi 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) xvītācā (ānātī) 'both a way of easy access (and one with no access)'
(31.4b)  aśicā (ārmaitī) ‘also reward (and piety)’
(32.10b) aśibyā ‘with (his) eyes’
(53.5a)  kainibyō ‘to (these) girls’
(53.8c)  śyeitibyō (vīṣibyō) ‘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)  (xvāiś) hizubīś ‘with (their own) tongues’
(43.7e)  (aibī thwāhū gaēthāhū) tanuśicā (read tanuśucā) ‘(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 ḳ suggest that there was a short neuter ending *-i in Gāthic.

§2. Turning to the Tocharian languages, I think that an explanation which starts from PIE. *duo and the endings *-H(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 alreday (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 < *Hzen (cf. Kortlandt 1983a: 320f.) followed by the numeral *dwo in the same way as Lith. mūdu ‘we two’, jūdu
‘you two’, fem mūdvī, jūdvī, OE wit, gīt

The same particle is found in the 3rd sg suffixed pronoun A -m, B -ne

The expected reflex of the PIE endings *-H₂e and *-i is palatalizing *-a in Proto-Tocharian, and this is indeed the regular ending before the dual particle, e.g. A āsān, B es(a)ne ‘both eyes’ < *ok’t-r-ndwo, which therefore reflects an older stage than Gk ὀσε (which has an analogical -e). I think that the expected reflex of *-tH₂ would be *-yā in view of AB tās- < *dhH₂s- and A -mām, B -mane < *-mH₂nos (cf. Klingenschmitt 1975 161f). The objection that we find -t- 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 -t- represents *-H₂e- 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 < *dwoH₂, we < *dwoi ‘two’, B tāi < *toi ‘the two’ (On A ti- for *te- in tim ‘these two’, tim ‘those two’ see Kortlandt 1983a 319ff)

The neuter dual ending *-i palatalized the preceding *w in B kenī(ne) < *gonwi(-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 pwār(n)e ‘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 wīki, B ikam ‘twenty’ < *dwi-

If Gk ἀμφί ‘on both sides’ represents *H₂nt-bhi (Jasanoff 1976), Toch A āmpi, B āntpi, antapi ‘both’ reflect *H₂nt-bhi-H₂e, with similar addition of
the regular dual ending as in Gk. ἀμφώ, Latin ambō < *H₂nt-bhoH. The form A āmpuk may reflect *H₂nt-bhi-k*(e), with -uk < *-āk* as in yuk, B yakwe 'horse', etc.

§3. Pedersen's derivation of B ikäm 'twenty' < *wi<knt (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 -ńc < *-nti. The corresponding B ending -m represents the secondary ending *-nt (cf. Kortlandt 1979: 66 on the A zero ending beside -ńc). The sequence *wi* gave rise to the B dual ending -i, as was pointed out above. The absence of palatalization in B was 'poison' does not warrant the assumption of a new sound law but rather points to an early borrowing from Indo-Iranian (Skt. viṣām), as is indeed suggested by its specialized meaning and lack of phonetic congruity with Gk. ἰός and Latin viūrus.

Thus, I think that PIE. *dui<knti lost its *-i on the analogy of *de<knt and *triH₂dkont 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 -ń < *-nes, it seems probable to me that it originated as a copy from the particle -pi in such instances as A wiki șapi 'twenty-one', cf. B ikām şe. 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.

Frederik Kortlandt
Cobetstraat 24
2313 KC Leiden
Holland
REFERENCES

Beekes, R. S. P.

Cowgill, W.

Hilmarsson, J.

Insler, S.

Jasanoff, J. H.

Klingenschmitt, G.

Kortlandt, F.
1979 "Toward a reconstruction of the Balto-Slavic verbal system", Lingua 49, pp. 51–70.

Oettinger, N.
Pedersen, H.
1941 *Tocharisch vom Gesichtspunkt der indoeuropäischen Sprachvergleichung*. København.

Weitenberg, J. J. S.