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Proto-Indo-European *-ye/o- presents in Tocharian: consensus and contentions

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1. Introduction

A non-specialist consulting the standard references may easily obtain the impression that PIE *-ye/O- presents have nearly disappeared in the Tocharian languages.

- Van Windekens (1982:86ff.) notes only the Class XII presents with suffix PT *-ññ²/ë- < *-ny^e/O-, which he think were all denominative in origin (see §2).
- Adams (1988:72-6) posits deverbative vs. denominative *-y^e/_O-presents, but no *-ey^e/_O- presents.
- Pinault (1989) recognizes only the Class XII denominatives (see below), but believes that Tocharian inherited PIE o-grade presents in *éy^e/_O- and replaced them with *-ské^e/_O- presents (§3).

It is true that fewer secure examples of such presents seem to exist in Tocharian than in most other IE branches, but recent advances in our understanding of Tocharian historical phonology allow us to identify a number of previously unsuspected reflexes. The time seems ripe for a review of the entire problem.

2. Tocharian Class XII presents

Pedersen (1941:170) first proposed that Class XII denominative presents, e.g. TB /tənk^Wəññ⁹/e-/, TA tuṅkiñ- to TB taṅkw, TA tuṅk 'love', originate in PIE *-y^e/_O- denominatives to *n*-stem nouns; he compared Ved.

iṣaṇyáti 'excite', to which Van Windekens (1944:244) added the type of Gr. ἀνομαίνω 'name'. This interpretation is now generally accepted; cf. Couvreur 1947:62, Van Windekens 1982:86, Adams 1988:72, 75, Pinault 1989:141, pace TE I:216 (*-ññ- < *-sĥ-).

- The inflection of these verbs is fully thematic, like that of Class II (*-e'/_O-) or Class VIII (*-se'/_O-) or IX and X (*-ské'/_O-), pace Van Windekens 1982:87-9.
- We thus have *-n- + *-ye/_O- > *-nye/_O- > PT *-ññ²/ë-, with pre-PT
 *Cy giving a palatalized geminate *CyCy (Hilmarsson 1986:316ff.; Adams 1988:35, 44fn.4; Ringe 1996:116-7).

Cf. TB /lareññ-/, 3pl. lareññentär 'love' <- lāre 'dear', /sklokəññ-/, 3pl. sklokäntär 'doubt' <- sklok 'doubt'.

However, other members of this class are clearly non-denominative in origin, pace Van Windekens 1982:89ff., Adams 1988:75 (suffix *-ññə/ë-extended to "primary" verbs). At least the following are formed to verb roots ending in /-a-/; they take Class V subjunctives and Class I preterites and/or occur beside Class VI nasal presents in /-(ə)na-/.

TB /məntəññ³/e-/, 3sg. mäntam to /mənta-/ 'eliminate, destroy'

TB /kləntsəññə/e-/, 3sg. kläntsam 'sleeps', beside TA Cl. VI pres. klisn-ā-ş to klisā-

TB /kəskəññə/e-/, mid. 3sg. käskantär, Cl. V subj. käskātär, Cl. I pret. käskāte* to /kəska-/ 'destroy' (<— PIE *gwhņ-ské/6-)

Following Schmidt (1989:311-3, 1995:279-80; cf. Pinault 1989:141), I would derive these presents from PIE *-nH-ye/ $_{O^-}$, i.e. nasal-infixed formations to set roots with additional suffix *-ye/ $_{O^-}$.

- He compares the type of Ved. grbhāyáti beside grbhnấti 'grasps', if āya- < *-nh2-y⁶/ó- (de Saussure, Insler, Peters) rather than *-eh2-y⁶/o(Kurylowicz, Narten, Hoffmann).
- Note especially the attractive equation of Ved. mathāyáti 'robs, tears from' (beside mathnāti*, impf. ámathnāt) and TB /məntəññə/e-/: mathāyanti = mäntaññem < *mnt-nh2-yó-nt-i.</p>

Other than these two subtypes, Tocharian appears to have no secure (direct) reflexes of PIE *- $y^e/_{0^-}$ presents. (On TB Class IV subj. $k\ddot{a}lyp\bar{\imath}tsi$ <- PIE *klep- $y^e/_{0^-}$, see §4.)

- Note that if the normal treatment of a *Cy cluster was PT *CyCy, one should look for thematic presents ending in a uniformly palatalized consonant, including before PIE *-o- > PT *-ë- (> TB -e-, TA -a-, 3pl. -eñc), and geminatead in TB.
- The only likely candidate is the mysterious TA Class VII subj. in -ñ(ä)-~-ña-, e.g. ar-äñ-tär 'will come forth', nākäñtär, pl. nākñantär 'will blame'. These usually correspond to ablauting Class I subjs. in TB (cf. TB ertär, pl. eräntär) and so must be a post-PT innovation of some kind.

3. PIE *-ey^e/₀- presents in Tocharian

The question of PIE *-eye/o- presents in Tocharian obviously depends on the fate of intervocalic *y.

- Van Windekens (1976:62-5) and Adams (1988:35) state that PIE *y was retained in Tocharian, but does not discuss the consequences for *-eye/o- presents.
- Pinault (1989:126) states that PIE *-eye/o- > pre-PT *-əye- ~ *-əyə-contracted and so "perdait toute identité formelle", thus presumably clearing the way for the rise of the causative in *-ske- ~ *-sse- <*-ske-0- (see below).
- The most thorough review of the problem is in Ringe 1996:51-6; he comes to no definite conclusion, but cites Cowgill's idea that PIE *treyes > *tre:s > PT *trey (*-s > *-y in monosyllables, cf. Katz 1997) > TB trey ~ trai, TA tre. (The linking vowel /-p-/ in TB compounds such as treyá-meskem /treyá-/ 'threefold power' could be a later innovation.)

Nevertheless, at least one Tocharian thematic present must reflect an inherited formation in *-ey e / $_{O}$ -, namely TB *mely*-, TA *malyw*- 'grind, crush' < PT *mël y w y -əy 9 / e - < PIE *molh 2 wéy e / O -.

■ This was compared with the Goth. Class I weak verb ga-malwjan*

'bruise' (pret. ptcp. masc. acc. pl. gamalwidans), ON $m\phi lva$ already by Lane (1938:31). Most scholars have derived the verb from a *-ye/o-present: cf. Van Windekens 1976:95 (*ui), 278-9, 1982:11, Adams 1988:73-4, 75 ("*Co(C)C-yelo-"). Ringe (2000:124-5) sets up PT *mël y w y - y - z - or * y - y - y -, but does not specify the origin of the palatalized * y - y .

The Tocharian development was rather

- PIE *molh2wéy e / $_{O^{-}}$ > *molwéy e / $_{O^{-}}$ (Saussure's Law; Hackstein 1995:26 with refs.) > PT *mël y w y -áy a / e -; then
- PT *mël^yw^y-áy³/ė- > *mel^yw^yy³/e- (syncope of *á after glides, or rather rightward stress shift; Hilmarsson 1989:14, Ringe 1989:37) > *mel^yy- > TB /mel^y-/, pres. 3sg. *melyim*, *melyán*-, 3pl. *melyem*; and
- PT *mëlw^y- $\delta y^{\partial}/\dot{e}^{-}$ > *malw^yäy^ä/_a- > *malw^yy^ä/_a- (syncope of *ä) > *mal^yw^y- > TA *malyw*-, pres. 2sg. *malywät*, act. ptcp. obl. *malywäntām*, mp. ptcp. *malywmām*, impf. 3sg. *malywā*.

See R. Kim 2003:222-3fn.70, but no "secondary palatalization" of *w+y > *w^y is needed.

The Tocharian and Germanic forms, along with CLuv. $m\bar{a}lhu-malw$ 'break' < *malhw-, e.g. pret. 3sg. $m\bar{a}lh\bar{u}ta$, pres. 3sg. malwai., point to a (probably already PIE) u-extension of the h2e-conjugation present *mólh2-m+mélh2- 'grind' (LIV:433 s.v. ?* $melh2\mu$ - 'zerreiben, malmen', Jasanoff 2003:64ff.). This was thematized by means of the suffix *- $ey^e/_O$ - in both Tocharian and Germanic, like many h2e-conjugation presents in non-Anatolian IE languages.

Another *-ey^e/_O- present underlies TA Cl. II pres. pañwäṣ 'stretches (forth)', pl. (pa)ñweñc-äṃ, mid. 1pl. pañwamträ, ptcp. pañwmāṃ, inf. pañwtsi. This verb is to be connected with PIE *(s)penh₁- 'pull, stretch' and its reflexes, e.g. OHG spannan 'stretch', Gr. πονέομαι 'work hard, toil' (LIV:578-9). I have argued elsewhere (R. Kim 2006:fn.15, pace Ringe

2000:125fn.13) that the TA present may be equated with TB mp. peññáträ (B558 b3/4):

post-PIE *ponh₁w-ey^e/_O- > *ponw-ey^e/_O- (laryngeal loss) > PT *peñw^y-áy^a/_e- > *peñyáyatər > *peññayátər > pre-TB *peññátər > $peññatr\ddot{a}$; > *pañw^y-äy^ä/_a- > *pañw^yy^ä/_a- > *pañw^yā/_a- > TA pañw-.

Cf. Klingenschmitt 1982:234-5, Hackstein 1995:26-7; for the *u*-present, cf. Arm. *henowm* 'weave, sew together'. (I cannot account for the other TB pres. *päññān-m(e)* (B253 b2), with different root ablaut.)

We thus have two good examples of *-ey $^{e}/_{O^{-}}$ presents to roots extended with a formant -u-.

- In contrast to *-i-, a suffix *-u- is not so well attested among h2e conjugation presents ("a somewhat shadowy category"; Jasanoff 2003:141-3). Cf. e.g. Hitt. tarhu- 'overcome, be capable' (3sg. tarhuzzi, taruhzi) and Ved. tūrvati 'conquers', tarute 'crosses over' < *térh2-u- ~ *trh2-u-.
- As far as I am aware, *melh2- 'grind' is the only h2e-conjugation verb which forms both a root present and a u-present: semantic distinction?
- In any case, at least some of the numerous Tocharian verb roots ending in *-w- (see e.g. Van Windekens 1982:11-15) may go back to usuffixed presents of this type.

Another possible example of an o-grade present in *-ey^e/o- is TB pres. mp. ptcp. *cepyemane*, ger. I *ceppille* 'tread'.

- If pre-PT *py yielded PT *p y p y > TB pp, the stem-final cluster py of the participle must be from underlying /cep y -/, with syncope of / y -/.
- But it cannot be ruled out that py and pp are alternative spellings for $/p^{y}p^{y}/$. Also, the palatalization of stem-initial c points to PT *e < *ē rather than *ë < *o as the stem vowel.

Interestingly, the iterative-causative function assumed for PIE o-grade *- éy $^{e}/_{O}$ - presents finds no support in Tocharian.

• Several scholars have suggested that Tocharian inherited o-grade

- transitive(-causative)s in *- $\acute{e}y^e/_{O^-}$ from PIE, but later replaced this suffix with the reflex of *- $s\acute{k}^e/_{O^-}$ (Pinault 1989:126, Kobayashi 1997).
- But there is no evidence that *-eye/O- ever acquired causative value in pre-Tocharian. Furthermore, the suffix *-ske/O- is not itself transitive-causative in value, but is rather simply a present-forming suffix which became generalized in marked transitives; cf. the numerous non-causative Class IX and X (sk-)presents, e.g. 1sg. TB aiskau, TA esam to TB /ai-/, TA e- 'give', TB yamaṣṣāṃ 'does, makes' to /yam-/ 'do, make', TB kānmaṣṣāṃ, TA kumnāṣ to TB /kəm-/, TA kum- 'come'. As pointed out by Hackstein (1995:2-4), the distinctive marker of the marked transitive ("causative") in TB is initial stress, which probably reflects PT initial reduplication.

4. PIE denominative presents in *-e-y^é/₆-

Class IV subjunctives are characterized by a suffix -i-, e.g. TB kälypītsi 'to steal', aklyitär 'will teach', lalyitär 'will strive, exert oneself'. They were attested only in TB until recently, but TA v.n. āklyuney-ā 'by being taught' in the newly published Maitreyasamini-Nāṭaka (YQ 1.10 a4; MSN:124) presupposes a subj. stem ākly-, which can go back to PT *akly-əy- (cf. TB aklyilñe).

A connection between Class IV subjunctives and PIE *-ye/O- presents has long been alleged, but never investigated in detail.

- The older view (Lane 1959:166; cf. Van Windekens 1982:224, Pinault 1989:144), that these are simply optatives transferred to non-past (= subjunctive) usage, is unattractive: why only in these verbs, which share no obvious formal or semantic properties?
- The clear relationship between TB subj. śeritär 'will hunt' and TB śeruwe* (śerwe, obl. śeruwem), TA śaru 'hunter' < PT *śerəwë < (post-)PIE *kéruwos (vṛddhi-derivative to PIE *kérwo- 'deer') suggests that these stems actually reflect denominatives in *-e-yé/6- to thematic nouns, and so may be compared with the Greek ποιέω-type or Vedic denominatives in -a-yá-.</p>
- In this case, (post-)PIE * $k\bar{e}$ ruwe- $y^e/_{O^-}$ > PT * $seraw^y$ - $ay^a/_{e^-}$ > * $serayay^a/_{e^-}$, whence by haplology TB / $seray^a/_{e^-}$. Cf. Ringe 1996:53;

similarly Adams 1988:74-5, but probably not from * g^h wērwe- $y^e/_{o^-}$ (to * g^h wēr- 'wild animal').

This suffix was then extended to other denominatives, e.g. TB aklyitär 'will teach' < PT *akly-əyə/ë- to akalye, obl. ākli 'teaching, Lehre', TB lalyitär 'will strive, exert oneself' < PT *laly-əyə/ë- to lalyiye, obl. $l\bar{a}lyi$ 'exertion, effort' (pace Adams 1988:74-5). Ringe (1996:54-5) suggests that akalye, lalyiye were conversely derived from the verbs, citing the pret. ptcps. $\bar{a}klu$, $lal\bar{a}lu$ without stem-final palatalization; but the latter may have other explanations.

In the case of TB $k\ddot{a}lyp\bar{t}tsi$ 'steal', PT *kəl^yp^y-əy^ə/_ë- may have replaced *kəl^yp^y-^ə/_ë- < *klep-y^e/_O- (cf. Gr. κλέπτω; Ringe 1996:54), or perhaps < *klep-y^e/_O- by sound change (epenthesis of *ə?). Pace Ringe (loc. cit.), $k\ddot{a}lyp\bar{t}tsi$ cannot continue PT *kəl^yp^y-ə- ~ *kəl^yp-ë- < PIE *klep-e/_O- (Goth. *hlifan*, OLat. *clepere*); in that case the infinitive should have been "kalyptsi" /kəl^ypá-t^{\$}əy/.

5. A PIE present in *-o-y $^{e}/_{o}$ -?

Finally, I tentatively propose that Tocharian preserves an example of a suffix *-o-ye/o- in TA pres. 3pl. karyeñc, mp. ptcp. karemām and subj. 3sg. kareṣ, karyaṣ, 3pl. kareñc(-m) 'laugh', alongside TB pres. 3pl. keriyem, keryem, mp. ptcp. keriyemane.

- This verb surely reflects PIE *g^her- (LIV:176-7 [but no mention of Tocharian verb!], Adams 1999:197); cf. Ved. háryati 'finds pleasure in, likes', Gr. χαίρω 'rejoice', OLat. horitur 'encourages, incites', Umbr. fut. heriest 'volet', OHG gerön 'desire, long for'.
- Lane (1953:285-6) and Adams (1988:73, 1999:197) interpret this verb as a *- ye/O- present comparable, except for the root vocalism, with Gr. χαίρω. Lane suggested that the TA imperfect in -ā- (with preceding palatalization) continues the PIE stative suffix *-eh1-, that that the latater was generalized from stative aorists to verbs with presents in -ye/O-, including 'laugh'. But quite apart from the antiquity of such

- stative aorists (see now Jasanoff 2002-3), the TA impf. is a post-PT innovation: *-ā- from the pret. was added to PT *-əy-, preserved in TB (R. Kim forthcoming).
- In any case, stem-final -ry- cannot continue *-r-ye/O-. Although I am not aware of any secure examples of PIE *ry in Tocharian, the parallel of *ny > PT *ññ (see §2) implies *ry > PT *ryry, which should have given TB -rr-, TA -r-. All examples of TA and TB ry with known histories result from the relatively late pre-PT change of liquid metathesis (Schindler 1967, Ringe 1996:158-60 with refs.): cf.

PIE neut. *trih2 > *triya > *tr y əya > PT *tər y ya > TB fem./neut. tarya 'three' (pre-TA *täry > *täräy > tri) and

PIE * k^W rih2- > * k^W riya- > * k^W ryāya- > PT * k^W əryya- > TB /kərya-/ 'buy' in pret. act. 1pl. $k\ddot{a}ry\bar{a}m$, mp. $k\ddot{a}ry\bar{a}mte$.

The spelling of TB keriyem, keriyemane makes it clear that the underlying form of the verb in TB is /kerəy-/, presumably from PT *kër^(y)əy-⁹/ë- (so Hilmarsson 1996:135-6). Van Windekens's supposed "dédoublement" of *y > *iy in this and some other TB forms (1976:65) is utterly unfounded. Such a preform would also be consistent with TA pres. 3pl. karyeñc (<*karañc ~ kare* < PT *kërëñcə ~ *kërën).

■ PT *kër^(y)əy-³/ë- could in turn continue *g^hor-éy^e/_O-, but I remarked that the intransitive meaning of 'laugh' conflicts with the transitivity of such formations elsewhere in IE (R. Kim 2003:223fn.70); cf. Hilmarsson 1996:136 ("iterative *g^hor-ei²/_O-"). I thus cautiously suggested "a denominative to an old o-grade thematic deverbal noun, hence *g^horos 'pleasure, rejoicing' —> *g^hore-y^e/_O-?"

But how to account for the bizarre and synchronically isolated TA stem alternation $-e-\sim -ya-(-ye-)$?

- Van Windekens (1944:245-6, 1976:188) posits a present with ablaut suffix *-i- ~ *-ĕi- and "contamination entre *ghorī- et *gh(e)rēi-"; improbable to say the least.
- Hilmarsson (1996:136) takes karyas to be a Class V subj. (< *karyāṣ.

by weakening of $*\bar{a} > *a$; TE I:45-6), but his proposed sound change of $*-r^ya->*-ra^i-> TA$ -re- would be unparalled. Even if it is accepted, I do not understand what he means by "[i]n karyeñc epenthesis was already there for a different reason so that the sequence -rya- was preserved".

Ringe (2000:123-4) tentatively postulates a subj. suffix PT *-ëy-, ablaut variant of pres. *-əy-, but this would be the only such ablauting suffix in the Tocharian verbal system, and without any obvious PIE source. Also unlikely is that TA -e- < PT Cl. IV subj. *-e-; see §4 on the origins of this type.</p>

I suggest instead that this present is to be reconstructed for PT as *kër-ëyə- *kër-ëyë-.

- This would regularly give pre-TA *kar-ayä- ~ *kar-aya- > *kar-ayä- ~ *kar-äya- (weakening of *a > *ä in second syllable between preceding and following "full vowels"; TE I:46-7) > TA kar-e- ~ kar-ya-.
- We should thus have 3sg. kareş, 3pl. karyeñc, mid. ptcp. *karya mām. The 3pl. kareñc took over the stem alternant of the 3sg. (and 2sg., 2pl., i.e. the "e-forms"), as did the ptcp. karemām. Conversely, 3sg. karyaş has adopted -ya- from the "o-forms", e.g. 1sg. karyam*, 1pl. karyamäs*.
- Cf. the analogical reshaping of Cl. II presents such as PT *kəl^y(y)-³/ë- 'be standing' > pre-TA *käl^y-ä/_a-: 3sg. *käl^y-ä-tär > kälytär, 3pl. *käl^y-a-ntär > klyantär, but 1sg. *käl^y-a-mār, ptcp. *käl^y-a-mān > *klyamār, *klyamām --> kälymār, kälymām after verbs with syncope, e.g. ākmār*, ākmām < *āk-a-mār, *āk-a-mān to āk- 'lead' (Winter 1991:52-3). A (virtually) unique alternation -e- ~-ya- would have been exceptionally prone to remodeling.</p>

TB pres. /kerəy- $^{9}/_{e^{-}}$ / must then have assimilated this verb to the type of /mel y - $^{9}/_{e^{-}}$ / 'crush', seen above.

Such a PT formation would in turn go back to a denominative present $*g^h or -o - y^e / 6$, to $*g^h or s$ 'pleasure, rejoicing (or sim.)'.

This verb may then be added to the Anatolian evidence for a PIE date of *-o-ye/o- presents: as Melchert (1997:136-7) remarks, Lycian

leniting verbs in -e- such as *tubedē* are difficult to explain otherwise, and it is possible that "the massive Hittite class in $-\bar{a}i$ -/ $-\bar{a}$ - (and likewise Luvian $-\bar{a}$ -/ $-\bar{a}i$ -) represents a conflation of BOTH *- \pm + \pm 0- AND secondary thematic *- \pm 0- \pm 0-."

 Cf. also the Gr. present type in -oω, considered by some scholars to be an innovation, but possibly inherited.

6. Conclusions

- The suffix of Class XII denominative presents continue *-n- + *-ye/O-, but at least some non-denominal presents probably continue *-nh2-ye/O-, as per K. T. Schmidt. Otherwise, no traces of *-ye/O- may be clearly discerned.
- Tocharian preserves at least a couple of o-grade presents in *-éy^e/_O-, but offers no trace of the iterative-causative function familiar from the classical IE languages.
- Denominative presents in *-e-y⁶/6- are represented by Class IV subjunctives; the suffix has spread from thematic to other nouns.
- TA kary- may reflect an old present in *-o-yé/ó-, comparable to the Anatolian presents cited by Melchert.

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