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Inhalt

Jay H. Jasanoff

Some difficult Tocharian genitives

Abstract: This paper discusses the Tocharian gen. sg. in B *-ntse*, A *-s*, and the gen. pl. in B *-ṃts(ə)*, A *-śśi*. The PToch. gen. sg. ending **-nsæ* is explained by assuming an extension of the *o*-stem ending **-o-s(y)o* to *n*-stems, giving first **-Cn-ə-sæ* (with connecting **-ə-*) and then, with regular metathesis, **-C-ə-nsæ*, from which productive **-nsæ* was extracted. The more difficult gen. pl. endings B *-ṃts(ə)* and A *-śśi*, which are not usually thought of as being cognate, are traced to sequences of the animate acc. pl. in **-ns* followed by a particle with Sievers variants **-Tye* (Toch. B) and **-Tiye* (Toch. A). The particle **-T(i)ye* is perhaps to be identified with the *-se* of Gk. *póse* 'whither', and thus further with the locational suffix **-tye/o-* of Ved. *nítya-* 'own', Hitt. *appezziya-* 'hindmost', etc.

Keywords: Tocharian, genitive, Sievers' Law, secondary cases

1 Introduction

The nominal cases of Tocharian, as is well known, divide into a "primary" group (nominative, oblique/accusative, genitive, vocative),[1] with portmanteau endings that fuse to the stem in the standard IE way, and a "secondary" group (ablative, allative, causal (B only), comitative, instrumental (A only), locative, perlative), with agglutinative postpositional endings that attach to the oblique. The primary case forms mostly continue reconstructible PIE preforms or their remodeled descendants. Thus, e.g., the identically formed nom.sg. and obl.sg. of the word for 'horse' (B *yakwe*, A *yuk*) go back to PIE **$h_1$éḱwos* and **$h_1$éḱwom*, respectively, which fell together phonologically; the nom.pl.'s B *yakwi* < **-oi* and A *yukañ* < **-ones* are transparent analogical replacements of the inherited form in **-ōs*; the obl.pl. forms B *yakweṃ* and A *yukas* go directly back to the PIE acc.pl. **$h_1$éḱwons*. The secondary case endings, by contrast, mostly lack clear IE etymologies and often look completely different in the two languages (e.g., B abl. *-meṃ* ≠ A abl. *-äṣ*, B com. *-mpa* ≠ A com. *-aśśäl*, B perl. *-sa* ≠ A perl. *-ā*). The secondary cases have no separate endings for singular, dual, and plural; number is conveyed by the number-marked oblique forms, to which the case endings proper are added (cf., e.g., B abl.sg. *yakwe-*

1 The terms "oblique" and "accusative" will be used more or less interchangeably in what follows. No further role will be played by the vocative.

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meṃ, pl. *yakweṃ-meṃ*; A abl.sg. *yuk-äṣ*, pl. *yukas-äṣ*). The postpositional origin of the secondary cases is what accounts for the phenomenon of "Gruppenflexion" – the grammatical rule that only the last in a string of conjoined secondary case forms needs to be marked with the case suffix. Thus, e.g., B *oṅkolmaṃmpa* [com.pl.] *yakweṃmpa* [com.pl.] 'with elephants and horses' can also be rendered *oṅkolmaṃ* [obl.pl.] *yakweṃmpa* [com.pl.], with the word for 'elephants' in the oblique.

The genitive, in this scheme, is universally considered a primary case. As in the other primary cases, the genitive endings differ from singular to dual to plural. Some of the gen.sg. endings, such as the TB *-e* (= A -∅) of *nt*-stems (cf., e.g., B *walo* 'king', gen. *lānte*; A *wäl*, *lānt*) and the BA *-i* of the *r*-stem kinship terms (B *pācer* 'father', gen. *pātri*; A *pācar*, *-cri*), clearly go back to PIE preforms.[2] Other genitive endings, however, are less clear, and some, like the adjectival gen.sg.masc. in B *-epi* (≅ A *-yāp*) and the TA gen.pl. in *-śśi*, appear to contain postpositional material. The genitive also shows *Gruppenflexion*: cf. B *kreñcepi* [gen.sg.] *onolmentse* [gen.sg.] = *krent* [obl.sg.] *onolmentse* [gen.sg.] 'of the good being'.[3] The obvious inference is that some, though not all genitive forms really did grow out of agglutinative oblique/accusative + postposition sequences, and that the agglutinative behavior proper to these latter combinations was extended to the genitive case as a whole.

The discussion that follows is devoted to shedding light on the origin of two salient but unclear Tocharian genitive formations. One is the productive gen.sg. in B *-ntse* and A *-s*, which thanks to our improved understanding of Tocharian phonology and morphophonemics can now be definitively explained. From here we will move to the more challenging problem of the gen.pl., where an effort will be made to show that the unexplained and wholly opaque endings B *-ṃts(ə)* and A *-śśi*, despite all appearances, are etymologically identical.

2 The gen.sg. in B *-ntse*, A *-s*

The immediate forerunner of B *-ntse* and A *-s* was PToch. **-nsæ*, which in combination with a preceding vowel gave B *-äntse*, *-antse*, *-entse*, etc., and (with regular fronting, raising, and loss of *-n-* before *-s-*) A *-is*, *-es*. Two main approaches are cur-

2 In *lānte* (*lānt*) and other *nt*-stem genitives, the source was obviously the PIE consonant-stem gen.sg. in **-os*. The *-i* of *pātri* (*pācri*) is often identified with the *-ī* of Lat. *uirī*, *amīcī*, etc. (so Klingenschmitt 1975: 154, fn. 10; 1994: 375ff.; but cf. Pinault 2008: 488f.). Other possible sources suggested in the literature are the consonant-stem dat.sg. in **-ei* (Kim 2014: 28) and (likeliest in my opinion) the *i*-stem gen.sg. in **-eis* (TEB: 105; Adams 1988: 139).

3 Example taken from Kim 2014: 29.

rent regarding the origin of this ending.[4] One view, due originally to van Windekens (1979: 181) and improved upon by Pinault (1989: 88f. and 2008: 489ff.), compares the final *-e* of B *-ntse* with the *-e* of B *lānte*, the reflex of the PIE consonant stem gen.sg. in **-os*. To account for the **-ns-* cluster, Pinault assumes a proterokinetic ("closed inflection") *n*-stem gen.sg. in **-en-s*; this, he says, was formally recharacterized by the addition of the more transparent hystero- and amphikinetic ("open inflection") gen.sg. in **-os*, taken from the corresponding derived *n*-stem collective. Such recharacterizations are well-documented in IE languages; familiar examples are the Latin 3pl. perfect in *-ērunt* (< *-ēr(e)* + *-unt*), the Vedic nom.pl. in *-āsaḥ* (**-ōs* + **-es*), and English *-ren* in *children* (< OE *cildru* + later *-en*). But recharacterization scenarios require some kind of special motivation to explain why the older ending was not simply *replaced* by the new one.[5] The purported renewal **-ens* → **-ens-os* is unsatisfactory in this respect. Even if the "closed inflection" gen.sg. in **-en-s* survived long enough to be available for Pinault's explanation – which is by no means assured – it is hard to believe that the sequence **-en-s* would have been so firmly entrenched in the internalized morphology of speakers, particularly young ones, that they would have favored the unprecedented neologism **-ens-os* over already extant **-(e)n-os*. No other IE language made this choice.[6]

According to the more widely held view, the final **-sæ* of the PToch. ending goes back to the **-so* or **-syo* of the standardly reconstructed *o*-stem ending **-os(y)o* (cf. Ved. *áśvasya*, Gk. *híppoio*, *-ou*, OPr. *-as*) and its pronominal counterpart **-es(y)o* (cf. OAv. *cahiiā*, Gk. *téo*, OCS *česo*). Thus, Krause & Thomas (TEB: 104) envisage a simple addition of **-so* (> **-sæ*) to the oblique in **-n* (> BA *-ṃ*). Two facts potentially stand in the way of this idea: (1) the PIE status of the yod-less gen.sg. ending **-e/oso*, which is otherwise arguably confined to Germanic and Balto-Slavic, is less than certain;[7] and (2) the nasal consonant that figures organically in **-nsæ*

4 I omit discussion of van Windekens (1944: 152) and Couvreur (1947: 40), who improbably argue for a connection with the possessive adjectives in A *-ts*, B *-tstse*.

5 In the cases just mentioned the older forms were common enough to have been acquired, perhaps only passively, early in the acquisition process, when young speakers, if they generated them at all, would have produced them by rote rather than by phonological computation. Later, as juvenile grammars matured, the memorized endings (pre-Lat. **-ēr(i)*, pre-IIr. **-ōs* or **-ās*, Mid.Eng. *-re*) would have cried out for greater transparency. Being too well-established to be replaced outright, they were "improved" by adding parsable further material.

6 Cf. Hitt. gen.sg. *lamnaš* (: *lāman* 'name'), Gk. gen.sg. *onómatos*, Lat. *nōminis*, Go. *namins*, and PSl. **jĭmene*. Old Irish (gen.sg. *anmae* < **-mens*) retains the old form.

7 Whether Gk. *-ou* necessarily comes from **-oso* rather than **-osyo* is a topic of perennial discussion. On the possible evidence for **-oso* in (non-Hittite) Anatolian see the references in Melchert 2012: 286. It is perhaps a cautionary fact that reflexes of *both* **-osyo* and **-oso* have been claimed for these languages.

is confined in the oblique to nouns denoting rational beings. The first problem – that of yod-less *-*so* beside *-*syo* – can now be set aside. As recently shown by Fellner (2013: 46–50), pre-Toch. *-*y*- was lost without palatalization after coronal consonants, so that *-*syo* and *-*so* would have fallen together as *-*so* (> *-*sæ*) in Tocharian regardless of whether the yod-less form *-*so* was actually inherited.[8] But the "disconnect" between the obligatory *-*n*- of the genitive ending and the highly restricted *-*n* of the oblique is a serious concern. Klingenschmitt (1994: 374ff.) attempts to improve on Krause & Thomas' proposal by suggesting that the *o*-stem gen.sg. in *-*os(y)o* first gave PToch. *-*æsæ* (our notation), while the corresponding acc.sg. in *-*om* gave PToch. sandhi variants *-*æ* and *-*æn*. Later, when the two sandhi variants came to be assigned to different groups of nouns, the stage was set for a proportion: since the gen.sg. in *-*æsæ* appeared to consist of the obl./acc.sg. in *-*æ* followed by an element *-*sæ*, a new gen.sg. in *-*ænsæ* (whence later analogical *-*ansæ*, *-*ənsæ*, etc.) was triggered by the longer acc.sg. in *-*æn*. Nothing, however, is really gained by this scenario. The assumed variants *-*æ* and *-*æn* are not independently motivated, and the distribution of the gen.sg. in *-*nsæ*, for all Klingenschmitt's ingenuity, is still at odds with that of the oblique ending on which it is allegedly founded.[9]

In a more promising move, Adams (1988: 139) takes the *-*sæ* of the PToch. ending from PIE *-*s(y)o*, but takes the *-*n*- from the *-*n*- of *n*-stem nouns, thus combining elements of the Krause & Thomas/Klingenschmitt and van Windekens/Pinault approaches. But Adams' formulation ("*-*n(t)se* is nothing but a genitive in [PIE] *-*eso* … to an *n*-stem, i.e., *-*neso*") can be improved. There is no need for the specific sequence *-*neso*, which has nothing positive to recommend it and would have given PToch. *-*ñsæ*. The spread of *-*s(y)o* to the *n*-declension, and the subsequent generalization of the new combination *-*nsæ* to the other stem classes, can be more simply envisaged as follows:

1. The inherited thematic gen.sg. in *-*osyo* inspired the rise of analogical copies in the other declensions, initially in the *i*- and *u*-stems (*-*isyo*, *-*usyo*). Compare Pali gen.sg. *aggissa* (: *aggi*- 'fire'), *gurussa* (: *guru*- 'guru'), as if < Skt. **agniṣya*, **guruṣya*. At some point the *-*y*- was lost without inducing palatalization (Fellner's rule; cf. above).

8 So already Klingenschmitt (1994: 374, fn. 111) for *-*syo* and the specific cluster *-*sy*-. He does not discuss the other coronal + *y* clusters.

9 Klingenschmitt's discussion is based on the common assumption that the TB oblique sg. in *-ṃ* is a reflex of the PIE acc.sg. in *-*m*. Whether or not this is true (and I consider it extremely unlikely), the fact remains that the secondary cases have an *-n*- if and only if the oblique ends in *-ṃ* (cf. *eṅkwe* 'man', obl. *eṅkweṃ*, perl. *eṅkwentsa*; *yakwe*, obl. *yakwe*, perl. *yakwesa*), while the *-n*- of the gen.sg. is completely independent of the form of the oblique (*eṅkwentse*, *yäkwentse*).

2. *-*s(y)o* was also extended to a subset of consonant stems, including *n*-stems.[10] The addition of *-*s(y)o* to stem-final *-*n*- was facilitated by the insertion of a connecting schwa (*-*ə*-) – the same "morphological" schwa that was used to separate a consonant-final root or stem from a following suffix or desinence in other productive combinations. Morphological schwa insertion of this type – not to be confused with the later syncope and epenthesis rules of Proto-Tocharian and the individual languages – is well attested in causatives (e.g., PToch. **wəyk-ə-sk-* > B *wikäsk-* 'drive away'), *s*-preterites (PToch. 3sg. **præk-ə-sa* > B *prekäsa* 'asked'), neuter *men*-stems (PToch. **wak-ə-m´* (< **-ə-mĕn*) > B *wāki* 'distinction'), and other categories.[11]
3. The sound changes that marked the transition from PIE to the "classical" Tocharian vowel system included the later syncope and epenthesis rules just referred to, which inserted and deleted schwas according to the syllabicity of adjacent segments, position in the word, etc. The effect of these developments would have been to convert *n*-stem genitives of the structure *-*C(e)n-əs(y)o* (or, in later form, *-*C(ə)n-əsæ*) to *-*Cənsæ*. Meanwhile, the other inflectional forms of *n*-stems lost their *-*n*- in the singular, thus permitting the sequence *-*ənsæ* to be reanalyzed as a desinence in its own right.[12]
4. In the wake of the above, the language would have had gen.sg.'s in *-*æsæ* (former *o*-stems), *-*asæ* (former *devī*- and other *ă*-stems), *-*åsæ* (former *ā*-stems), and *-*(ə)sæ* (with and without syncope; former *i*- and *u*-stems), alongside *-*ənsæ* (former *n*-stems). In this context the variant of the ending with the cluster *-*ns*-, being both more salient than its near-lookalike *-*əsæ* and immune

10 Though not, as we have seen, to *r*- or *nt*-stems; cf. B *pātri*, *lānte* (= A *pācri*, *lānt*).

11 "Morphological" schwa, though *lautgesetzlich* in certain phonological combinations, was so widely generalized that it is futile to try to explain its presence in a given form by Neogrammarian sound change alone. Thus, e.g., the synchronic root *klautk-* (< *-*t-sk-*) 'turn around' and the causative stem *nautäsk-* 'make disappear' both contain the PIE present suffix *-*ske/o-* added to a historical root ending in a dental. The difference between the two is not that *klautk-* contains "bare" *-*sk-* while *nautäsk-* contains an extended form of the suffix (e.g., *-*isk-*, *vel sim.*), but that *klautk-* is an old form which no longer contains a synchronic morpheme boundary, while *nautäsk-* is a more recent combination in which the component parts are kept separate by an inserted schwa. The *-*ə-* in the suffix of the *s*-preterite was discovered by Winter (1994: 197ff.).

12 In masculine *n*-stems, the nom.sg. lacked *-*n* from the beginning (cf. B *okso* 'ox', *oṅkolmo* 'elephant', $kau_u rṣe$ 'bull', etc.), while the obl.sg. either lost it by morphological replacement (*oksai*, *oṅkolmai*, with transfer to the amphikinetic *i*-stem ("*Sapphō*-type") declension) or by sound change ($kauurṣ$ < *-*ən*, haplological for *-*ənən* < *-*enn̥*). In neuter *n*-stems the loss of the *-*ən* in the oblique mirrored its loss in the nominative (nom.-obl. *ñem* 'name' < *-*mn̥*, *wāki* < *-*əy* < *-*əw´* < *-*əm´* < *-*əmĕn*).

to syncope, would naturally have tended to spread – first perhaps into the domain of the former *i*- and *u*-stems, then everywhere.

Under this refinement of Adams' scenario, the creation and spread of **-nsæ* can be understood without appeal to questionable preforms, far-fetched analogies, or presumed sandhi variants.

3 The gen.pl. in B *-ṃts(ə)*, A *-śśi*

While the gen.sg. in **-nsæ* has been a perennial problem, the parameters have at least been clear: some genitive marker – **-os* or **-s(y)o* – was added to a stem or case form that contained an **-n-*, with subsequent generalization of the result. The gen.pl. endings B *-ṃts(ə)* and A *-śśi* offer no such "handle". The TB and TA endings look completely different and have not traditionally been considered to belong together. On the TB side, the surface similarity of B *-ṃts(ə)* to the gen.sg. in *-ntse* has tended to lead investigators astray. Thus, Adams (*ibid.*) sets up **-nesom*, with **-ne-* as in his reconstruction of the gen.sg. and **-som* as in OCS gen.pl. *těxъ*. Klingenschmitt (1994: 390f.) says that *-ṃts(ə)* is the same ending as the gen.sg. in *-ntse*, but with *-ə* (< **-ōm*) substituted for *-e* (< **-(s)o*).[13] Pinault (2008: 500), who takes *-ntse* from **-ns-os*, takes *-ṃts(ə)* from **-ns-ōm* via an intermediate stage **-nsu*. None of these ideas are viable. Even if Adams' reconstruction of the PIE gen.pl. ending as **-ŏm* were correct, final **-om* would have given *-e* in TB, as in the *o*-stem obl.sg. (e.g., *yakwe* < acc. **-om*).[14] PIE **-oHom*, the actual ending, would have contracted to **-ōm* and given PToch. **-æ* or **-a*, depending on whether or not long vowels were shortened before final nasals.[15] The oft-repeated claim that post-IE **-ō(-)* gave **-u(-)* in final syllables in Tocharian is no longer tenable.[16] If

13 He also offers a more complicated second explanation which, like the first, ultimately depends on the supposed development of **-ōm* to **-ə*.

14 The claimed Slavic **-ŏm* is a fiction; cf. most recently Jasanoff 2017: 151–152.

15 The strongest evidence *for* such a shortening is in the declension of *ā*-stems: cf. B nom.sg. *kantwo* 'tongue' < PToch. **-å* < pre-Toch. **-ā*; but obl.sg. *kantwa* < PToch. **-a* < **-ăn* < **-ām*. More or less the same rule is found in Latin (acc.sg. *linguăm* 'tongue') and Old Irish (*túaith* 'tribe' < **tōtɛn* < **-ăn*).

16 As argued in Jasanoff 2018: 73-74, three of the forms said to support the rule (A *wu* 'two', *ămpuk* 'both', and A *okät*, B *okt*, apparently for **oktu*, influenced by 'seven') are in fact duals, with an ending reconstructible as **-ōu* < **-oh$_1$(u)* (cf. Ved. *-ā*, *-āv*, *-au*; Go. *ahtau*). The 1sg.pres. in *-u* (athematic) and *-au* (thematic), which are found only in TB, are not from thematic **-ō* (< **-oh$_2$*), but lenited from **-əm(i)* (athematic) and **-om(i)* (thematic). This leaves only BA *ku* 'dog' (< **kuwV*

anything can be said with confidence about B *-ṃts(ə)*, it is the negative fact that it has nothing to do with the PIE ending whose place it occupies.

A *-śśi*, though at first sight unpromising, actually offers a more productive point of departure than B *-ṃts(ə)*. Unlike the TB ending, *-śśi* has an interesting distributional peculiarity: it is found only in Krause & Thomas' classes IV–VII, i.e., in plurals that are historically non-neuter. We thus find, e.g., nom.pl. *pācri*, gen.pl. *pācräśśi* 'patrum' (cl. IV); nom.pl. *yukañ*, gen.pl. *yukaśśi* 'equorum' (V); nom.pl. *riñ*, gen.pl. *riśśi* 'urbium' (VI); and nom.pl. *käntwāñ*, gen.pl. *käntwāśśi* 'linguarum' (VII). In classes I–III, on the other hand, where the nom.-obl.pl. forms go back to neuter collectives in PToch. **-(w)a*, **-na*, and **-nt(w)a*, the gen.pl. is made by adding the ending of the gen.sg. to the plural stem: nom.-obl.pl. *waṣtu*, gen.pl. *waṣtwis* < PToch. **-a-ntsæ* 'domorum' (cl. I); nom.-obl.pl. *wramäṃ*, gen.pl. *wramnis* 'rerum' (II); nom.-obl.pl. *yärkant*, gen.pl. *yärkäntwis* 'venerationum' (III).[17] A major formal difference between animates and neuters in the plural is that the former, but not the latter, historically ended in **-ns* (> B *-ṃ*, A *-s*) in the acc.pl. (> obl.pl.). There is a strong suggestion, therefore, that the sequence *-śś-*, which must in any case go back to an etymological cluster (PToch. geminates were simplified in TA), somehow contains the *-s* (< **-ns*) of the TA obl.pl. The first scholar to see this was Couvreur (1947: 40), who envisaged a segmentation **-s-* (obl.pl.) + **-ś-* (palatalized from the *-ts-* of the TB ending) + *-i* (gen.sg. ending; cf. *pācri*, *tñi* 'thy', etc.).[18] Left unexplained by Couvreur, however, was the identity of the *-ts-/-ś-*, or why the recessive and specifically *singular* ending *-i* should have figured in the formation of a gen.pl.

If we take seriously the idea that *-śśi* was created on the basis of an acc.pl. in **-ns*, we can imagine a gen.pl. of the structure **-(n)s* + *X*, where *X* was a sequence that (1) began with something that combined with **-s-* to give *-śś-*, and (2) ended with something that gave *-i*. The element that followed the **-s-* would almost certainly have been **-c-*, since **-śc-*, the palatalization product of **-kt-* and **-st-*, is the only PToch. sequence known to have given *-śś-* in TA. Examples of this treatment are fairly common; cf. A *päśśäṃ* 'breasts', B *päścane* (: Lat. *pectus*); A *kaśśi* 'hungry', B *keścye* (: Hitt. *kāšt-* 'hunger'); and 2sg.impv. A *päśśäm* 'put!', B *päścama* (: root A *ṣtäm-*, B *stäm-* 'stand'). The first segment of *X*, therefore, must

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or **kwV*), where the possibility of contraction or assimilation to the **-w-* obscures the identity of the final vowel.

17 Some of these also have productively formed variants in *-śśi*: thus, e.g., *wramnāśśi* beside *wramnis*.

18 Adams (1988: 148, fn. 48) credits almost exactly the same idea to Winter; see also Klingenschmitt 1994: 391–392.

originally have been a dental stop.[19] As for the *-i*, there are many phonological possibilities. All final monophthongs were lost in TA. The vowels that actually surface in absolute final position, when not in loanwords or analogically restored,[20] go back to sequences of the form **-Vy#* or **-Vw#*, i.e., to diphthongs. These pre-TA diphthongs may in turn continue either

1. actual PIE or pre-Toch. diphthongs, with or without a lost final consonant. Exx.: nom.pl. *āṣtre* 'pure' (: B *-i*) < PToch. **-æy* < **-oi*; gen.sg. *pācri* (: B *pātri*) < PToch. **-əy* < **-eis*(?); gen.sg. *seyo* 'fili' < PToch. **-əw* < **-eus*; nom.-acc.sg. *rake* 'word' (: B *reki*) < PToch. **-æy* < **-ōi*; or
2. pre-Toch. **-Vy-* or **-Vw-* sequences followed by additional syllabic material that was lost by sound change in PToch. or TA. Exx.: adjectival suffix *-ṣi* (: B *-ṣṣe*) < PToch. **-ṣṣəyæ* < **-skiyos*;[21] ptcp. *yāmu* 'done' (= B) < PToch. **-əwə* < **-uwus* (analogically reconstituted from **-us*);[22] *tālo* 'miserable' (: B *tallāu*) < PToch. **-awə* < **-awn̥t*; nom.-obl. *yoke* 'thirst' (: B obl. *yokai*) < PToch. **-ay* < **-ōyn̥* (analogical for **-oyn̥*; Jasanoff 2018: 75–76).

In our specific case, the final *-i* could go back to (1) PToch. **-əy*, representing pre-Toch. **-ĕi* or **-ī* (phonologized as **-iy*), with or without a following consonant (e.g., **-s*, **-n*, **-t*) or one of the vowels (**-e*, **-i*, **-u*) that was lost at the PToch. stage;[23] or (2) pre-Toch. **-ĕi* or **-ī* (again, phonologized as **-iy*) followed by a **-V(C)* sequence (e.g., **-om*, **-es*, **-ō*) that was *not* lost in Proto-Tocharian, but that was subsequently lost in TA. Thus, some typical sequences that would have given A *-śśi* would have been **-(n)s-tei*, **-(n)s-tiyo*, **-(n)s-teyes*, or any variant of these with **dh* for **t*.

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19 But not **-d-*, which would have given PToch. **-ts-* or its palatalization product **-ś-*. A cluster **-s-ś-* (with **-ś-* < **-tś-* < **-d-*) would probably not have remained distinct from *-śś-* long enough to escape regular degemination to single *-ś-*.

20 To the latter category belongs, e.g., the 1sg.pret. in *-ā* (*prakwā* 'I asked', *śärsā* 'I knew', etc.), where the vowel was probably restored from cases where it was preserved before an enclitic (e.g., *prakwā-ṃ* 'I asked him', etc.).

21 The formal history of the suffix is discussed by Fellner (2013: 60ff.).

22 For the phonology of the forms, see, e.g., Jasanoff 2015: 80ff.

23 The only single consonant that was not eventually lost in Proto-Tocharian was **-r*. But some final consonants were lost earlier than others. Nasals were among the first to go; thus, e.g., **-en* and **-n̥* fell together with **-e* as **-ə*, and this "early" final **-ə* was lost without leaving an accentual trace in TB (cf. nom.sg. **alyíye* 'palm of the hand' < **-æyæ* < **-ēyē*, but obl.sg. *ā́lyi* < **-æyə(n)* < **-ēyn̥*). PIE **-s* was lost later; the PIE nom.pl. in **-es* was still **-əs* (*vel sim.*) when "early" **-ə* disappeared in absolute final position, and the subsequent loss of **-s* produced a "late" **-ə* that did *not* disappear in Proto-Tocharian. This final **-ə*, though eventually lost as well, *did* affect the accent in TB (cf. *kántwo*, pl. *käntwā́ñ* < **-nes*).

Two questions now arise: first, do we know of any pre-Toch. morphemes of the shape *-*Tei*, *-*Tiyo*, etc. that could plausibly have led to the development of genitival meaning; and second, can any reconstruction of the type *-*(n)s-Tei*, *-*(n)s-Tiyo*, etc. be formally reconciled with B *-ṃts(ə)*? The possibility of an affirmative answer to the latter question is hinted at by the nasal consonant, which could represent the TB obl.pl. in *-ṃ* [-n] < *-*ns*, parallel to the TA obl.pl. in *-s*. The *-ts-* that follows the nasal cannot come from *-*Ti-* or *-*Te-*, which would have given *-c-* in TB. But *-ts- can* come from *-*Ty-*, a sequence close enough to *-*Ti-* to encourage further reflection. Suppose, for example – temporarily suspending any consideration of the etymological identity of the suffixed element – that the source of A *yukaśśi* 'equorum' was a pre-Toch. sequence **ekwons-tiyes*. In that case, the equivalent in TB would have been the unknown and non-occurring **yäkweṃś(c)i*. But what if *-*tiyes*, added to the acc.pl. ending *-*ons*, was the Sievers' Law realization of underlying monosyllabic *-*tyes*? If so, the monosyllabic suffix form *-*tyes* would have been retained after the "light" consonant-stem acc.pl. in *-*n̥s*.[24] The acc.pl. of *wlōnt- 'king' would then have been *wlōntn̥s, with "gen.pl." *wlōntn̥s-tyes*. From this would regularly have come PToch. *lantən(s)tsə, whence B *lantaṃts(ə)* (i.e., *lantáṃts*), the form we actually have.[25] A period of competition between the "long" ending *-*nścəyə* < *-*nstiyes* and the "short" ending *-*n(s)tsə* < *-*nstyes* could in turn have followed, with the former eventually being generalized in TA and the latter generalized in TB.

All this is simply a thought experiment; there is no evidence – and none will be offered below – for a *-*t(i)yes* or *-*dh(i)yes* in the PIE lexicon, much less a *-*t(i)yes/*-dh(i)yes* with a meaning suitable to have yielded a genitive. A suspiciously similar-looking adverbial formative *-*tye*, however, is implied by Greek words of the type *póse* 'whither', *állose* 'to another place', *pollakhóse* 'to many parts', *kuklóse* 'into a circle', etc. The specifically allative sense of these forms is not necessarily old. An inflected version of the same morpheme appears in the PIE adjectival suffix *-*tye/o-*, which is added to preverbs and adposition-like elements to form adjectives with locative meaning, e.g., Ved. *sánutya-* 'far off', *nítya-* 'own'

24 As established by Schindler (1977: 60, 64), Sievers' Law was triggered by sequences of the type *-*V̄(T)Tyo* (> *-*V̄(T)Ti(y)o*) and *-*VR(T)Tyo* (> *-*VR(T)Ti(y)o*; hence *-*onstiyes*), but not *-*V̆(T)Tyo* (hence *-*n̥styes*). A commonly cited example of the "light" treatment is Ved. *mátsya-* 'fish'.

25 I assume that *t, like the other coronals *s, *n, and *l, was "protected" from palatalization by a following *y, and that only after palatalization had run its course did *ty undergo assibilation to *ts*. A second case of *ts* (< *ty) remaining unpalatalized before a front vowel is perhaps to be seen in the infinitive ending BA *-tsi*, which, if cognate with Ved. *-dhyai*, can only go back to *-*tyēi* < *-*dhyēi* (cf. Fortson 2013: 55ff.). The etymologically distinct *ts that arose from *d was subject to palatalization before front vowels in the usual way (cf., e.g., B *śak*, A *śäk* '10' < *deḱm̥).

(< *'internal') = Go. *niþjis* 'kinsman', and the hard to disentangle Ved. *ápatya-* 'offspring', Gk. (Hesych.) *épisson· tò hústeron genómenon* (i.e., 'progeny'; cf. *opís(s)ō* 'backwards'), and Hitt. *appezzi(ya)-* 'hindmost'.[26] Minimally, therefore, we can probably assume a PIE nucleus of adverbs in **-tye* with some kind of local meaning. Locational expressions are a well-known source of new genitives and possessives. Familiar cases include the prepositions meaning 'from' that have wholly or partly replaced the genitive in Romance (Fr. Sp. Port. *de*, It. *di*) and modern Germanic (Ger. *von*, Du. *van*, Eng. *of*). Allatives and locatives can also evolve into genitive markers: cf. Bulgarian *na* 'of' < 'on, onto'; post-Biblical Hebrew *šɛl* 'of', expanded from *l(ə)* 'to, for'; Fr. *c'est à moi*, ultimately from Lat. *ad*; etc.[27]

The outlines of a possible solution to the problem of the gen.pl. thus begin to emerge. The first post-PIE step on the way to *-śśi* and *-ṃts(ə)* would have been the extension of adverbial **-tye* from its original locus, which must have been very restricted, to an essentially unlimited range of ordinary nouns. Processes of this type are common; compare, e.g., the spread of ablatival *-then* in Greek (e.g., *ouranóthen* 'from heaven'), ablatival *-taḥ* in Vedic (*mukhatáḥ* 'from the mouth'), and, almost certainly, instrumental-adverbial **-bhi* in post-Anatolian PIE itself.[28] The result would have been the creation of adverbs of the type **ekwo-tye* 'to/near/for the horse(s), horse-wards', with **-tye* appended to a nominal stem. The second major step – a characteristically Tocharian move – would have been the replacement of the bare stem by the acc. (> obl.) sg. and pl. Number-indifferent **ekwo-tye* would thus have split into a singular **ekwon-tye* (*vel sim.*) 'to/near/for the horse' and a plural **ekwons-tye* 'to/near/for the horses'. Much the same thing happened in the TA ablative, where there was a comparable split of adverbial **ekwo-ti* 'from the horse-side' into **ekwon-ti* (whence ultimately A abl.sg. *yukäṣ*) and **ekwons-ti* (whence A abl.pl. *yukasäṣ*).[29] The conversion of the nascent gen.pl. **ekwons-tye* into a true genitive would have grown out of ambiguous contexts like "The hay is bound for/in the vicinity of the horses (**ekwons-tye*)", where the predicative use of

26 The Greek adverbs in *-se* are discussed by Dunkel (2014: 126, fn. 25). Dunkel's preferred derivation of *-se* from **-tih*$_1$ would complicate the connection with adjectival **-tye/o-*.

27 I am indebted to Stefan Höfler, Alan Nussbaum, Jeremy Rau, and Michael Weiss for discussion of these forms.

28 The background of the *bh*-cases is discussed in Jasanoff 2009: 138–144.

29 Preforms of the type **ekwo-ti* were also the source of the Hittite ablative in *-az* (e.g., sg. and pl. *arunaz* 'from the sea(s)'). The development of pre-Toch. **ekwon-ti* and **ekwons-ti* to A *yukäṣ* and *yukasäṣ* was indirect: the forms as we have them were reassembled by adding the synchronic ablative ending *-ṣ* to the synchronic (= freestanding) obliques *yuk* (sg.) and *yukas* (pl.) and inserting an automatic *-ä-*.

the new form could easily be misinterpreted as denoting actual possession. The corresponding singular **ekwon-tye* was apparently never grammaticalized.

A second look at the phonology is now in order. Under the "thought experiment" scenario above, A *-śśi* was conjecturally taken from **-Tiyes*, with final **-s* and the disyllabic Sievers' Law treatment. Removing the final **-s* would make no difference for the outcome in TA, where **-tiye* and **-tiyes* would have fallen together. More serious is the question of whether Sievers' Law would still have been an active rule in Tocharian at the relatively late point at which **ekwo-tye*, with **-tye* added to the stem, was replaced by **ekwons-tye* (> **-tiye*), with **-tye* added to the Sievers-triggering acc.pl. Regardless of whether the original Sievers' Law was still active, however, secondary Sievers-like phenomena, often completely independent of the PIE incarnation of the rule, are known from various IE traditions.[30] There is thus no reason to exclude the possibility that Tocharian, with its well-known predilection for epenthesis at different chronological periods, could at some point have taken **-onstye* to **-onstiye* by sound change while leaving the consonant-stem sequence **-n̥stye* untouched. In the TB form of the ending, *-ṃts(ə)*, we find a different problem. Here there are no Sievers complications; what is surprising is the retention of the final underlying **-(ə)* < PToch. **-ə*, which, as an etymological PIE **-e* in absolute auslaut, ought to have been lost within Proto-Tocharian (see fn. 23). The explanation for the irregular-seeming retention lies in the final cluster. Prior to the inner-PToch. loss of absolute final **-ə*, there would have been two variants of the gen. pl. ending: **-nścəyə* (< **-tiye*), later generalized to give A *-śśi*, and **-nstsə* (< **-tye*), later generalized to give B *-ṃts(ə)*. In the longer form, the loss of the final schwa was unproblematic (**-nścəyə* > **-ścəy* > *-śśi*). In the shorter form, however, the loss of the schwa would have left the triconsonantal cluster **-nsts* in absolute final position. This, unsurprisingly, was phonotactically unacceptable, and the schwa was retained. For a parallel, compare, e.g., *arañce* 'heart', obl. *arañc(ə)*, where the **-ə* (< **-ən* < **-ənən*; cf. fn. 12) of the oblique, which ought to have disappeared, was likewise "protected" by the final cluster. The final step was the simplification of **-nstsə* to **-ntsə*, perhaps in tandem with the general simplification of **-ns* to **-n* (B *-ṃ*) in the obl.pl.

If the above is correct, it must rank among the more unlikely discoveries of comparative grammar that the gen.pl. endings *-śśi* (A) and *-ṃts(ə)* (B) were mere Sievers variants.

30 One thinks, e.g., of the extension of the Sievers' Law environment in Latin to include **-ĔR-* sequences (cf. 2sg. *uenīs*, *ferīs*, etc. < **-iyesi*), or the "converse" of Sievers' Law in Germanic (cf. Go. *satjiþ* 'sets', syncopated from **satijiþ* < **-eyeti*; but *sandeiþ* 'sends', with **-ijiþ* (< **-eyeti*) retained).

Abbreviations

TEB — Wolfgang Krause & Werner Thomas (1960). *Tocharisches Elementarbuch*. Vol. 1: *Grammatik*. Heidelberg: Winter.

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