# MISCELLANEA AVESTICA ET PALAEOPERSICA

В статье предлагается ряд наблюдений, касающихся исторической фонологии авестийского и древнеперсидского языков. В § 1 рассматривается развитие мл.-авест. dat. pl. *ptər<sup>a</sup>biiō* как фонетически закономерной формы. § 2 содержит этюд, посвященный ацентологии авестийского слова для «солнца», причем показано, что оно в плане акцентологии сопоставимо с ведийским s<sub>ú</sub>var-. В § 3 рассматриваются особенности развития \*ТН в унаследованных (индо)иранских словах, причем отмечается, что младоавестийское  $\dot{s}$  в композите  $xa\dot{s}i^{\circ}$  не является исконным. В § 4 древнеперсидские šc (напр., cišciv & c.) pacсматриваются как унаследованные рефлексы праиндоиранской группы \**ttc*. § 5 посвящен рассмотрению относительной хронологии развития, причем предлагается видеть аналогическое давление со стороны форм acc. sg. в праиранских амфидинамических именных парадигмах у основ с исходом на *i*- и *u*-. В §6 предпринимается попытка объяснить древнеперсидский гапакс dadas (DB 4.71-72) с помощью древних иранских данных фонологии и морфологии.

*Ключевые слова*: авестийский язык, древнеперсидский язык, праиндоиранский язык, историческая фонология.

### § 1. YAv. *ptər<sup>ə</sup>biiō*

As is well known, cases such as the YAv. acc. sg.  $\bar{a}tr \partial m$  'fire' < \**HeH-tr* + -*m* or 3sg. subj. praes. *trofiiāt* 'would steal' < \**tr*/*p*-*iē-t* seem to point to what appears to be at least descriptively a Young Avestan sound change \* $\partial r > r\partial / t_{([+lab.])}$  (see Hoffmann, Forssman 2004: 91, but cf. Beekes 1999 *pass*. and de Vaan 2003: 512 ff. for an altogether different view).<sup>1</sup> The passive present *striie*-< \**stor-iá*- (via \**stro-iá*- > \**striiá*-) that is usually adduced in support of such metathesis<sup>2</sup> is not a good example, however, since Proto-Indo-Iranian sequence \**ri* regularly results in PIIr. \**rii* 

<sup>&</sup>lt;sup>1</sup> As far as  $\langle r\partial f \ddot{u}r erwartetes \partial r^{\partial} [...]$  hinter inlautendem \*au» (Hoffmann, Forssman 2004: 91) is concerned, I do not see here any kind of similar development. On the contrary, forms such as OAv. *fraor*<sup> $\partial t$ </sup> 'devotedly' = [frawərt] (Y. 30.5c) clearly point simply to  $*aw\partial r > YAv$ .  $*awur > *awr = aor^{\partial}$ .

<sup>&</sup>lt;sup>2</sup> Or perhaps syncope if the change is as late as the anaptyxis of  $\partial$ , so that  $t\partial r^{\partial} > tr\partial$ . In this case, however, anaptyxis would have to precede YAv. \* $\partial > i / [+pal.], *\partial > u / [+lab.],$  as is required, e.g., by the  $u < *\partial$  in  $br\bar{a}truiia$ -.

anyway (cf. Ved.  $kriy\dot{a} < k^{\mu}r \cdot i\dot{e}/\dot{o}$ , matching the OP 3sg. opt. pf. caxriy $\bar{a}^{t}$  vs. Ved. 3sg. opt. praes. bibh $ry\bar{a} - < b^{h}i \cdot b^{h}r \cdot i\dot{e}H_{1}$ - with what is clearly an analogically restored r), thus making YAv. striieultimately ambiguous. Is is nevertheless possible that striie- does reflect  $*stra \cdot i\dot{a} - < *star \cdot i\dot{a} - \leftarrow *strii\dot{a}$ , provided the restitution of \*star- was early enough to undergo metathesis. That at least in the passive present the phonetically regular outcome could be and probably regularly was susceptible to restoration is proved by the likes of YAv. kiriia-  $< *ka^{i}r \cdot ia - \leftarrow *kriia - < *k^{\mu}r \cdot i\dot{e}/\dot{o}$ - &c. (OP a-ka-ra-i-ya- is of course ambiguous, as it can either stand for the renewed \*akarya- or old \*akriya-). It is very unlikely that  $*strii\dot{a}$ would have been exempt from what seems to have been an acrossthe-board renewal in  $i\dot{a}$ -presents.

Seen from this perspective, the YAv. dat. pl.  $pt \partial r^{\partial} bii\bar{o}$  'to the fathers' < PIE  $*pH_2$ -tr- $b^{\hat{h}}ios$  is normally recognised to be aberrant for expected  $**f\partial r\partial bii\bar{o}$ , while its sequence  $t\partial r^{\partial}$  is usually ascribed to the analogical influence of  $n\partial r^{\partial}bii\bar{o}$  'to men' < PIE  $*H_2nr$ - $b^{\hat{h}}ios$  vel sim. (cf. Hoffmann, Forssman, *loc. cit.*). This is not impossible and is theoretically even rather likely given the fact that  $n\partial r^{\partial}bii\bar{o}$  itself is an analogically remade dative. The expected form must, at least in my view, have been  $nuruii\bar{o} = {}^{+}nuruuii\bar{o}$  with the usual simplified spelling (thus also attested side by side with the partly restored  $n\partial ruii\bar{o}$ ; cf. surunao-/surunu(u)- 'to hear')<sup>3</sup> <  $*n\partial ruwij\bar{o} < *n\partial rwj\bar{o} <$ 

<sup>&</sup>lt;sup>3</sup> With surunao-/surunu- one could think of either \*səru-nao/nu-  $\leftarrow$  \*sərnao- < PIE \* kl-néu-/nu-' (i.e., as a morphological portmanteau of \*sərnao/nu- and sru- (i.e., the shape of the weak stem outside of the present) or  $*s^{\circ}runao$ - with anaptyxis in the anlauting cluster of a more radically reshaped \**sru-nao-/nu*-, copying the shape of the weak stem of the aorist, the perfect, the stative, and the past passive participle. Considering the 2sg. opt. praes. surunuii $\ddot{a}$  in Y 68.9a, however, it seems that we are almost certainly dealing with late anaptyxis, since both opening verses ( $s^{u}runuiia$ nō yasnəm ahurāne ahurahe / xšnuiiā nō yasnəm ahurāne ahurahe; for the recent edition see Redard, Kellens 2013: 35) point metrically to 6/5 + 8 (cd are regular 8 + 8). A disyllabic participle s<sup>*u*</sup>runuuant- would also ensure perfect metrical correspondence between  $s^{u}runuatasc\bar{a} a s^{u}runuatasc\bar{a}$ and the following juxtaposition xšaiiantascā axšaiiantascā in Y 35.4 (for the edition see Narten 1986, Kellens/Pirart 1988). In this case, then, the colouring of  ${}^{\circ}ru$  to  ${}^{u}ru$  is not directly comparable to  $uru < {}^{\ast}\partial ru$ , but this is not a problem, since in contrast to YAv.  $*\tilde{\tilde{a}} > i / [+palatal] __; __[+palatal]$ and  $*\bar{a} > u / w_{\pm}$ ; \_\_w, which only affects non-anaptyctic, i.e., old  $\bar{a}$ (mostly < a / N), the second wave of the colouring process affects the central vowel of both sources. Consider, e.g.,  $gar^{\bar{o}}b\bar{i}\bar{s} < *gar^{\bar{o}}b\bar{i}\bar{s} < PIE$ 

\**nər* $\beta$ *jəh* < \**nərbiah*.<sup>4</sup> But the retention of the sequence *tər*<sup>2</sup> must also be posited in the case of YAv. tū<sup>i</sup>riia- 'paternal uncle' (cf. Chwar.  $f_{cwr}$ , Pașt. tra, on which see Morgenstierne 2003 s.v.) <  $*t\bar{u}rija^{-5} < *t\bar{u}r(i)ja^{-6} < *tawr(i)ja^{-6} < *tawr(i)$ \* $pt = ru(i)ia < PIE * pH_2 - tr - u - (i)io - ,^7$  which stands in clear opposition to YAv. brātruiia- 'nephew' (cf. ЭСИЯ II s.v.) < \*brā-trə- (both in  $V\bar{i}d\bar{e}vd\bar{a}d$ ). The latter form is not traditionally seen as representing the regular outcome of its PIE prototype (cf. Hoffmann/Narten 1989: 73<sup>126</sup>), but the alternative spellings  $br\bar{a}t\bar{u}^{i}riia$ - and  $br\bar{a}turiia$ can hardly be given precedence seeing that these could in turn have easily been modelled on  $t\bar{u}^i riia$ - (for a similar view but a different evolutional history of the word see de Vaan 2003: 517-518 with references). Regardless of whether *brātruiia*- stands for <sup>+</sup>*brātruuiia*-(with the usual simplified spelling) or [brātruja-], the sequence  $*b^{h}reH_{2}-tr$ - here clearly reflects the expected sound change \**tr* $\partial$  / ([+lab.]) conspicuously absent from  $t\bar{u}^{i}riia$ . Note here that

 $*g^{\mu}rH-b^{h}is$  'with songs (of praise)' beside  $m\bar{o}r\partial ndat < *m\partial ndat < PIE$ \*mr-n-d-a-t 'destroyed' etc.

<sup>4</sup> For the relative chronology of YAv. \* $\partial rw$  (< \* $\partial ru$ ) > \* $\partial^w r$  > \*ur(w) (vide infra) vs.\* $\partial rw$  (< \* $\partial rb$ ) >  $\partial^u r$  cf.  $g\partial^u ruuaiia$ - 'to grab' < PIE \* $g^h rb^h$ -nH-ie/o-, which points to the fact that one would not in fact expect \* $n\partial rwj\bar{o}$  to yield something like \* $n\partial rj\bar{o}$  (via \*jj < \*w'j as in *paoriia*- etc.) either.

<sup>5</sup> Via Late YAv.  $j > ij \sim w > uw / C$ 

<sup>&</sup>lt;sup>6</sup> With regular loss of palatalized  $\overline{w}'$  (probably via *j*, cf. Old Irish *drui* < \**druw'* < \**dru-uid-s*) as in \**páruija-* 'first' > \**parwja-* > \**pa*<sup>w</sup>*rja-* > \**pawrja-* > mlav. *pao<sup>i</sup>riia-* vs. OAv. *pa*<*o<sup>u</sup>*>*ruuiia-* (with YAv. contamination) <= \*[párwija-]. Note that full metathesis (i.e. with proper resegmentation of the suprasegmental <sup>w</sup>) in the case of original \**-r*<sup>w</sup>- < \**-r*<sup>w</sup>*w-* < \**-rw-* only seems to have occurred if *-w-* was lost (most probably due to the palatalising effect of the following segment): contrast YAv. *ha<sup>u</sup>rwa-* 'whole' < \**há<sup>w</sup>rwa-* < \**hárwa-* with *uruuarā-* 'plant(s)' < \**urwarā-* < \**∂<sup>w</sup>rwarā-* < ?*mwia-* < PIE \**H*<sub>2</sub>*rH*<sub>3</sub>*-uér-eH*<sub>2</sub>- (with the colouring of \**∂* in a labial environment but no compensatory lengthening; see, however, Lubotsky 1997 for a radically different account) vs.  $tu^i riia- < tturija- < turija- < turija- < *towrja- < *towrja- < *ptoruja- (with$ *ð*>*u* $/_[+lab.] as well as compensatory lengthening due to the loss of the fully segmental$ *w*).

<sup>&</sup>lt;sup>7</sup> It is insignificant whether the suffix is di- or monosyllabic. One would not necessarily expect, however, the descriptively Sievers-type sequence (if this is the correct reconstruction) to survive in Iranian. For Vedic *pit*<sub>*r*</sub> $v_{(i)}$ *ya*- or *pit*<sub>*r*</sub> $v_{(i)}$ *yá*- are expected (perhaps even *pít*<sub>*r*</sub>v(i)*ya*-, considering the model of *bhrát*<sub>*r*</sub>*vya*-), but the accentuation is not directly attested in the extant sources (cf. Rau 2011: 15–16).

on the evidence of Ved.  $bhr \dot{\bar{a}} t_{r} v_{(i)} ya$ -, YAv.  $br \bar{a} truuiia$ - < \* $br\bar{a}truwija - \langle *br\bar{a}trawija - \langle *br\bar{a}taruija - \langle *b^{h}reH_{2}-tr-u-(i)io$ - is the less likely alternative as opposed to the unproblematic development in brātruita- < \*brātruwja- < \*brātrəwja- < \* $br\bar{a}t = v^{h}reH_{2}-tr-u-iio$ , since in the case of ' $br\bar{a}truuiia$ - the potentially disyllabic Proto-Iranian sequence \*ij would have to be preserved as well as accented to avoid early Young Avestan syncope. Since in the case of inital p in  $pt \partial r^{\partial} b i i \bar{o}$  as opposed to  $t\bar{u}^{i}riia < *ptarwja$ - we must be dealing with a case of restitution (one completely parallel to  $pt\bar{a}$  beside regular  $t\bar{a} < *pt\bar{a}$  in the nominative singular) from the oblique cases with the prevocalic shape of the stem (\*tar- < PIE \*p-tér- ~ \*pitr-V- < PIE \*p- $H_2$ -tr-V-~  $t \partial r - C - \langle PIE * p - tr - C - \rangle$ , both sequences form an equitable juxtaposition to  $br\bar{a}truiia < *br\bar{a}trawja$  and other examples attesting to metathesis in *tər* sequences. The reason for the failure of this particular sound change to operate in the case of the former thus becomes immediately apparent – it must have been the heavy cluster \*#ptro- which would otherwise have been produced that was disfavoured. Note here that the Common-Iranian fricativisation of stops / C precedes YAv.  $t \ge r \ge t \ge a$  is clearly evidenced by all the examples with  $\{-s\}$  tor > tro (and not \*\* $\theta$ ro). This is significant in as far as YAv. \*\* $f\theta r \partial$ - produced by reverse chronology would not have violated the onset constraint in a word-initial syllable, cf. OAv.  $f \partial \delta r \bar{o} i = [f \theta r \partial j]).$ 

To a similar effect the OAv./YAv. 3sg. stative presents *mruiiē* 'spoken' and *sruiiē* 'famous' < \**mruwáj*, \**sruwáj*,<sup>9</sup> continuing PIE \**mluH-éi* and \**kluu-éi* respectively (cf. Kümmel 1996 s.vv.) fail to show syncope of the unaccented sequence *uw* in heavy word-initial clusters such as  $\#CRuw^{\circ'}$ .<sup>10</sup>

<sup>&</sup>lt;sup>8</sup> With subsequent loss of the laryngeal by lex Wetter in the sequence  $*p \partial Htr$ -' (concerning the PIIr. paradigm of the word for 'father', one should start from  $*pt\dot{a}$ , strong stem  $*pt\dot{a}r$ -, weak stem \*pitr-', "middle" stem \*ptr-).

<sup>&</sup>lt;sup>9</sup> Possibly via \**uwje* (if the reflex of \*-*ai* was subject to rediphthongisation in auslaut, which however is not unambiguously demonstrable) > \**uw'je* > \**u(j)je* > *uje*.

<sup>&</sup>lt;sup>10</sup> Note that OAv. *-duiiē* (2pl. primary medial personal ending) < \**-duwaj* vs. YAv. <sup>+</sup>- $\delta\beta e$  < \**-dwaj* is ambiguous as both would result from either < \**-d<sup>h</sup>uuai* (with syncope and  $w > \beta$  in Young Avestan and the preservation of *dw* with subsequent development into *duw* by the late Young Avestan Sievers-effect, for which cf. OAv. *ahuiiē* 'existence' (dat. sg.) < \**ahuw'(j)e* 

### § 2. YAv. hū

The equation between Old Avestan disyllabic  $x^{\nu} \bar{a} ng = *huwang$  $< *huw\tilde{a}$  and Young Avestan  $h\bar{u}$  (both genitives singular to the heteroclite neuter huuar<sup>2</sup> 'sun') is an established and unproblematic fact. The short genitive  $h\bar{u} < *huw\tilde{a}$  (possibly via \*huwan(h) <\*huwa) owes its seemingly truncated ending to Young Avestan contraction in the sequence  $*h\dot{u}w\bar{a} > *h\dot{u}w\bar{u} > h\bar{u}$  (see, e.g., Lubotsky 1997 pass., Hoffmann, Forssman 2004: 153). What is not usually explicitly pointed out but seems significant enough, especially in terms of the assessment of the relationship between Old and Young Avestan, is that unlike OAv.  $x^{\nu} \bar{\partial} ng$ , which clearly points to an oxytone \*huwáng < \*huwấ and thus preserving the proterodynamic accentual pattern of PIIr. \*suuáns (from PIE  $*s(H_2)uu\acute{e}ns = *sH_2-u\acute{e}n-s$  by lex Lindemann, alternatively  $*suH_2\acute{e}ns$  $\leftarrow *s\acute{e}uH_2ns < *s\acute{e}H_2-un-s$  via laryngeal metathesis and in the event that one starts from an acrostatic  $\frac{so}{\dot{e}H_2-u'}$ , or from  $\frac{suH_2\dot{e}ns}{\dot{e}hs}$ \*séH<sub>2</sub>-un-s, starting from a proterodynamic \*séH<sub>2</sub>-ul- $\emptyset$  ( $\rightarrow$  \*séuH<sub>2</sub> $l=\emptyset$  / \*sH<sub>2</sub>-uén- ( $\rightarrow$  \*suH<sub>2</sub>-én-)), Young Avestan hū can only be the result of a barytonised genitive  $\hbar u w \tilde{a}$ . Given the fact that early Young Avestan sequences of *\*ij* and *\*uw* are regularly syncopated if unaccented, the initial sequence of  $*huw\tilde{a}$  would result in exactly what is the transmitted Old Avestan form via \* $huw\tilde{a} > YAv$ . \* $hw\bar{a} >$ \*\* $x^{\nu}\bar{\partial}$ , cf. OAv. \* $zuw\dot{a}ja$ - 'call' > YAv. \* $zw\dot{a}ja$ - > zbaiia- vs. YAv. *hizuu-V-* 'tongue' < \**hizúw-V-* < \**sidzúu-V-*  $\leftarrow$  PIE \**dng*<sup>h</sup>-*uH*<sub>2</sub>-*V-*, or *tanuiie* 'body' (dat. sg.) < \**tanúwai* < PIE \**tnH*<sub>2</sub>-*uH*<sub>2</sub>-*ei*. Since the nominative/accusative singular \* $h\dot{u}\mu ar < PIIr$ . \* $s\dot{u}\mu ar^{11} < s\dot{u}\mu r < s\dot{u}\mu r$ \* $s\dot{u}H_2-l-\emptyset$  (with laryngeal metathesis and subsequent generalisation of the zero-grade) was accented on the first syllable (cf. Ved.  $s_{\mu}var$ '(sun)light'), secondary accentual columnarity is not surprising and can be nicely paralleled by the archaic Vedic gen. sg.  $s_{\mu}var$ (homophonous even with the endingless locative  $s_{i}var \leftarrow *sH_2-u\acute{e}l$ )  $< *súyars \leftarrow *suyans$  (with the additional generalisation of the

<sup>&</sup>lt; \*ahuwai < \*áhwai vs. YAv.  $a\eta^v he < *a\eta^w hai$ ) or \*- $d^h \mu ai < PIIr$ . \*- $d^h(u)\mu ai$ .

<sup>&</sup>lt;sup>11</sup> The Proto-Indo-Iranian outcome of the syllabic \*r in auslaut is beyond any doubt to be reconstructed as \*-ar#. Vedic *-ur* in *dhánur*-type heteroclites is limited to \*-Cur# sequences, in which the syllabicity of the elements involved was at least to my mind subject to metathesis. The development observable in \*-Cur# > -Cur# is superficially comparable to the PIE rule, whereby \*Cur > \*Cru.

*r*-(< *l*)allomorph into the oblique cases). Note that it is extremely doubtful that Ved.  $s\bar{u}r$ -é (dat. sg.) reflects any kind of old accentual mobility (the retrograde by-form of the genitive singular is always accented as  $s\bar{u}r$ -as, while  $s\bar{u}r$ -é almost certainly copies the pattern of root nouns). It is important to add that the innovation displayed by the Young Avestan paradigm \*huwar, \*huwatatata (~ \*hur-ah) as opposed to Old Avestan \*huwar, \*huwatatata is no obstacle in regarding the latter idiom as directly ancestral to the former, as is the case with the well-known and much discussed morphological innovations, also nicely paralleled by their progressive behaviour in Vedic.

# § 3. YAv. xaśiº

According to Hoffmann, Narten 1989:  $66^{98}$  (cf. Hoffmann, Forssman 2004: 101) the YAv. compositional form  $ha\dot{s}i^{\circ}$  'companion' may mirror a virtual  $< *haci- < *hak^{h}i- < *sok^{\mu}-H_2-i-$  or could have introduced its  $\dot{s}$  from the oblique cases, where  $*k^{h} < \text{PIE}$  $*k^{\mu}H_2$  was in contact with \*j < PIE \*i. The decision in favour of one or the other is of course not unimportant for the correct interpretation of the sound law, by which Proto-(Indo)Iranian  $*tc^{(h?)}$  $< *k^{(h?)} / \_j$  behaves differently than  $/ \_V^{\text{E}}$ . Since PIIr. \*tc < PIE $*k^{(\mu)} / \_V^{\text{E}}$ , j only regularly displays the outcome of secondary fricativisation (parallel to stops and, much later, YAv.  $*dz \sim *dz >$  $*z / \_j$ ) when followed by the palatal approximant, one does not expect  $*tc^{h}$  to have necessarily behaved much differently, but this is ultimately very difficult to prove given that  $ha\dot{s}i$ - is in fact the sole example of the inherited sequence  $*k^{(\mu)}Hi$  that we possess.

It is fairly easy to show on internal grounds, however, that  $\dot{s}$  can easily be analogical. One encounters a similar phenomenon in the feminine stem  $apa\dot{s}\bar{i}$  < PIE  $*apo-H_3k^{\mu}-iH_2$ - (to  $ap\dot{a}nc$ - 'turned away'), which has replaced its original \*tc, the expected reflex of the PIIr. sequence  $*k\bar{i}$ , with \*c from the oblique cases. There it was regularly produced by the contact of  $*k^{\mu}$  with the anlaut of the fullgrade suffix  $*ap\bar{a}cj\bar{a}-<*ap\bar{a}kj\bar{a}-<*apo-H_3k^{\mu}-ieH_2$ -. Since the Old Avestan sequence  $\langle \dot{s}ii \rangle$  attests to the preservation of the glide (cf. Old Persian  $\dot{s}iy$ ), it must be concluded that the transference of  $\dot{s}$  from the oblique cases in the case of  $apa\dot{s}\bar{i}$ - as well as  $ha\dot{s}i$ - cannot have preceded the regular YAv. sound change by which \*j was absorbed into the preceding \*c (and, parallelly,  $*a \leq YAv$ .  $*dz / _j$ ).

There nevertheless remains the rather difficult question whereas  $ha\dot{s}i^{\circ}$  might still somehow represent the regular outcome of PIIr. \* $hakhi - < *sok^{\mu} - H_2 - i$ -. The issue must probably remain ultimately

open because there can be no absolute certainty that inherited sequences of a velar followed by \*h, i.e. the probable reflex of the PIE laryngeal  $*H_2$  and  $*H_1$ , were affected by the process of Proto-Indo-Iranian palatalisation by front vowels or \*j. Beside \*sakhi-/\*sakhj-, the only other example is the famous  $*dught \dot{a}r - /*d^{(h)}uktr - '$ 'daughter' < PIE  $*d^hugH_2t\acute{e}r_{-}/*d^huktr_{-}' < *d^hugH_2tr_{-}'$ , where the attested forms that could potentially go back to  $*df^{i}$  are too ambiguous (see more recently, e.g., Kümmel 2016) to serve as a vardstick for comparison, even more so because in this case, and in contrast to  $*i \sim *j$  in \*sakhi-/\*sakhj-, the potentially palatalising segment goes back to the specifically Indo-Iranian reflex of postlaryngeal anaptyxis ( $\emptyset > \mathfrak{q}(>i) / H$  C). However, if there was no palatalisation across h, one is in fact left without a good explanation for the YAv. oblique stem  $ha\dot{s}$ , unless one wanted to say, and this is of course entirely ad hoc, that since there is no OAv. \*haśii-, YAv. haś- might not go back to such a pre-form at all but is a YAv. reflex of \*haxi- > \*hac- (note here that such a putative \*xi- > \*c- would not necessarily have fallen together with the reflex of YAv. \*hj-, the result of which is of course  $*ci \langle \dot{x}ii \rangle$ ).

If, on the other hand, \**Kh* did undergo palatalisation, which is by far the most economical solution (NB This says nothing about the possibility that \**Khi* < \**Kh*<sup>o</sup> would do so too!), one would most likely expect \**tc*<sup>h</sup>*j* to yield \**cj* (< \**tcj*)<sup>12</sup> in a combined change of T<sup>h</sup> >  $\Phi / \{-s, -f\}$  and T >  $\Phi / \{-s, -f\}$  C (both Common Iranian), which must surely have also affected the affricates.<sup>13</sup> According to Lipp

<sup>&</sup>lt;sup>12</sup> As normally in the case of  $k^{(u)}i > *cj > *cj > *cj$  by  $T > \Phi / \{-s, -f\}$ \_C. <sup>13</sup> The problem of  $*tc^h j$  is intimately connected to the question of the fate of interconsonantal laryngeals in non-marginal syllables in Iranian (in favour of Iranian \*i / H\_C see extensively Lipp 2009 II: 351ff.). My opinion is that there probably was no anaptyxis, cases such as OAv.  $dug^{\circ}dar$ -, YAv.  $duy\delta ar$ - vs. Ved.  $duhit\dot{a}r$ - being best explained as Iranian  $*d^hug^h.ht\acute{e}r$ -  $*dug^h.hd^h\acute{e}r$ - (unproblematic, since Bartholomae's Law operates across fricatives)  $> *dug.hd^h\acute{e}r$ - (?)  $> *dug.d^h\acute{a}r$ - (?)  $> *dug.d\acute{a}r$ - (i.e., with \*hsyllabified in the onset) vs. Indo-Aryan  $*d^hug.ha.t\acute{e}r$ -  $> *dug^h.ha.t\acute{e}r$ -  $*dug^h.hi.t\acute{a}r$ -  $> *du.g^hi.t\acute{a}r$ - with secondary trisyllabicity. That onset-initial laryngeals leave no visible trace can be nicely supported by the likes of Ved.  $j\acute{a}nman\bar{a}$  (instr. sg.) as opposed to  $j\acute{a}niman$ - 'birth; generation', which points to  $*g\acute{e}n.hmg.n\bar{e}$  (\* $g\acute{e}nh-mgn.\bar{e}$ )  $\leftarrow$  PIE  $*g\acute{e}nH_1-mn-eH_1$ . Avestan forms such as  $mazb\bar{t}\breve{s}$  = Ved. mahibhis (instr. pl.) or  $maz\bar{a}n\bar{a}$  = Ved.  $mahin\acute{a}$ 

<sup>(</sup>instr. sg.) mentioned by Lipp (2009 I pass.) in support of Iranian \*meģ-H<sub>2</sub>b<sup>h</sup>is > \*medʒ.hə.b<sup>h</sup>iš > \*ma.dʒ<sup>h</sup>ı.b<sup>h</sup>iš > \*ma.dʒ<sup>l</sup>.b<sup>h</sup>iš > \*ma.dz†ı†.biš and \*meģ=H<sub>2</sub>-mn-éH<sub>2</sub> > \*meģ=H<sub>2</sub>-n-éH<sub>2</sub> > \*medʒ.hə.né > \*ma.dʒ<sup>h</sup>ı.ná >

2009 II: 388, \* $tc^{h}i$  (as in our  $ha\dot{s}i$ -, although this is not explicitly stated) < \*khi would then regularly yield \*ci in that same monophthongisation process that yielded T<sup>h</sup> >  $\Phi$ . If this is correct, YAv.  $ha\dot{s}i$ - does not of course need to be analogical and the above scenario is redundant, but the matter seems slightly more complicated. If we are correct to assume that PIr. sequences \*D<sup>(h)</sup>\$h<sup>14</sup> underwent devoicing (see most recently Kümmel *fthc*.) in a process by which \* $D^{(h)}h > *Dh > *Th = *T^{h15}$  (whence, together

<sup>15</sup> Note that the lack of devoicing in PIr.  $*d^hug^h.ht\acute{er}$  is in fact surprising. In view of YAv. *jafnu-* 'depth, valley' and *jafra-* 'deep' there was probably no condition / \$hV as in both cases YAv. f clearly points to  $*p^{\hbar} < *b^{\hbar}h$ . Since PIIr. \* $dzab^{h}$ -rá- would have developed into YAv. \*\* $ja\beta ra$ - and \* $dzamb^{h}$ -nu- would certainly not yield \* $dzam\beta nu$ - as prerequisite for \**dzamfnu*- (even so, the sequence with a regularly devoiced YAv.  $\beta$  / N would be much too late to undergo the Common Iranian change by which  $N > \emptyset / \bar{V} > \bar{V} \Phi$ , the only possibility, I think, is to assume PIE  $*g^{(\mu)}mb^{(h)}H$ -ró- > PIr.  $*dzab^{h}hra$ - (\*dz is of course analogical  $\leftarrow$ \* $dzemb^{(h)}H$ -) > \*dzab.hra-> CIr. \* $dza.p^{h}ra$ -> \*dzafra- (= Ved. gabhīrá-'deep'; for the equation cf. EWAia I s.v.) and PIE  $*g^{(u)}\acute{e}mb^{(h)}H$ -nu- > PIr. \* $dzamb^{\hat{h}}.hnu - >$ \*dzamb.hnu - >\* $dzam.p^{\hat{h}}nu - > CIr.$ \*dzamfnu - >\*dzamfnu - >\* The *i*-stem compositional form (as expected in a Caland-type adjective) viz. YAv.  $ja^{i}\beta i$ - of course expectedly reflects \*dzabi- (with analogical \*dzas above) < PIr. \* $dza.b^{h}i^{-}$  < PIr. \* $dza.b^{(h)}hi^{-}$  < \* $gm.b^{(h)}Hi^{-}$  < PIE  $*g^{(\mu)}mb^{(h)}H$ -i-. But in the case of *jaf*- the environment is \*D while \*D\$hD (as in the case of  $*dug^{h}.hd^{h}\acute{e}r$ - or  $*medz.hb^{h}i\check{s}$ , mentioned above) could have behaved differently at the  $T^hD$  stage, where one would expect regressive voicing assimilation (not at all necessarily in the case of Iranian  $*T^{h}R$ , however, and on the evidence of *jaf-R*- quite certainly not). Note, however, that for Young Avestan \* $dux\delta ar$ - would have been perfectly tolerable (cf.  $ux\delta a$ - 'word' < PIIr. \*uk-t<sup>h</sup> $\dot{a}$ -), so that whatever the development might have been, it definitely reaches back to OAv. \*dugdar-,

<sup>\*</sup>ma.dzi.n $\dot{a}$  > \*ma.dz $\dagger i \dagger$ .n $\dot{a}$  are not decisive as the otherwise expected outcomes \*\*mažb $\ddot{i}$ š (< \*maz.biš < ..., <sup>vide infra</sup> < \*madz.hbiš < \*madz<sup>h</sup>.hb<sup>h</sup>iš < \*medz.hb<sup>h</sup>iš) or \*\*mašn $\bar{a}$  < \*maſn $\dot{a}$  < \*masn $\dot{a}$  < \*matsn $\dot{a}$  < \*madz.hn $\dot{a}$ < \*medz<sup>h</sup>.hn $\dot{e}$  could have easily been restored to maz- at any point in which the interparadigmatic allomorphy was felt to be intolerable (cf. yasna-'sacrifice' for expected \*yašna- < CIr. \*jaſná- < PIr. jazná- < PIIr. \*jadzná- < PIE \*jag-nó- etc.).

<sup>&</sup>lt;sup>14</sup> Heterosyllabicity is of course required in the case of  $*D^{\hbar}$ . Note in this respect  $*d^{(\hbar)}e \cdot d^{(\hbar)}H_{1/3} \cdot us \cdot$  (oblique stem of the act. ptcp. pf.) >  $*d^{(\hbar)}ed.huš \cdot > *dad^{\hbar}.huš \cdot > *dad.huš \cdot > *dad.huš \cdot > *daduš \cdot > YAv. da\partial uš \cdot$  (vs. strong stem  $da\delta uuah$  - as brought to renewed attention by Kümmel *fthc*.), since  $*d^{(\hbar)}e \cdot d^{(\hbar)}e \cdot d^{(\hbar)$ 

with the old \*Th,  $*T^h > \Phi$ ), PIr.  $*ts^h < *dzh <$  PIIr. \*dzh < PIE \* $g^{(h)}H$  will have yielded \*ts rather than \*s (and thus parallelly  $*tc^h >$ \*tc) seeing that the voiceless dental fricative in OP  $ma\partial i sta$ - 'great' (for expected \*madista- = av. mazista-) < PIE \*meg-isto- 'biggest, greatest' presupposes the existence of OP \* $ma\theta$ - (corresponding neatly to YAv. mas-, cf. Kümmel, Op. cit.) at least somewhere in the paradigm of the adjective meaning 'great, big', thus ultimately pointing to PIr. \*mats- (and not \*\*mas-) < PIr. \*madzh- < PIIr. \*madzh- < PIE \* $megH_2$ -.

## § 4. OP cišciy & c.

As has long been established, the Old Persian combinations of the nom./acc. sg. neuter pronoun  $ci^{d*} < PIE *k^{\mu}id$ ,  $ava^{d} < PIE$ \*° $a\mu od$  and the pronominal adjective  $anya^{d} < PIIr$ . \*°anja'-'(an)other' with the enclitic indefinite particle ° $ci^{d} < *°k^{\mu}id$  result in cisciy 'something', avasciy 'that also', and aniyasciy 'also something else'. It is therefore tempting to conclude that PIIr. \* $-t^{o}tc$ -> OP \* $-c^{o}tc$ - (similarly Lipp 2009 I: 118<sup>62</sup> with references). The rather exceptional development of the pre-PIIr. cluster \* $tk^{E}$  would of course be unsurprising across a loose morpheme boundary (i.e. in external sandhi), as is the case with, e.g., OP -s- (= Av. -sc- < \*-s.tc-) < \*-ss- < \*-s.ts- < \*-s.tc- < \* $-sk^{E}$ - vs. -sc-<sup>16</sup> (in XPI 36 once exceptionally -sc-, as regularly in Avestan) < \* $-c^{o}tc$ - < \* $-s^{o}tc$ -

of which  $du\gamma\delta ar$ - is the expected YAv. outcome. I am not too enthusiastic about the old idea that the cluster \*gd in PIr. \*dugdar- goes back to a generalisation from the oblique stem, since this would require the highly uneconomical assumption that  $*g^{\hbar} < *gH$  was transferred from the strong stem before any specifically Iranian phonetic development took place, only to be readopted after  $*g^{\hbar}t$  yielded \*gd ( $<*gd^{\hbar}$ ) by Bartholomae's Law in its new environment. Cases such as OP  $\langle \text{g-r-[f-t-m]} \rangle$  (DB 4.90; see Schmitt 1991: 45) if for *garftam* (and if this is the past passive participle corresponding to Ved. *grbhītá*- 'seized, grabbed' < PIE  $*g^{\hbar}rbH_2$ -tó- as seems likely despite semantic difficulties), are of course unhelpful, since as in OP *basta*- 'bound'  $\leftarrow *bazdá- < *badzda- < *badzda- < *bnd-d^{\hbar}á- < PIE$  $b^{\hbar}ndh$ -tó- and productively so whenever Bartholomae's Law obscured synchronic transparency (be it in morphology or word formation), even the theoretically predictable \*bd (if the parallel case of *gd* in \*dugdar- is anything to go by) would have been replaced by \*bt > \*ft.

<sup>&</sup>lt;sup>16</sup> As in Indo-Aryan, where s > f / tf; s > 3 / dc (cf.  $-s^{o}ca < -s^{o}fa$ , *májja*- 'to dive' < mezdza-).

\*- $s^{o}k^{E}$ - (cf.  $pas\bar{a}$ \* 'after' < \*po- $sk^{\mu}e$  vs.  $manas^{o}ca \sim manas^{o}ca$  'and mind'). One could thus envisage the following development:

PIE \*- $t^{o}k^{(\underline{u})E}$ -> PIIr. \* $tt_{c}$ > \* $tst_{c}$ 

> a) Proto-Indo-Aryan \*t f > \* f f (by assimilation as a follow up to the regular elimination of the sibilant between two stops);

> b) Proto-Iranian \**tstç* > \**s<sup>o</sup>tç* (by inner-Iranian simplification of affricates /\_\_\_T, T\_\_\_ as in Av. *-raost* 'hindered'< \**-rautst* < \**-loud<sup>h</sup>-t* and loc. pl. *nafšu* 'grandson' < \**napsu* < \**naptsu* < \* $n^{e}p$ -*t*-*su*) > OP  $c^{o}tc$ .

If this is the correct scenario, one would expect Avestan to yield  $*-s^{\circ}t_{c}$ , since as opposed to Old Persian, there would have been no subsequent assimilation across word boundary as evidenced by, e.g., *has*<sup>o</sup>*cit* 'someone' < \*-*s*<sup>o</sup>*t*c- (vs. - $\check{s}^{o}c$ - < \*-*f*<sup>o</sup>*t*c- under RUKI-conditions) etc. Cases such as Av. ahmāt<sup>o</sup>cit (abl. sg.) or kat<sup>o</sup>cit (nom. sg. ntr.), however, show no trace of sandhi (tc could stand here for the occasional *padapātha*-induced separation of the affricate t, but it is more likely that it reflects restitution) and are ultimately uninformative, but there is a stronger argument against the above assumption that the PIIr. sequence  $*-s^{\circ}tc$ - regularly developed into OP  $c^{\circ}tc$ . It is namely the very two Old Persian lexicalised derivatives *vaciy* 'whatever' and *aciv* 'however', both with what must have arguably been synchronically non-transparent word formation, that in fact fail to show any trace of  $-\dot{s}c$ -, even though they go back to directly comparable sequences \**iat-tcid* < PIE \**Hiód*° $k^{\mu}id$  and \**at-tcid* < PIE \* $\dot{a}t^{\circ}k^{\mu}id$  respectively (cf. Dunkel 2014 s.vv.). It will thus necessary be ciściy, avaščiy, and aniyaščiy – forms with synchronically productive morphology - that display some secondary and undoubtedly analogical development of the  $*-t^{\circ}tc$ - sequence, rather than what would have been its expected outcome viz. -tc- (by degemination)  $< -tc^{\circ}tc^{\circ} < *-t^{\circ}tc^{\circ}$ , which in turn seems to be reflected by vaciv and aciv. The source of the analogy that produced neuter forms such as *cišciv* & c. must of course have been the idiosyncratically Old Persian external sandhi  $-\check{s}^{o}c$ -  $< *-s^{o}tc$ - of the corresponding masculine forms.

# § 5. PIr. \*-āuš, \*-āum

In contrast to Vedic, Iranian preserves remnants of holodynamic and hysterodynamic *u*-stems, which on the evidence of Avestan and Old Persian terminated in \*- $\bar{a}\mu\bar{s}$  in the nominative singular (note that the ending is liable to being replaced by - $u\bar{s}$  from the predominant proterodynamic and acrostatic patterns) and \*- $\bar{a}\mu m$  (e.g., YAv. *nasāum* 'corpse, carcass',  $p \partial r^{\partial} s \bar{a} um$  'rib', (?)  $gar^{\partial} m \bar{a} um$  'heat' /see Cantera 2007: 11–12/,  $fr \bar{a} dat.f \bar{s} \bar{a} um$  'furthering cattle', Classical OP  $dah a y \bar{a} um$  'land' etc.)<sup>17</sup> in the accusative (replaceable by *-um* in a parallel manner). To the strong cases of this synchronically productive paradigm of mobile *u*-stems must be added the archaic and moribund acc. sg. in *-am* (there are only two secure examples, viz.  $hi \partial a m$  'companion' (?) and vaiiam 'wind(god)', for which see Tremblay 1998: 202, Cantera 2007: 9–11, and Remmer 2011, resp.), as well as YAv. *-aom* < \**-awam* < \**-awam* and OP *-āvam*.

While it is evident that Av. -am reflects the expected ending, going back to PIE holodynamic  $*-\bar{om} < *-ou-m$  (and, parallelly, hysterodynamic  $*-\bar{em} < *-eu-m$ ) by lex Stang,<sup>18</sup> and that its early but evidently purely analogical replacement by  $-\bar{a}um$  (Av., OP) < PIr.  $*-\bar{a}um$  cannot predate Proto-Indo-Iranian (as is probably but not obligatorily true of  $*-\bar{au}-am$ ), one misses a feasible relative chronology behind these restructurings.

The only viable source of the PIr. novel ending  $*-\bar{a}\mu m$  must necessarily be the nominative singular  $*-\bar{a}\mu s$ . The latter then cannot of course be a retrograde formation, neither does it have any interparadigmatic support in the parallel declensional pattern of holodynamic *i*-stems (note that PIIr. preserves a single such stem in

<sup>&</sup>lt;sup>17</sup> Concerning the etymological source of the new ending, Old Persian material is of course decisive enough in itself as the spelling  $\langle (a)$ -a-u-m $\rangle$  can only stand for  $-\bar{a}um$ . Theoretically, an Old Avestan ending  $*-\bar{a}um$  could go back to either  $*-\bar{a}u$ -am (through YAv.  $*-\bar{a}u$ -m as is the case with the unmistakably disyllabic acc. sg. of holodynamic *i*-stems in  $-\bar{a}im$ ) or  $*-\bar{a}um$ , while the specifically YAv. attestations of accusatives in  $-\bar{a}um$  can only speak in favour of  $-\bar{a}um$  ( $*-\bar{a}u$ -am would have resulted in YAv. \*-auam > \*-auam > \*-auam > \*-aom). On the assessment of the actual spelling of this sequence in the extant manuscripts see de Vaan 2000 and a critical account in Cantera 2007: 11–14.

<sup>&</sup>lt;sup>18</sup> See Tremblay, Cantera, Remmer *op. cit.* What one descriptively labels a Stang's Law phenomenon is of course the result of a series of early Proto-Indo-European sound changes (assimilation, degemination and compensatory lengthening), set in motion as a response to the constraint against \*-*RR* sequences in coda. Since -V.um# < \*-Vum# would have relegated the previously moraic segment to the syllable onset, \*-Vm (theoretically via \*-*Vmm*) would have been the preferred solution. Note that in the case of -Vim# there was no such possibility due to the phonological distance between the resonants, the only possibility of resyllabification then being \*-V.im#, whence PIIr. \*-Vi-am. For a radically different view cf. recently Pronk 2016.

\*sakhai-/\*sakhi- 'friend, companion' < PIE \*s $\delta k^{\mu} = H_2 - o_i - /*sok^{\mu} = H_2$ *i*-). In the strong stem, the latter group consistently preserves its old inherited features: nom. sg. \*- $oi-s \rightarrow *-\bar{oi}^{19} > \text{PIIr.}$  (\*- $\bar{o} >$ ) \*- $\bar{a}$ ,<sup>20</sup> \*- $oi - s - \bar{a}i$  (acc. sg. \*- $oi - m > s - \bar{a}i - am$ ). Compared to what would have been the original pattern inherited by the u-stems with a nom. sg. in \*- $\bar{a}u < *-\bar{o}u \leftarrow *-ou-s$  and acc. sg. in \*- $\bar{a}m < *-ou-m$  (strong stem \*-ou- > \*- $\bar{a}u$ -), such allomorphy was obviously tolerated since it matched perfectly the pattern established in other resonant stems: \*- $\bar{a}$ , \*- $\bar{a}R$ - (acc. sg. \*- $\bar{a}R$ -am). It must therefore have been the abnormal nominative singular  $*-\bar{a}u$  of holo- (and hystero-)dynamic *u*-stems that was remodelled first by being matched to the auslauting sequence \*- $\bar{a}\mu\bar{s}$  in root-nouns \* $g\dot{\bar{a}}\mu\bar{s}$  'cattle; bull; cow'  $\leftarrow$  PIE \* $g^{\hat{u}} \dot{o} \mu s$  and \* $d \dot{i} \dot{d} \mu \dot{s}$  'sky'  $\leftarrow$  PIE \* $d \dot{i} \dot{e} \mu s$  (the latter behaves as a root noun at least synchronically) by the obvious proportion  $*-\dot{a}m$ :  $*-\dot{a}m$  $= *-\dot{a}u\dot{s} : x$ , where  $x = *-\dot{a}u \rightarrow *-\dot{a}u\dot{s}^{21}$  Note that this was only possible at the Proto-Indo-Iranian stage, since it is exactly Indo-Iranian that introduces secondary length into the strong cases of  $*g^{\mu} \dot{o} \mu$ - and  $*di \dot{e} \mu$ -, the source of course being the inherited and

<sup>&</sup>lt;sup>19</sup> The lex Szemerényi type of ending here is PIE (cf. Hittite  $-\bar{a}i$ !) and follows the model provided by the productive group of resonant stems, where the loss of \*-*s*, probably via a resonant geminate, degemination and subsequent compensatory lengthening were the result of a regular sound change. The same analogical spread of the new synchronic nom.sg. ending of holodynamic and hysterodynamic animate stems (and in much the same manner holodynamic collectives) also affects PIE *t*- and *s*-stems, where \*- $\bar{o}s \leftarrow$  \*-os < \*- $ot-s \sim$  \*-os-s is secured by cases such as Welsh *nei* 'nephew' < \* $nep\bar{u} <$  \*- $\bar{o}s <$  \*-ot-s etc. (note that in the case of *t*-stems, Hittite must have reintroduced the \**t* into the nominative to the same effect as, e.g., Old Indic and Germanic; as opposed to Stang's Law that does not seem to have left any unambiguous traces in Anatolian, it is clear from cases such as  $h\bar{a}ra\bar{s}$  'eagle' < \*- $\bar{o}$  + -*s* that Szemerény's Law was an inherited phenomenon).

<sup>&</sup>lt;sup>20</sup> The loss of \**i* in absolute auslaut (as in the loc. sg. \*- $\bar{a}$  < PIE \*- $\bar{e}i$ ) is part of the more general Proto-Indo-Iranian rule, which can be stated as R{-m,-w} >  $\emptyset / \bar{V} \{ \neq V \cdot V \}$ \_#. Avestan thematic dat. sg. - $\bar{a}i$  is of course secondary in comparison to OAv. - $\bar{a}ii\bar{a}$  = Ved. - $\bar{a}ya$  < PIE \*- $\bar{o}i$ -o (< \*-o-ei + dir. \*-o).

<sup>&</sup>lt;sup>21</sup> Note that simple «sigmatisation» of  $*-\bar{a}u$  as in the case of the Hittite nom. sg. *-auš* of arguably holodynamic *u*-stems (paralleled by *-aiš* in the survivors of holodynamic *i*-stems; note that the asigmatic type seen in *haštāi* 'bone(s)' and *šakuttāi* 'thigh(s)' is of course due to the forms being collective plurals) is not a feasible alternative, as there existed no such productive process in Indo-Iranian.

preserved length in the acc. sg., where  $*-\dot{a}m < *-\dot{o}u-m \sim *-\dot{e}u-m$ . The anomalous  $*-\bar{a}m$  of suffixal holodynamic *u*-stems was then replaced by the unique retrograde  $*-\bar{a}\mu m$  (comparable to at least Hittite *-ain* in holodynamic *i*-stems with the nom. sg. in  $-ai\check{s} < *-\bar{o}i + *-s$ ), while it remained liable to the influence of the parallel mobile *i*-stem acc. sg.  $*-\bar{a}i$ -am, to which one has to ascribe the Old Persian variant spelling  $\langle (a)$ -a-v-m $\rangle = -\bar{a}v$ -am and, at least partly (i.e., in as far as it does not reflect the hysterodynamic pattern or a remodelled proterodynamic \*-u-m  $\rightarrow *-au$ -am) also Young Avestan *-aom* <  $*-a\mu$ am <  $*-a\mu$ am (probably at least in the case gaom). Note that there was no reverse influence of the innovative  $*-\bar{a}\mu m$  on the holodynamic *i*-stem paradigm as is clearly demonstrated by the OAv. karmadhāraya-compound huš.haxāim (Y 64.13), which requires a metrically disyllabic  $*-\bar{a}\mu$ am.

#### § 6. OP davas

The Old Persian adjective  $\langle da\vartheta as \rangle$  (nom. sg. m.) is a *hapax legomenon* of unclear meaning attested at DB IV.71–72 (see Schmitt 1991: 43, 71, *idem* 2014 s.v.). The exhortative sentence in which it appears, however, luckily receives a nearly verbatim repetition in the immediately following conditional clause ('*do this and that, and if you do this and that, you shall* ...'), where in place of  $y\bar{a}v\bar{a} da\vartheta as$   $\bar{a}hay$  'as long as you are *d*.' one now reads =*taiy yāvā taumā ahatiy* 'as long as there is strength in you':

tuvam kā haya<sup>h</sup> aparam imām dipim vaināhạy tayām adam niyapi<sup>n</sup> $\vartheta$ am imai=vā patikarā<sup>h</sup> mā=taya<sup>t</sup> vikanāhạy yāvā da $\vartheta$ as āhạy ava $\vartheta$ ā=dīš paribarā (DB 4.70–72) 'You, whoever you may be, who will hereafter look at this inscription that I have engraved or the images/reliefs, you should not destroy them (and) as longs as you are d. take care of them".

yadiy imām dipim vaināhạy imai=vā patikarā<sup>h</sup> naiy=dīš vikanāhạy utā=taiy yāvā taumā ahatiy paribarāhạ=dīš ... (DB 4.72– 74) 'If you shall look at this inscription here or the images/reliefs (and) not destroy them and as long as there is strength in you take care of them, ...'. As already noticed by Gershevitch 1959: 198, taumā astiy + dat. poss. must thus surely be a periphrasis of daðas ah-.This does not mean, however, that they should signal the same thing.

It is incorrect, I think, to interpret the form as  $da\vartheta a^n s$  (as *per* Schmitt 2014 s.v. with references) and recognise in it the Old Persian equivalent of the OAv. nom. sg. m. -qs < \*-ans < \*-ont-s / a

<sup>&</sup>lt;sup>22</sup> In my view, the usual and functionally corresponding YAv. ending  $-\bar{o} \sim *-as^{\circ}$  cannot reflect \*-ah < \*-as < \*-ats (as per Schindler 1982). It does not seem logical to assume that in the Proto-Iranian sequence \*-V(n)ts the final cluster would have had a double outcome viz. sporadic »simplification« to \*-s (> \*-h) vs. regular monophthongisation of the originally biphonemic sequence to \*ts. Since in sandhi the suffixal  $*-as^{\circ}$  of the generalised immobile participle was synchronically reanalysable as the sandhi realisation of  $-\bar{o} < *-ah < *-ah < *-os$ , the introduction of  $-\bar{o} \sim *-as^{\circ}$  into the declensional pattern of the active participle could be seen as a retrograde analogical development of Young Avestan.

<sup>&</sup>lt;sup>23</sup> The length in  $*-\bar{a}ns$  is of course an innovation for \*-ans. Proto-Iranian  $(*-\bar{a}s >) *-\bar{a}h$  (as opposed to Ved.  $-\bar{a}n$ ) can of course reflect either sequence.

<sup>&</sup>lt;sup>24</sup> Note that in Proto-Indo-European, mobile active participles (most probably holodynamic, although theoretically a descriptively hysterodynamic pattern is also possible, especially if one considers the parallel ablaut pattern of mobile optatives) correspond to mobile presents and aorists, while immobile active participles characteristically accompany immobile presents (including *e*-reduplicated presents and intensives) and *s*aorists: mobile 3sg.  $*C\acute{e}C-t \sim 3$ pl.  $*CC-\acute{e}nt \rightarrow$  ptcp.  $*C\acute{e}C-ont-$  (or, alternatively,  $*CC-\acute{e}nt-$ )  $\sim *CC-nt-$ ' vs. immobile 3sg.  $*C\acute{e}C(-s-)t \sim 3$ pl.  $*C\acute{e}C(-s)-nt$  // 3sg.  $*C\acute{e}(C)-Ce'_oC-t \sim 3$ pl.  $C\acute{e}(C)-CC-nt \rightarrow$  ptcp.  $*C\acute{e}C(-s)-nt - // *C\acute{e}(C)-CC-nt-$ .

<sup>&</sup>lt;sup>25</sup> Or any verbal form of comparable shape. Gershevitch *loc. cit.* suggests \*datf- 'be strong' (accepted by ЭСИЯ II: 375), to which would belong Av. *dasuuar*- < \*dek-ur and *dasman*-\* < \*dek-men- 'health', but this is

Such a proposal opens up an altogether different problem, however. If  $da \vartheta as$  is indeed an active present participle, then the attested nom. sg. m. ending -as must necessarily reflect the specifically Old Persian reflex of the inherited PIr. sequence \*-ats < \*-at-s < PIE \*-*nt*-s. Given the fact that PIIr. palatoalveolar affricate \*f <PIE \*k normally yields OP  $\theta$  (through the PIr. dental affricate \*k, which then merges with the monophthongised product of the inherited biphonematic sequence \*ts), one would expect  $*d\acute{ek}-nt-s$  to yield \**datfats* > \**datsats* (thus indeed in the Av. immobile participle, whose nom. sg. m. expectedly terminates in -as, cf. stauuas 'praising, worshipping' < \*stéu-nt-s). Since, however, it is more than likely (also in terms of diachronic typology, for which see Kümmel 2007: 195)<sup>26</sup> that PIr. \*ts reached its specifically Old Persian reflex via dental (laminal) s (coalescing with the old s in the rest of Iranian, while progressing towards the voiceless dental fricative in Old Persian), one is tempted to envisage a specifically Old Persian situation where  $s > \theta$  {-#}, while s > s / # (i.e., merger of \*s with the old s, which after Common Iranian \*s > h / lV/R V/R still held a marginal position). If this is correct (note that the lack of data makes it impossible to weigh this assumption against the evolution of comparable sequences), it would point to the conclusion that like  $-\check{s}$ , -r and -m Old Persian -s too was regularly written (and pronounced in as far as there is a correlation between the two phenomena) in absolute auslaut. Seen from this perspective the OP nom. sg. m. *nt*-stem  $\langle tunuv\bar{a} \rangle$  'strong, powerful' (DNb 10 = XPl 11; cf. acc. sg. tunuvantam, attested at DB 4.65) must then necessarily stand for *tunuvā*<sup>h</sup> (as if for \**tan-uant-*)<sup>27</sup> and match the analogical Avestan nom. sg. m.  $-uu\ddot{a} < *-u\bar{a}h < *-u\bar{a}s$  of possessive

based solely on the assumption that OP  $da\vartheta as$  must mean '(physically) strong' vel sim.

<sup>&</sup>lt;sup>26</sup> Such intermediate stage in the development of the PIr. affricate \**ts* (and, in a parallel manner, \**dz* < PIIr. \**dz*) could perhaps allow for a more economical explanation as to why PIr. \**ts* > \**s* (via geminate \**ss*) / \**s*>0\$\_\_\_ and \**s* > 0 / #,\$\_\_\_\*ts, but these changes might also have taken place before \**ts* > \**s* as is in fact rather probable, cf. in this respect Av. *nafšu* < \**nápsu* < \**náptsu* etc.

<sup>&</sup>lt;sup>27</sup> For OP distance assimilation of *a* to *u* when / \_\_u consider \**kərnu-* 'do, make' > \**kanu-* (an *allegro-*form comparable to Ved. *kuru-* for older *kṛṇu-*) > *kunu-*, and possibly also cases with regular OP anaptyxis, if it is correct to assume that \**drudz-* > \**darudz-* > *duruj-* 'lie to, deceive', \**druwa-* > \**daruwa-* > *duruva-* 'firm', \**Sugda-* > \**Sugada-* > *Suguda-* 'Sogdiana'.

denominals in \*-u/mant- rather than reflect the old participial \*- $\tilde{a}ts$  (= OAv. -qs) < \*-ants < \*- $\acute{e}nt$ -s.

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#### L. Repanšek. Miscellanea Avestica et Palaeopersica

The contribution offers a series of miscellaneous notes and observations on various details of Avestan and Old Persian historical phonology. § 1 deals with the *prima facie* aberrant behaviour of the Young Avestan dat. pl. *ptər<sup>o</sup>biiō*, arguing in favour of the form displaying the expected outcome. § 2 adds a small but important observation on the accentual behaviour of the Avestan paradigm for 'sun', which arguably displays a secondarily acquired columnar accent comparable to Vedic  $s_{i}var$ . § 3 argues against the primacy of  $\dot{s}$  in the Young Avestan compositional form  $xa\dot{s}i^{\circ}$  and discusses several related problems pertaining to the inherited \*TH sequences in (Indo-)Iranian. §4 reassesses the viability of Old Persian clusters šc (as in cišciv & c.) as genuine reflexes of the inherited Proto-Indo-Iranian sequences \*ttc. § 5 tries to envisage the most economical relative chronology behind the inter- and intraparadigmatic analogical pressure exerted on the acc. sg. of Proto-Iranian holodynamic *i*- and *u*-stems. §  $\mathbf{6}$  is an attempt at the reconciliation of the facts of Old Iranian historical phonology and morphology with the highly problematic Old Persian hapax  $da\vartheta as$ , attested at DB 4.71–72.

Key words: Avestan, Old Persian, Proto-(Indo-)Iranian, historical phonology.