

# The development of the TB adjectives suffixed in -ske/-śke 1

Athanaric Huard

#### ▶ To cite this version:

Athanaric Huard. The development of the TB adjectives suffixed in -ṣke/-śke 1. Tocharian in Progress Online Conference, Dec 2019, Leiden, Netherlands. hal-03356380

# HAL Id: hal-03356380 https://hal.science/hal-03356380v1

Submitted on 28 Sep 2021

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



# The development of the TB adjectives suffixed in -şke/-śke1

Athanaric Huard (EPHE, PSL / ERC HisTochText<sup>2</sup>)

Tocharian in Progress Online Conference, Leiden University, December 8–10, 2020 (revised version)

This publication belongs to the research conducted under the HisTochText project. This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No. 788205).

- Scope: adjective formations, study of a small class of adjectives derived with the following suffixes:
  - -śke: amiśke 'despondent', tallāñciśke\* 'miserable'; lykaśke 'small', wlaiśke 'tender, soft';
  - -şke: lalamşke 'soft'; añmālaşke 'compassionate, pitying';
  - -rṣke: klänkarṣke\* 'wavering', pällarṣke 'praiseworthy', pautarṣke 'caressing, pleasant', mäntarṣke 'short', mällarṣke 'soft', takarṣke 'serene, pure; faithful', nekarṣke 'pleasant'.

    NB: As shown by Winter 1961 and Itkin 2016, the TA adjectives lāläṃṣke\* and potarṣke\* are borrowings from TB.

#### • Problems:

These adjectives are linked to a nominal diminutive suffix - $\acute{s}ke$  (e.g.  $Kercapi\acute{s}ke$ ,  $kokalyi\acute{s}ke$ ), which was explained as a borrowing from an Iranian diminutive. So how could we explain the spread of this suffix to adjectives and the variants  $\rlap{s}\sim \acute{s}$ ?

<sup>1</sup> I am very grateful to Chams Bernard, Georges-Jean Pinault and Nicholas Sims-Williams for discussing several points adressed in this presentation.

This publication belongs to the research conducted under the HisTochText project. This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No. 788205).

- The subclass of -r is productive as deverbative adjectives (e.g. m antar is k is hort' (cf. Peyrot 2016:204)  $\leftarrow m$  antar ito stir, to destroy'). What have these adjectives in common with the other adhectives in  $-\frac{k}{k}$  and how the growth of this class can be explained?
- Some of these words translate important Buddhist concepts:  $a\tilde{n}m\bar{a}laske = Skt$ .  $k\bar{a}runika$ 'compassionate' and takarske = Skt. prasanna- 'pure, clear; faithful'. In which extent is this suffix linked to Buddhist Tocharian terminology and phraseology? Are they different suffixes or should be taken together as variants? In the latter case, how should this alternation  $s \sim s$  be accounted for?

# I. The origin of the -śke/ske suffix(es)

- It is clear that these suffixes should at least partly connected to the Iranian suffix of Kaniška and the Khotanese diminutive -śka/śkā as was first proposed by Bailey, then by Klingenschmitt 1975 and lastly Sims-Williams 2002:237-2.
- According to Sims-Williams 2002:237-2, this suffix comes the combination of two diminutive suffixes \*- $i\check{c}a$ -k(k)a- (> Parthian - $i\check{c}ak$  and Sogdian -c'kk). In an unattested Iranian language, this suffix was syncopated and simplified to \* $\check{c}k$  > \* $\check{s}k$ .
- The earliest attestations are the names of Kušan kings: Kaniška (κανηþκο), Huviška (οοηþκο),
   Vasiška (βαζηþκο); also Kuzgašk (κοζγαþκο) and Sadaṣkano.
- In TB, -śke is attested in proper names (kercapiśke, lariśka, etc.), in common names for small beings (kālyśke 'young brahmin', śamaśke 'boy'), and in adjectives. According to Pinault 2015:176-77, the suffix spread from an hypocoristic attached to proper names, but there is no necessity to assume such a specialized meaning.
  - NB: as in Khotanese, this suffix is limited to Late Khotanese it could have been borrowed from TB, or from another Iranian language (Pinault 2015:175; Degener 1989:312).
- For the variant -*ṣke*, considered as an adjectival suffix, two scholars proposed a separate origin:
  - According to Hilmarsson 1996:141, -ṣke is a second member compound reinterpreted as an adjectival suffix: < action noun \*-ṣākæ 'stepping, treading', from the root sikā- 'to step' (cf. ṣiko 'step'). The first member is an abstract in -är < \*-ṛ. Thus: kläṅkarṣke 'doubtful' [sic] < \*kläṅkä ′r+ṣākæ 'stepping into doubt, turning to doubt' and mäntarṣke 'evil' [sic] < \*'stepping into evil, turning to evil'.
  - According to Pinault 2015:178, one should start from \*-ṣäkæ 'following, aiming at' < \*sekwos- or \*sekw-ó-. Thus: lalaṃṣke 'soft' < \*lālan-ṣkæ 'close to caressing' > 'soft, tender' and tparṣke 'shallow' (built on tapre 'high') < \*'almost high' or 'aiming at height'.

#### II. A single diminutive suffix

- However, there are several reasons to assume that both -*ṣke* and -*śke* are variants of the same diminutive suffix:
  - o 1) no clear distribution nominal diminutive -*śke* vs. adjectival -*ṣke*;
  - 2) both share the same inflection which is highly peculiar in TB;
  - 3) in the two only cases in which we have both the base adjective and the suffixed one, the meaning of the suffix can be explained as a diminutive, not as conveying an approximative or a inchoative meaning.
    - 1) No clear distribution between adjectival -ske and nominal -ske:

#### Table 1<sup>3</sup>

Nouns suffixed in -ske

laraşk(e) (vs. lariśka), cayaşka\*, turkaşka, yurpāşka\* yäkwaşke\* 'small horse', śamäşke\* 'small boy' (vs. śamaśke)

Adjectives suffixed in -śke wlaiśke 'tender, soft' (vs. lalamṣke 'soft'), lykaśke 'small', amiśke 'despondent', tallāñciśke\* 'miserable'

#### 2) Both suffixes share the same inflection

• Both suffixes share in the masculine the same inflection that is unique within the nominal morphology. It combines an -e < \*-o from the thematic inflection with the plural of the nasal inflection Obl.pl.  $-am < *\bar{a}ns < *\bar{o}ns$  (type onkolmo,  $onkolma\tilde{n}$ ):

	Table 2 <sup>4</sup>							
	Ma	asculine - <i>śke</i> decl	lension	Masculine -şke declension				
	Sg. Dual		Pl.	Sg.	Dual	Pl.		
Nom.	ami-śk- <b>e</b>	[śamä-śk- <b>ane</b> ]	lyka-śk- <b>aṃ</b>	mällar-ṣk- <b>e</b>	(la)läṃ-ṣk- <b>i</b>	takar-şk <b>-aṃ</b> [śamä-şk <b>-añ</b> ]		
Obl.	lyka-śk- <b>eṃ</b>	[saiwi-śk- <b>ane</b> ]	tallāñci-śk- aṃ	mällar-şk- <b>eṃ</b>	(l)alam-şk- <b>i</b> lalam-şk- <b>ane</b>	lalaṃ-ṣk- <b>aṃ</b>		

• Here we have two problems to address, the dual and the ending of the N.pl:

<sup>3</sup> References: *laraşke* (SI P 139.d b1(I); *lariśka* THT 465 a2; *cayaşka*\* PK AS 14.2 b6; *turkaşka* THT 1397.n b2; on *yurpaşka*\* see Ching and Ogihara 2013:106-107; *yäkwaşke*\* 'small horse' (THT 352 a2), *śamäşkañ* 'small' THT 514 b1 (vs. normal form *śamaśke*).

<sup>4</sup> References, for the first line: THT 127 a6 (class.); THT 1248 a4 (arch.); THT 92 b4 (class.); PK AS 7J b1 (class.); PK NS 83 b3 (arch.); PK NS 107 b3 (class.) and THT 514 b1 (arch.); for the second line: PK AS 5B a1 (class.); PK NS 83 b3 (arch.); THT 273 a5 (arch.); IOL Toch 68 a5 (class.); IOL Toch 764 b2 (class.) and THT 386 a5 (class.); PK AS 13 F a3 (class.).

- Problem of the depalatalization of final  $-\tilde{n}$ , treated in full length by Michaël Peyrot 2008:78-84. All attested adjectival N.pl.m. are in -am but there is no attestation in archaic texts. Looking at the nouns, there is one case of N.pl.  $-\tilde{n}$  in an archaic text, which suggests we have to deal with a phonetic rule.
- No clear distribution of the dual endings -i and -a-ne (interpreted, respectively as the masculine dual ending ( $<*-oih_1$ ), and the feminine one ( $<(i)y\bar{a}y\ddot{a} <*(i)h_2$ - $ih_1$ ) by Hilmarrson 1989:19-29). Probably both are analogical formations after the singular or the plural:
  - arch.: (la)lämski (on saiwiśkane, obl. du. m.), PK NS 83 b3;
  - class.: (l)alamṣki (on (p)ai(n)eś), IOL Toch 764 b2; lalamṣki (on paine, obl. du.), PK AS 13A a5; lalamṣki (on ṣarne), THT 23 a7; lalamṣkane (on praroñ, alt.) THT 74 a6, lalamṣkane (on painesa, alt.), THT 386 a5
  - Nouns in archaic texts: Obl.du.m. saiwiśkane, PK NS 83 b3; śamäśkane, THT 1248 a4; şeyyiśkane THT 3597 b4.

#### 3) The meaning of both suffix can be accounted for as a diminutive.

- Most adjectives with these suffixes are lexicalized. In only two cases, both the base word and the suffixed adjective are attested:  $tall\bar{a}nci\dot{s}ke^*$  on  $tall\bar{a}u$  'miserable' and tparske on tapre 'high'.
- *tparşke* means 'shallow' (said of water) in all of its three occurrences, and it correspond to Skt. *uttāna*-. See e.g. in the adaptation of the *Varṇārhavarṇastotra*:
- (Ex. 1) snai ptsa kätkre ra tparṣkemeṃ tparṣke (mäsketär)

  "Even the bottomless deep (becomes for you) the shallowest of the shallow"

  sugambhīram api jñeyam uttānottānam eva te

  "selbst das tiefgründigste Erkennbare liegt völlig offen für dich da"

  (SI P 2 b4; tr. Pinault 2016:16; VAV III 17; tr. Hartmann 1987:149)
- Previous semantic explanation: < 'little deep' (Adams 2013:297), but this would be anachronistic; < \*'almost high, aiming at height' (Pinault 2015:178), which is close to approximative value that diminutive suffixes could adopt (Jurafsky 1996:547).
- The concept of "highness" could be conceived as 1) referring to a position; 2) to a scale of the vertical dimension. In this context, one should rather start from the second alternative. Thus it we should likely start from a literal diminutive value.
- The reference of scale for adjectives or phrases describing the level of water is the body water itself. Thus, adjective referring to small dimensions can refer to low waters:
  - Greek βράχεα 'shallow water', substantivized neuter of βραχύς 'short';
  - Latin *tenuis aqua* 'shallow water', lit. 'thin water'.
- To conclude, an adjective \*'little high [water]' would naturally mean 'shallow [water]'.

• *tallānciśke*\* is used two times in the same text. Here is the whole passage after the metrical reconstruction and the translation (with some modifications) of Peyrot 2013:368:

```
(Ex. 2) snai keś wā wes | cī saim yāmoṣ | tallāñciśkam [28a]

pātār mātār | rīntsāmte pest | ciṣc sīkāmä [28b]

(mästa) [b1] no twe | rīne räme(r) | n(e)rvvānṣai pest [28c]

orästa wes | kleśänmāṣṣeṃ | sānänts śwātsi 28

(wināskeu-)[b2]cä | erepāte | tsātsaikarnne [29a]

nno =ntwe | te mänt pärmänk | mäsketär ñī [29b]

wes wā {n}nai (tne | yolai)ñ mākā | yekte-perni [29c]

yust-me wā {n}nai | tallāñciśkam | mā west-meśca 29

"Albeit in countless numbers we have made you our refuge, we abandoned our poor father and mother [and] we stepped towards you, you quickly went away to the nirvāṇa city [and] you left us as food to the kleśa enemies 28. I (honor) you in [your] beauty and shape [= in your statue (?)]. «He [= Maitreya] will arise then», thus is my hope. For we are very evil here and of little worth; you turn towards us miserable ones, [but] you don't speak to us." (THT 273a5-b5; tr. after Peyrot 2013:368)
```

- Here a speaking "we", representing the devotee, complain about the disappearance of Śākyamuni, and find a consolation in the future advent of Maitreya. In the second stanza, this "we" is probably dramatically staged as standing before a statue of the Buddha (*erepāte tsātsaikar\**, cf. e.g. Pāli *loharūpa-* 'statue of bronze') which is turned towards the devotee but cannot speak.
- Thus the text insists on the despondency of the devotee grieved by the absence of Śākyamuni. The suffix of *tāllañciśke* has clearly a nuance of affection and pity since it commutes with *lāre* in similar phrases: *śaul ñi lāre päst rinaṣle* 'I have to abandon my dear life' (THT 25 a8, see also THT 220 a4); or with a diminutive: *mäkte ai(sk)au (uttareṃ ñä)kte-yokäṃ säsuwer(śk)eṃ amāskai rilye* 'How [should] I give (Uttara), my divine little son, who is difficult to abandon' (THT 85 a6 and PK NS 355 a4).
- This is a frequent value endorsed by diminutive suffixes as in e.g. Latin *misellus* 'poor, wretched', French *pauvret*, or Classical Persian *miskīnak* 'poor, wretched' on *miskīn* 'poor wretched' (Chams Bernard, personal communication).

Meter (4x12, 4/4/4). Peyrot reads  $ciṣc \cdot \bar{t}k\bar{a}$ , but some traces of akṣara can be seen. In ligature with ṣc, a vertical stroke that can belong to a <ma>, a <sa>, or a <pa> can be seen. At the edge of the manuscript, one can see the left side of an rectangular akṣara that could only be < $\underline{pa}$ > or < $\underline{ma}$ >. Given that we expect a 1st pers. pl., the latter is more likely. As for the verb, the verb  $sik\bar{a}$ - 'to step' would fit both the meter and the context (constructed with the allative in THT 3 b6). Hence my reading:  $ciṣc \lceil s \rceil \bar{t}k(\cdot)\bar{a}\lceil \underline{ma}\rceil$ .

<sup>6</sup> One can hesitate on the status of *tallāñciśkaṃ* en a5, namely if it depends of *pātär mātār* (Adams 2013:299) or of the subject *wes* (Peyrot 2013:398). The meter would favor the first hypothesis, but one has to assume depalatization of the final nasal in an archaic text, which is still possible. The second option would better fit the ending. Besides in these contexts, the epithet is rather on the beings that are abandoned: *śaul ñi lāre päst rinaṣle* 'I have to abandon my dear life' (THT 25 a8, see also THT 220 a4), (*la)lāṃṣki saiwiśkane rintsātai snai eṅkāl ñāktā* 'you left these two sweet boys, [showing] no attachment, o lord' (PK NS 83 b3).

# III. Further arguments for a borrowing

• Since these two forms seem to be variants of the same suffix, how can we explain this variation? Both cluster are attested elsewhere, even if the *şk* cluster is rarer and likely come from secondary syncopes and borrowings: *şkas, aṣkār, eṃṣke, peṣke, koṣko*.

#### 1) An explication of variants -ske/śke

- Klingenschmitt's explanation (1994:371, fn. 106): the original variant -śk- was dissimilated in contact of r (e.g. tparṣke < \*tparśke). This dissimulation was blocked when a palatal sibilant was in the word as in śanmirśke, ṣerśka. But there are numerous counter-examples: lalaṃṣke, m(ñ)cuṣke, paitārśke, etc.
- Sims-Williams posits two stages of development for the suffix \*- $\check{c}(a)k$ ->- $\check{c}k$ ->\*- $\check{s}k$ -. As in TB  $ck > \acute{s}k$ , cf.  $yw\bar{a}rc$  'in the middle' +  $k\bar{a} > yw\bar{a}rcka$  and  $yw\bar{a}r\acute{s}ka$  (Peyrot 2008:77, fn. 88), borrowings at two stages can be assumed:
  - Iranian \*- $\check{c}(a)k \rightarrow \text{TB}$  \*-ck- > - $\acute{s}k$ -
  - ∘ Iranian (Bactrian) \*- $\dot{s}k$  → TB - $\dot{s}k$  (cf. Skt. kani $\dot{s}ka$ -, TB kana $\dot{s}ke$ , Khotanese kaṇai $\dot{s}ka$ -).
- Evidence for this hypothesis in an archaic text:
- (Ex. 3) /// (śai)ṣṣe / täṅwas lareṃ soyñcka(ṃ) ramt 6 "you [pl.] loved the world like dear sons. 6." (THT 226 a1)

#### 2) Hypothesis for the origin of the inflection

• The paradigm is unique in Tocharian nominal morphology and is difficult to explain within the history of Tocharian:

• Hilmarsson (1989:85) proposed the following explanation: 1) there is an affinity of the collective with the diminutive, 2) one should start from the ending of a collective singular  $*-\bar{a}$ 

<sup>7</sup> End of a meter of 4x25 (5 / 5 / 8 / 7). Thomas following Sieg and Siegling 1953:135 emends <u>tank·s</u>\ to <u>tank·s</u>\ and interprets it as the 2sg. pers. subjunctive of the verbe <u>tänkwā(ñň)</u>-: "Die Welt wirst du lieben wie ein liebes Söhnlein" (Thomas 1968:205). But as several verbs with a present XII are paired with a prt I (cf. <u>käskam</u>, <u>käskānte</u>; <u>kawāññentär</u>, <u>kawāte-ne</u>; <u>kläntsan-ne</u>, <u>klyantsa</u>; <u>mäntam</u>, <u>mantāre</u>), there is no need to do so and this form can be interpreted as the expected 2pl. prt. of this verb. Besides the correction required for <u>śońcka</u> to <u>śomśkem</u> can be avoided by interpreting the words as a plural with an <u>anusvāra</u> concealed by the mud.

- $<*h_2;$  3) this ending was then reinterpreted as a neuter plural and a new singular was built using the vowel -e.
- However: 1) there is no affinity between "collective" and diminutive suffixes. On the contrary, a collective suffix should have rather an augmentative status (Jurasky 1996:545), as in the Romance nouns descendant of Latin -ālia, cf. French mangeaille 'big meal' vs. manger 'normal meal'; 2) Hilmarsson probably thought of the diminutives of Germanic languages which produce neuter nouns, but this is not a cross-linguistic widespread feature. Besides it entails the existence of the neuter singular as a category.
- Alternatively, one could assume that in plural the inflection of nasal stems of *onkolmo* type was taken over, but no obvious motivation is available. On the other hand, the nasal inflection seems to characteristic of adjectives, as in the types *lāre*, *lareñ* 'dear', or *läkle-lyakāñ* 'who see the suffering'. However:
  - This inflection is also shared by the -s/ske nouns, cf. samaskañ;
  - According to this hypothesis, one would rather expect an inflection like śrāddhe, śraddheñ 'faithful'.
- Tentative hypothesis: this peculiar inflection could explained through the borrowing process, since the descendant of the thematic inflection in several Middle Iranian languages opposites a weak vowel in the singular to an /a/ in the plural. This, through reanalysis, could have been rendered in TB as an opposition between -e in the singular and  $-a\tilde{n}/-am$  in the plural, since the  $-a\tilde{n}$  plural is the only inflection pattern with an /a/ vowel in which we find masculine nouns.<sup>8</sup>

Table 
$$3^9$$

Tocharian B Khotanese - $a$  stems Sg. Pl. Sg. Pl.

Nom.  $-\varsigma k - e$   $-\varsigma k - a\tilde{n}$   $/-\varsigma k - am$   $-\ddot{a} < -*a$   $-a < *-\bar{a}$ 

Obl./Acc.  $-\varsigma k - em$   $-\varsigma k - am$   $-u < *-om$   $-a < *-\bar{a}$ 

- First difficulty: One can retort to this hypothesis that borrowings from Iranian with the -ike suffix do not show a similar inflection, but have a -i plural<sup>10</sup>:
  - TB kamartike 'lord', N.pl. kamartiki (THT 65 a2) ← Bactrian καμιρδο 'chief', according Pinault 2002:262-264, or from another Iranian language (Peyrot 2015);

<sup>8</sup> Alternatively, N. Sims-Williams suggested to me that one could think of an Iranian language that have generalized the old gen. pl. (forms such as  $-\bar{a}n$ ) as a general plural, which would directly explain the TB forms.

The data are taken from Emmerick 1968:251.

<sup>10</sup> I leave the TA aside since these terms were possibly borrowed from TB into TA, or at least influenced by TB, see Winter 1961:276. This would be further supported by the fact that they have a plural in  $-\bar{a}\tilde{n}$  different from the inherited thematic nouns.

- TB spaktanike 'servant', N.pl. spaktanīki (IOL Toch 215 b3) ← Bactrian \*σπαχτανιγο, as TB spaktāṃ < \*σπαχτανο, cf. σπαχτανιο 'who should obey' (Tremblay 2005, 436 <ith references);</li>
- TB aṣanike 'worthy', N.pl. aṣanīki\* (Obl. pl. aṣanīkeṃ, THT 375 b1), cf. aṣāṃ borrowed from Khotanese āṣǎno 'worthy, arhant' or Bactrian αζανο (Tremblay 2005:436, with references). For the inflection, see Peyrot 2008:110 *contra* TEB.
- However, these loans are from the Tocharian point of view not analyzable. In contrast, -ś/ṣke is a productive TB suffix and has a distinctive shape that could resist analogical pressure.
- Second difficulty: the flexion of the diminutive/caritative of *appaka* 'dear father!'. Most of the attestation of this suffix are vocatives, but *naumikkane* 'small jewels' suggests an inflection close to that of -śke (Pinault 2011:180-83). However, they are very rare and the inflection of the suffix is difficult to reconstruct:
  - N.sg. appakke (THT 83 a4) Voc. appakka on āppo\* 'father' (Voc.sg. āppa, Obl.sg. āppai);
  - Voc.sg. *larekka* on *lāre* 'dear';
  - Voc.sg. ammaki 'dear mother';
  - o Dual.Obl. naumikkane (THT 33 b1) on naumiye 'jewel';
  - Obl.sg. tanākkai (PK AS 2A a2) on tāno 'grain' (flexion maybe influenced by witsako 'root', tvānkaro 'ginger');
  - Proper names:  $pal\bar{a}k(k)e$  (SI P 117 a6), korakke (SI B Toch 12 a3), Obl.sg. korakem (K DA M 507.37 and 36 a14). G.sg. purnakki (SI P 139.d b2i). But several names come from Skt.  $p\bar{a}laka$  'guardian',  $p\bar{u}rna$  'full',  $p\bar{u}rnaka$  'the blue jay'.
- Thus the only evidence is *naumikkane*, but since this form seems exceptional, it could have been influenced by the inflection of -*śke*.

#### 3) Cases of peculiar inflections in loanwords

• Gen.sg. TB  $-\tilde{n}$  and TA-y only attested in borrowed proper names in -i, -u, and -a, although a genitive -ntse was possible. The TB  $-\tilde{n}$  ending can be related to the pronominal ending of TB  $ta\tilde{n}$ ,  $sa\tilde{n}$ , eventually to the causal. Pinault 2008:488 compares the Middle Indic Dat.sg.  $-\bar{a}ya$  (assuming that in TB  $*y > \tilde{n}$  by hyper-correction). But the TA -y could independently be explained as an extension of the -i-genitive. Influence of the Middle Indic G.sg. -ino could also be considered, according to the following scenario: Middle Indic borrowed as  $*-in\ddot{a}$ , lined up as  $*-i\tilde{n}\ddot{a}$  according to  $ta\tilde{n}$  and  $sa\tilde{n}$  in order to differentiate it from the accusative:

<u>Table 4</u> <sup>11</sup>					
Tocharian B	Tocharian A	Middle Indian (Pāli; other forms)			

<sup>11</sup> References, for TB *araṇemi*: THT 78 a6; 91 b5; 77 a4; for TB *yaśodhara*: THT 109 b3; PK AS 15A b7; PK AS 15C b4; for TA *ikṣavaku*: A 153 a3; for TA *bhādrā*: A 58 b2; 188 b4; 58 a5; for Middle Indian: Hinüber 2001:147-150.

	-i nouns	-a nouns	-u nouns	-ā nouns	-i stems	-ā stems
N.sg.	araņemi	yaśodhara	ikṣvāku*	bhādrā	aggi; Pkt. aggī	mālā
Acc.sg.	araņemiṃ	yaśodharai	ikṣvāku*	bhādrāṃ	aggiṃ	mālaṃ
G.sg. / D.sg.	araņemiñ	yaśodharañ	ikṣvākuy	bhādrāy	aggino, aggisso	mālāya; Pkt. mālāe

- TAB Gen.sg. -*i* for proper names borrowed from Sanskrit -*a* stems. Here also a TB -*ntse* genitive could have been adopted. The -*i* genitive is also attested in kinship terms: *pātri*, etc.
  - Since at an earlier stage, nouns were borrowed from Middle Indic with a weak final vowel, borrowed in TB as -\(\alpha\). The borrowed nouns may have adopted the ending of the kinship terms, because these ones had in the oblique a similar ending (Obl.sg. \(p\bar{a}t\alpha\) or \(p\bar{a}t\alpha\), and this ending was marked [+human] in comparison to the ending \*-ns\(\alpha\) (or rather refers to "institutional persons" according to Pinault, personal communication).
  - Alternatively, if the kinship term were paired with proper nouns as epithet, an analogical transfer could be considered:  $*k\bar{a}\dot{s}yap\;p\bar{a}tri \rightarrow k\bar{a}\dot{s}yap\;p\bar{a}tri$  'for your father Kāśyapa'.

	<u>Table 5</u> <sup>12</sup>					
	ТВ	TA	Middle Indian (Pāli; other forms)			
Nsg.	maitrāk* or maitreye	kāśyap	putto; Māgādhi putte; Gāndhārī -u, -o, -a			
Acc.sg.	maitrāk or maitreyeṃ	kāśyap or kāsyapäṃ	puttaṃ; Gāndhārī -u, -o, -a			
G.sg.	maitreyi	kāśyapi	putassa; Gāndhārī putta <u>s</u> a			
D.sg. (final meaning)			puttāya; Aśoka edict (Shāhbāzgaṛhī) aṭhāye			

- Plural in -nta for loanwords ending in -i referring to animate beings although among native vocabulary this class only includes nouns referring to inanimate things:
  - ṣaḍvarginta (PK AS 18B b3) of ṣaḍvargi\* borrowing from Skt. ṣaḍvargīya- 'belonging to the group of six [bad monks]';
  - käṣṣinta (THT 11 b4) of käṣṣi 'teacher' perhaps borrowed from Iranian;
  - o maharsinta (THT 107 b3) of maharsi borrowing of Skt. maharsi- 'great sage';
  - o (cakra)varttinta (THT 2665 b2) of cakravartti from Skt. cakravarttin- 'universal ruler'.

<sup>12</sup> References, for TB *maitreye/maitrāk*: PK AS 13C b6; THT 74 b1 and IOL Toch 271 b3; THT 1573.k a6; for TA *kāśyap*: A 255 a5; 255 a8 and 332 b7; 226 a2; for Middle Indian, Hinüber 2001:139. One could also consider TB *kāsyap(e)*: *kāśyape* (PK AS 15J b7); *kāśyap* (IOL Toch 273 a3) and *kāśyapeṃ* (IOL Toch 263 b4); (*kā)śya(pi)* (THT 25 b1).

• This is probably to be explained by the fact that all nouns with a N.sg. -*i* have a plural in the nominal classes II.1, c (*reki*, *rekauna*); II, 2 (*nāki*, *nakanma*), and III (*keni*, *keñinta*, or *ek(a)ñi*, *ekñinta*), cf. Hartmann 2013:404-405. This was apparently the only available pattern for a borrowing with an -*i* nominative. The ending -*iñ* is restricted to agent nouns in second member of compounds (type *kärtse-yamiñ*). The plural *poyśinta* is analogical of *käṣṣinta*.

### IV. The development of the suffix in the history of Tocharian B

- We should explain this small class with a suffix was originally a diminutive; but several
  members of this class are obviously not diminutive in the strict sense and the different ranges
  of use of this suffix should be clarified.
- Due to lack of time, I will adopt a thematic approach and propose 4 factors that concurred to the development of this class:
  - o 1) semantic factor: the extension of this suffix on synonyms (and even in antonyms);
  - o 2) stylistic factor: peculiar use of this suffix in the literary language and in *stotras*;
  - 3) morphological factor: the creation of a productive subclass of deverbative adjectives in rske;
  - 4) terminological factor: this suffix was used to create a specific Buddhist terminology, partly calquing the Indic *-ka* suffix.

#### 1) Semantic factor

- Looking at sources, there are several cases in which adjectives suffixed in -ś/ṣke are enumerated together. Many terms of the corpus mean 'soft, pleasant, delightful, vel sim.'. This suggests that the suffix spread through synonymy; see: TB wlaiśke 'tender' vs. TA wlyep; lykaśke 'small, fine' vs. TA lykäly.
- (Ex. 4) *şmare mällarşke mäsketär-ne palsko şpä wlaiśke pautarşke :*"his mind becomes gentle, fine, soft, tender' (PK AS 7J b1)

  = *snigdhasaṃtatir bhavati* (Lévi 1932:91), see also: *cittaṃ mudukaṃ hoti maddavaṃ siniddhaṃ* "his mind is soft, tender and gentle" (Mil 361).
- (Ex. 5) pañäktaññe pelaikne ate tot empreṃtse swāre nekarṣke pällarṣke ste "the Law of the Buddha is so true, sweet, delightful, agreeable!" (THT 101 5)
- Thus the spread of the suffix -*ṣke/śke* is probably to be attributed to such cases of micro relationship of synonymy (and antonymy), evolving from the original diminutive value to an affective one. One could try to order the corpus in the following manner:

- 1. plain diminutive: *tparṣke* 'shallow', *lykaśke* 'small'; *mällarṣke* 'fine'; *mäntarṣke* 'short' (cf. Peyrot 2016:204).
- 2. emotional value:
  - 1. positive, with affection: *lalamṣke* 'soft, dear', *wlaiśke* 'smooth, pliable'; *nekarṣke* 'pleasant', *pautarṣke* 'caressing, tender', *pällarṣke* (hapax) 'praiseworthy', *takarṣke* 'serene, trustful', *(mā) klänkarṣke* (hapax) 'not wavering'.
  - 2. pitying value: *tallāñciśke* 'unhappy', *amiśke* 'sorrowful', *añmālaṣke* 'compassionate, pitying'.

## 2) Stylistic factor: a literary device

• The "affective" value cannot be explained by the semantics conveyed by the adjectives (see *klänkarṣke*). The spread of the suffix is also to be explained by the use of them in *stotra*, as epithet of the Law or the body the Buddha. Thus this affective value is a transfer from a being to the qualities of that being (for "implication" in the development of the affective value of diminutive, see references in Jurafsky 1996:552-553). As for Tocharian -*ś/ṣke*:

```
(Ex. 6) /// naktsi ceṃ wināskau käṣṣinta 10 — /// myāskante : ente sälpāre kauñi k· r· /// (ṣar)mts=(a)ñmālaṣkeṃ mällarṣkeṃ krento lalaṃṣkeṃ "... I revere these Teachers [who resolved] to destroy [ignorance]. 10. ... they exchanged. When the suns glowed ... ... because of (that) ... the pitying, soft, good, tender one ..." (THT 1345.b a1-a3)

(Ex. 7) /// ṣeṣṣirku : 4 takarṣkana ās(tr)ona lalaṃṣkana au(rtsana) /// /// s(a)na eśn= āṃṭpi toṃ wināskau : 5 wätkāltsana snai wa(ce) /// /// — mā rano kläṅkarṣkana : śpalmaṃñesa kekenwa mā cek wa(rñai) /// "... having surpassed ... 4. Serene, pure, soft, wide ...[...] ... I revere [your] both eyes 5. Powerful, without equal ... ... and unwavering, provided with excellency, not in any way ..." (IOL Toch 166 a3; b2-b3)
```

• TB *klankarṣke* here refers to the fixed eyes of Buddha (a characteristic of gods in the Indian world) that are described in the list of the secondary marks of his body, and was probably coined to express that quality: *aparimita-balatvād apagatônmeṣa-nimeṣāḥ* '[their eyes] do not

- have opening or closing <u>because of their unlimited strength</u>, 13 (Abhidharmadīpa, Jaini 1959:192).
- It is based on the verb *klänk* 'to retort, to contradict' (*klankälyñe* = *pratyanīka* 'hostile, opposed, injuring', PK AS 6D b3). To the same root also belong *klenke* 'vehicle' and *klānkā* 'to drive'. It was linked to Old English *ge-hlencan* 'to braid', Middle High German *lenken* 'to bend', Old Norse *hlekkr* 'chain, fetter' < IE \**klenk* 'to turn, to twist' by Adams 2013:240. Thus our adjective is perfectly understandable according earlier (concrete) meaning \*'to bend [the eyes]', i.e. 'to turn the eyes'. It was probably created "on the spot" by the author of the *stotra* in order to convey the idea of "fixed [tender] eyes" (Latin *vagulos oculos*).
- NB: Degener 1989:312 notes that most of nouns and adjectives suffixed in -śka in Khotanese are recorded in poetry, not with a proper meaning of diminutive, but "in stilistischer Verfeinerung".

#### 3) Morphological factor

- We have reconstituted the context and the motivation behind the growth of the suffix -śke/
  ske, but this does not explain all instances, and in particular the agglutination in the -r- in the 
  rṣke variant. As pointed out by Hilmarsson and Pinault, these are in most part deverbative

  adjectives. Both explain the -r- as coming from an abstract suffix \*-är < \*-r (alternatively \*
  ri). Before this diachronical explanation, I will present some evidence to show that the -rṣke

  adjectives are synchronically linked to deverbal -re adjectives.
- A system of -re quality adjectives based on "stative" verbs with  $\bar{a}$ -character can be observed in Tocharian, which is still, but marginally, productive (cf. TA praskär 'fearful'):

	Table 6: *-ræ-adjectives compared to verbs <sup>14</sup>							
ТВ	TB TA Meaning Verb Paradigm Etymology							
tapre	tpär	'high'	TA <i>täpā</i> - 'be high, tall' 15	TA prs. III <i>tpatär</i> , prt. I <i>tpo</i>	*d <sup>h</sup> eub <sup>h</sup> - 'deep' (IEW:267- 268)			

<sup>13</sup> That the stotra draws from a similar list of *vyañjana* is further shown by the correspondance between the description of the eyes above and other sub-marks: *viśālâyata-snigdha-madhura-prasanna-sama-netrāḥ* 'their eyes are wide, broad, gentle, sweet, pure, regular'.

<sup>14</sup> Verbal paradigms after Malzahn 2010.

<sup>15</sup> The root tāpā- that was subject of discussion. TG already proposed 'be high' for this root because it is paired with the adverb orto 'upward'. Now the meaning can be secured by two parallels: tpo kāswe sārk pe 'tall and straight his instep' (YQ II.4 b6) as a translation of the lakṣaṇa ucchaṅkapāda is based on a gloss such as: uccaiḥ sujātagulphatvād ucchaṅkucaraṇāh 'their feet are ucchaṅka because their ankles are well formed and high' (Abhidh-dīp 187). In the Garbhāvakrānti-sūtra (A 148), where orto tpont 'raised upwards' / āñc nmont 'bent downward' correspond to Tibetan mtho ba 'high' / dma' ba 'low': (kus ne tpont kulypa)l(m) tom tpont mäskantrāṃ • kus ne āñc (nmont kulypalaṃ tom āñc) nmont mäska(ntrāṃ •) '[The members (lyiyā āpsā)] that should be raised upwards become raised upwards. Those that should be bent downward become bent downward' (A 148 a4-a5), cf.

asāre	āsar	'dry'	AB $\bar{a}s(\bar{a})$ - 'to be dry'	TB prs. IV osotär; TA osatär	* $h_2eh_1s-h_2$ - 'heat, hearth' <sup>16</sup>
	praskär	'fearful'	AB <i>pärsk(ā)-</i> 'to fear'	TA prs. III  praskatär; sub. V  präskāl	*preK-sk <sup>e</sup> / <sub>o</sub> - (Adams 2013:445)
cäñcare	ciñcär	'pleasant	TB cänk- 'to please'	TB prs. II cäñcan-me; sub II cäñcyeṃ	*teng/g´ 'to seem, appear' (LIV <sup>2</sup> :629)
pärkare	pärkär	'long'	AB <i>pärkā</i> - 'to arise'	TB sub. V pärkaṃ-me	*bhergh- 'to rise' (LIV <sup>2</sup> :78)

• The verbs from which the -rske adjectives are derived from verbs that belong exactly to the same pattern. They are clearly linked to the subjunctive of these verbs with an apparent deletion of the  $-\bar{a}$  vowel:

<u>Table7: derivation of the -rşke adjectives from verbs</u>							
Adjective	Meanin	Verb	Paradigm	Etymology			
tparşke	'shallow'	TA <i>täpā</i> - 'be high, tall'	TA prs. III <i>tpatär</i> ; prt. I <i>tpo</i> ; caus. in TB prs. IX <i>tpästär</i> 'to proclaim' < *'to raise the voice'	*dheubh- 'deep' (IEW:267-268)			
takarşke	'serene; faithful'	tākā- 'to be'	sub V <i>tākaṃ</i> ; prt. I <i>tāka</i>	*( $s$ ) $th_2$ - $k$ - 'to step, to install' (LIV <sup>2</sup> :590)			
mäntarşke	'short'	<i>mäntā</i> - 'to hurt, to stir'	sub. V <i>māntatär</i> *	* <i>menth</i> <sub>2</sub> - 'to stir' (LIV <sup>2</sup> :438)			
mällarşke	'fine'	$m\ddot{a}l(\bar{a})$ - 'to crush'	prs. X mällāstär; sub VI māllālñe	*melh <sub>2</sub> - 'to grind' (LIV <sup>2</sup> :432)			
pautarşke	'caressing, tender'	pautā- 'to caress, to praise'	prs. IV pautotär; sub V pautoy	*bheudh- 'to be awake' (LIV <sup>2</sup> :82)			
klänkarske *	'wavering'	klänk- 'doubt; contest, refute'	prs. I <i>klyeñktär</i> ; sub I <i>klänkälyñe</i> ; (TA pt I in	*kleng- 'to turn, to twist' (Adams 2013:240)			

 $<sup>\</sup>ll$  (If) people (think that) low is handsome, it will be low. (If) people (think that) high is handsome, it will be high  $\gg$  (Kritzer 2014:68).

<sup>16</sup> Starting from a collectivum  $*h_2eh_1s-h_2$ - would explain both the prs IV paradigm and the apparent preservation of the  $\bar{a}$  vowel in the adjective. The reconstruction of this stem is secure, cf. Hit.  $h\bar{a}ssa-/hass\bar{a}$ - 'hearth', Lat.  $\bar{a}ra$  'altar' (LIV<sup>2</sup>:258). Alternatively one could start from a verbal stem  $*h_2h_1s-(e)h_1$ - as per LIV<sup>2</sup> (loc. cit.).

	(klāṅkā- 'to	klänko)	
	drive')		

- For the present explanation, the pivot form is *tparṣke* since it can be linked both to a *-re* adjective (TB *tapre* TA *tpär*) and a verb (TA *tpatär*). Thus one could explain the birth of the *-rṣke* type according to the following analogy:
  - verb with stative meaning in  $\bar{a} \to \text{property}$  adjective in -re with deletion of  $\bar{a}$ -vowel (type \*tpetär  $\to tapre$ )
  - property adjective in  $-re \rightarrow$  property adjective (with diminutive/affective value) in -rske with deletion of the *e*-vowel ( $tapre \rightarrow tparske$ )
  - verb with stative meaning in  $-\bar{a}$   $\rightarrow$  property adjective (with diminutive/affective value) in -rske (type \*tpetär  $\rightarrow$  tparske)
- Thus, the *-rṣke* type could be said to be the continuation, in very specific context, of the Caland system into Tocharian. However the exact history of this system remains to be clarified. For now, I will raise two questions: 1) how to explain the  $\bar{a}$  deletion rule? 2) the e deletion rule?
- For 2), Pinault (forthcoming) linked nekarṣke 'delightful, pleasant' to PIE \*negw-ró- 'naked' (Gk. νεβρός and Arm. merk 'naked'), assuming that the semantic kernel was 'deprived of harshness, sharpness, bitterness', hence 'bare' since in one occurrence it translates Skt. madhura- and is opposed räskare 'sharp' = Skt. kaṭuka- (IOL Toch 716 and 765; Peyrot 2008a:86-87).
- According to this explanation, nekar is not actually derived from an adjective \*\* $\tilde{n}akre$  or \*\*nekre, but rather from \*nek is nek is not actually derived from an adjective \*\* $\tilde{n}akre$  or \*\*nekre, but rather from \*nek is neg in the abstract corresponding to \*neg in according to the \* $h_2e$  is  $h_2e$  in the  $h_2e$  i
- This entails the coexistence in an older system of\*  $\ddot{a}r < *ri$  action nouns (with resultative meaning), for which there is some evidences, with the same synchronic rule of  $\bar{a}$ -deletion: TB  $ts\ddot{a}nk\ddot{a}r$ , TA  $ts\ddot{a}nk\ddot{a}r$  'summit' on  $ts\ddot{a}nk\bar{a}r$  'to arise', or AB  $lyip\ddot{a}r$  'rest' on  $lip\bar{a}$  'to remain'.
- As for the synchronic  $\bar{a}$  deletion rule, this can probably be explained by the fact that the derivation pattern of a property adjective from a verb was established before the addition of the  $-\bar{a}$  to the root, as in  $tapre \sim t\ddot{a}p\bar{a}$ , where the verb may be secondary since the root  $*d^he\mu b^h$ -gives mostly nominal derivatives in other IE languages (IEW:267-268).

#### 4) Terminological factor

• As I said in introduction, some of these nouns are important Buddhist concept, and the adjectival suffix -ske / -ske was used to build "native" Tocharian words as counterparts of a specific religious terminology. Here we are not dealing with the technical vocabulary of

Buddhism but rather with words that are sentimentally loaded. For this process, I will take two examples:

- $m\ddot{a}llar\dot{s}ke$  'fine, soft' is a perfect calque of mrduka-, the doublet of mrdu- 'soft': 1) mrd- =  $m\ddot{a}ll\ddot{a}$  'to crush'; 2) -r(e)- = -u- as quality adjectives, both ultimately connected to the Caland system; 3)  $-\dot{s}ke = ka$ . Hence:  $m\ddot{a}lla$ -r- $\dot{s}ke = mrd$ -u-ka-.
- *añmālaṣke* 'compassionate, pitying' which translates *kāruṇika* or *anukampaka* both epithets of the Buddha.
- Here, one should start from añmālaṣṣälñe which is oldest term for karuṇā or anukampa 'compassion' (it does not mean 'compassionate' as sometimes assumed), since it is only attested in archaic texts (THT 282, 1192, 1320) e.g.: añmālaṣle ertsi yesäñ aikne ste 'This your duty to have [lit. to evoke] compassion'
- To render *kāruṇika* or *anukampaka*-, the Tocharians calqued this formation, using the counterpart of Skt. *kāruṇā* or *anukampa*, *añmālaṣṣälñe* and the suffix *-ṣke*, which was appropriate given the affective context. Hence \**añmālaṣ(ṣä)lñäṣke* > *añmālaṣke* through haplology (as already argued by Hilmarsson 1996:30, but without the assumption of a calque).

## V. Appendix: list of the adjectives in -ske/ske

- amiśke 'despondent' = Skt. durmanas-. Adams 2013:21, following Van Windekens, links it to Ved. ámīvā- 'sickness, suffering', ámīti 'urge, press', Old Norse ama 'to vex, molest' (\*h₂emh₃- 'anfassen, anpacken', according to LIV²:265-266). If Greek ἀνία 'grief' belongs here is disputed.
- *klänkarṣke*\* 'wavering' on *klänk* 'to retort, to contradict' (*klankälyñe* = *pratyanīka* 'hostile, opposed, injuring', PK AS 6D b3), based on an earlier (concrete) meaning \*'to bend [the eyes]', i. e. 'to turn the eyes'. To the same root belongs *klenke* 'vehicle' and *klānkā* 'to drive'. Linked to Old English *ge-hlencan* 'to braid', Middle High German *lenken* 'to bend', Old Norse *hlekkr* 'chain, fetter' < IE \**kleng* by Adams 2013:240.
- *pällarṣke* 'praiseworthy' from *pälā* 'to praise'.
- *pautarṣke* 'caressing, pleasant' from *pautā* 'to honor, to please' (cf. TA *tuṅk poto*). Borrowed in TA as *potärṣke*\*.
- *mäntarṣke* 'short' (cf. Peyrot 2016, 204) from *mäntā* 'to hurt, stir', cf. Hitt. *tēpu* 'little, few', Skt. *dabhrá* 'little, small, deficient' from \**d*<sup>h</sup>*éb*<sup>h</sup>- 'to hurt, to deceive' (> Lith. dóbti 'strike', 'beat', Skt. *dabhnóti* 'to damage', Hitt. *tepnuzi* 'to diminish, to despise', etc. cf. LIV<sup>2</sup>:132).
- *mällarṣke* 'soft' from *mälā* 'to crush', calque of Skt. *mṛduka*-.
- *takarṣke* 'serene, pure; faithful' trsl. *prasanna* from *tākā* 'to be'; probably through the following evolution 'settled, being' → 'still, calm' → 'clear, serene', then 'faithful' as *Lehnübersetzung* of *prasanna*-.

- nekarṣke 'pleasant', trsl. madhura- < \*nog<sup>w</sup>-ri-, abstract of \*neg<sup>w</sup>-ró- 'naked', cf. Gk. νεβρός and Arm. merk 'naked' according to Pinault forthcoming.
- lalaṃṣke 'soft' (arch. lālāṃṣke) ← Middle Indic \*lalənaka- (syncopated form) < \*lalanaka- 'caressing, fondling' (> Hindī lalnā 'boy', cf. Turner 1966:636) with suffix substitution.

  Borrowed in TA as lālāṃṣke\*.
- lykaśke (TA lykäly) 'small', linked to Gr. ὀλίγος 'small', Albanian lig 'bad, evil; thin',
   Lithuanian ligà 'illness', etc. by Adams 2013:617.
- wlaiśke (TA wlyep) 'tender, soft', cf. wäl- 'to bend' (Adams 2013:673, with reference to Van Windekens).

#### VI. References

Adams, Douglas Q. 2013. A dictionary of Tocharian B: revised and greatly enlarged. 2nd edition. Amsterdam: Rodopi.

Degener, A. 1989. Khotanische Suffixe. Stuttgart: Steiner.

Emmerick, R. E. 1968. Saka Grammatical Studies. London: Oxford University Press.

Hartmann, Jens-Uwe. 1987. *Das Varṇārhavarṇastotra des Mātṛceṭa*. Göttingen: Vandenhoeck und Ruprecht.

Hartmann, Markus. 2013. Das Genussystem des Tocharischen. Hamburg: Baar.

Hilmarsson, Jörundur. 1989. *The Dual Forms of Nouns and Pronouns in Tocharian*. Reykjavík: Málvísindastofnun Háskóla Íslands.

- . 1996. *Materials for a Tocharian Historical and Etymological Dictionary*. Edited by Alexander Lubotsky and Guðrún Þórhallsdóttir. Reykjavík: Málvísindastofnun Háskóla Íslands.
- Hinüber, Oskar von. 2001. *Das Ältere Mittelindisch um Überblick*. 2., erweiterte Auflage. Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- Itkin, Ilya B. 2016. "The Tender Ghost: Tocharian B *lalaṃṣke* 'Tender': Tocharian A?" *Tocharian and Indo-European Studies* 17: 65–75.
- Jurafsky, Daniel. 1996. "Universal Tendencies in the Semantics of the Diminutive." *Language*, 533–578.
- Klingenschmitt, Gert. 1975. "Tocharisch und Urindogermanisch." In Flexion und Wortbildung. Akten der V. Fachtagung der Indogermanischen Gesellschaft, Regensburg, 9.–14. September 1973, edited by Helmut Rix, 148–63. Wiesbaden: Reichert.
- . 1994. "Das Tocharische in indogermanistischer Sicht." In *Tocharisch. Akten der Fachtagung der Indogermanischen Gesellschaft, Berlin, September 1990*, edited by Bernfried Schlerath, 310–411. Reykjavík: Málvísindastofnun Háskóla Íslands.
- Lévi, Sylvain. 1932. Mahākarmavibhaṅga (La grande classification des actes) et Karmavibhaṅgopadeśa (Discussion sur le Mahā Karmavibhaṅga). Paris: Leroux.

Malzahn, Melanie. 2010. The Tocharian Verbal System. Leiden: Brill.

Peyrot, Michaël. 2008. Variation and Change in Tocharian B. Amsterdam: Rodopi.

- 2008a. "More Sanskrit Tocharian B Bilingual Udānavarga Fragments." *Indogermanische Forschungen* 113: 83–125.
  2013. *The Tocharian subjunctive: a study in syntax and verbal stem formation*. Leiden: Brill.
  2015. "TOCHARIAN LANGUAGE" *Encyclopædia Iranica*, online edition,
  2015, available at http://www.iranicaonline.org/articles/tocharian-language (accessed on 27 July 2015).
  2016. "Further Sanskrit–Tocharian Bilingual *Udānavarga* Fragments." *Tocharian and*
- Indo-European Studies 17: 153–211.
- Pinault, Georges-Jean. 2008. Chrestomathie Tokharienne. Textes et Grammaire. Leuven: Peeters.
- ——. 2015. "The Formation of Buddhist Languages." In *Tocharian Texts in Context*. *International Conference on Tocharian Manuscripts and Silk Road Culture (2013)*, edited by Melanie Malzahn, Michaël Peyrot, Hannes Fellner, and Theresa-Susanna Illés, 159–185. Bremen: Hempen Verlag.
- ——. forthcoming. "Indo-European 'Naked' and the Caland System." Published in a forthcoming Festschrift, in press..
- Sims-Williams, Nicholas. 2002. "Ancient Afghanistan and Its Invaders: Linguistic Evidence from the Bactrian Documents and Inscriptions." In *Indo-Iranian Languages and Peoples*, edited by Nicholas Sims-Williams, 225–242. Oxford: Oxford University Press.
- Thomas, Werner. 1968."Zur Verwendung von toch. A *oki/B ramt* und A *mäṃtne/B mäkte* in Vergleichen." *Orbis* 17, 198-231.
- Tremblay, Xavier. 2005. "Irano-Tocharica et Tocharo-Iranica." *Bulletin of the School of Oriental and African Studies* 68: 421–49.
- Turner, R. L. 1966. *A Comparative Dictionary of the Indo-Aryan Languages*. London: Oxford University Press.
- Winter, Werner. 1961. "Lexical Interchange between 'Tocharian' A and B." *Journal of the American Oriental Society* 81: 271–80.