

Remarks on Inner-Tocharian Borrowing and the Etymology of Tocharian A *lek* ‘shape; gesture’, B *lek*^{*} ‘gesture’

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ABSTRACT

After discussing some thus far unknown examples of inner-Tocharian borrowing processes with direction TA >> TB, the present paper argues that also the substantive B *lek*^{*} ‘gesture’ represents a loanword from Tocharian A, in particular from the Tocharian A form *lek* ‘shape; gesture’. Under the assumption of a semantic development ‘equality, identity, correspondence’ ⇒ ‘figure, shape’ ⇒ ‘gesture’ – for which parallels are available –, A *lek* is etymologically connected with the independently reconstructable root PIE **leǵ-* ‘(be[come]) equal’ and thus traced back to a nominal pre-form **lóǵ-u-* or **lóǵ-o-*.

KEYWORDS

Tocharian languages; inner-Tocharian borrowing; lexicalization; internal derivation; *u*-substantivization; *o*-substantivization.

The present contribution consists in a closer investigation of the Tocharian lexemes A *lek* ‘shape; gesture’, B *lek*^{*} ‘gesture’, on whose etymology scholars have held quite divergent opinions: while some scholars have regarded both forms as directly inherited from Proto-Tocharian, others have posited an inner-Tocharian borrowing, with the Proto-Tocharian lexeme having been inherited into only one of the two languages.

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1. SEMANTICS & ATTESTATIONS

1.1. Tocharian A – part 1

The substantive nom./obl.sg. *A lek* – not to be confused with the adverb *A lek* ‘away’ – is translated as ‘Aussehen, Geste’ in *TG*: 48–49 (cf. ‘aspectus, gestus (?)’ in *TLT*: 271), ‘Gebärde, Geste’ in *TEB* 2, 136, and ‘gesture’ in *JWP*: 295. *A lek* is of unknown gender and is attested six times in the Tocharian A corpus, where it appears in two fixed collocations.

The first collocation is *A lek yām-* ‘do the gesture / movement of’,¹ as per (1).

(1) Attestations of *A lek yām-*:

- i. A6a6 (*Puṇyavantajātaka*): *śewimtrā potāk pañwtsi lek yaṣ* ‘il [le peintre] bâille, il fait le geste de s’étirer tout son long’ (Pinault 2022: 525).²
- ii. YQ III.12b4 (*Maitreyasamitinātaka*): (*krāmpo*)nt *pālsäkyo tsru cam wināssi lek yāmuraṣ trānkāṣ* ‘with a (worried) mind having made [only] some weak gesture of veneration, he says ...’ (after *JWP*: 197).

The second collocation is *A lek pikār* ‘gesture’ / ‘Miene [und] Gebärde’ (thus Thomas 1972: 436–437 n. 1), a *Wortverbindung* of two (quasi) synonyms³ which could also be used – like simple *A lek* – as direct object of *A yām-* ‘do’, cf. (2).

(2) Attestations of *A lek pikār*:

- i. A55b4: *k_uleñci wañke lek pikār* ‘female chat [and] gesticulation’ (*CEToM* [A55]).
- ii. A90b5 (*Nandacarita* I): *nātkis seyo lek pik(ā)r kārśātār* ‘the gesture will be understood by the son of the lord’ (Peyrot 2013: 629).
- iii. A191b2: */// aptsarāntwāṣ lek pikār ///* ‘... from the Apsaras a gesture ...’
- iv. A301b4-b5 (*Maitreyasamitinātaka*): *tāmaṃ kanaṃ tsar peyo abhinai ypār tsepāntā- b5 -(ñ) /// (tsä)ryo lek pikār ypār* ‘zu der Melodie machten die Tänzer mit Hand [und] Fuß Pantomime (...) mit (der Hand) (?) machten sie Geste [und] Gebärde’ (reading and translation according to Thomas 1957: 56 with n. 4).

1.2. Tocharian A – part 2

Beside *A lek*, one finds the Tocharian A forms *lekā* (A226a3 [2x], a4 [3x]) and *lekac* (A314b3, A315 = A316a4, A323a4; ? A431b5). While *TG*: 293 and *TLT*: 271 leave *A lekā* untranslated and *TLT*: 271 connects *A lekac* (‘procul’) with *A lek* ‘away’, Couvreur (1955–1956: 69) proposes to gloss both *A lekac* and *A lekā* as ‘aussehend wie’.

¹ This collocation – likewise corresponding B *lek yām-* (see 1.3. below) – is not dealt with by Meunier’s (2013) treatment of Tocharian syntagmata built with the verb AB *yām-*.

² As Pinault (2022: 525 with references) has convincingly argued, Sieg’s (1944: 9, 16) tentative translation of *A potāk* as ‘paw, hand’ should be replaced by ‘tout du long, tout son long’.

³ As to *A pikār*, it is attested – beside the loci in the main text above – five further times in contexts very similar to those of *A lek pikār*: it is object of *A yām-* ‘do’ and associated with *A rape* ‘music’ in A219b1 (cf. especially A301b4-b5) and connected with female (supernatural) beings like the Apsaras, female Vidyādhara, etc. in A312b3, A318a2-a3, and A100b6 (cf. especially A55b4 and A191b2). For the etymological discussion, see footnote 8 below.



The latter meaning fits well with at least two of the available attestations of A *lekac*, both dealing with the *Sonnenaufgangswunder* of the Buddha. There, A *lekac* functions as indeclinable adjective modifying the syntagmata A *vaiduriši āsām* ‘beryl throne’ and A *vaiduriši āsā(ñi)* ‘beryl throne(s)’, as per (3).

(3) Selected attestations of A *lekac*:

- i. A314b3: *kārtkālsaṃ sumer lekac vaiduriši āsā(ñi) (pākār) (tākar)* ‘on the ponds Sumeru-like throne(s) of beryl (became visible)’ (after CEToM [A314]).
- ii. A315 = A316a4: *tām kolmaṃ ywārska sumer lekac vaiduriši āsām pākā(r) (tāk)* ‘in the middle of that pond a Sumeru-like throne of beryl (became) visible’ (cf. Huard 2022: 410, 411)⁴ – differently DTA: 207 and CEToM (A315 = A316), where A *sumer lekac* is translated as ‘in the direction toward the Sumeru’.

Less clear is the fragmentary attestation in A323a4: *lekac k_uyal nu lymāš* /// (beginning of the line). As to A431b5 (*pāklyoṣ šomiṃ pes leka – – – r prak..* /// [end of the line]), it is unclear whether it belongs here at all.

The supposed meaning ‘similar to’ of A *lekac* is nicely confirmed by the attestations of A *lekā*, which is only found in the manuscript A226 (*Maitreyāvadānavyākaraṇa*).⁵ In the lines a3–a4, A *lekā* occurs in the description of infernal beings, whose bodies are compared to objects of the most disparate shapes. As noted by Chamot-Rooke (2022: 58, 59 with n. 117), A *lekā* corresponds to the Old Uyghur preposition *osuglug* ‘similar to’ (← substantive *osug* ‘way, manner’ [Wilkens 2021: 516]) and is constantly complemented by preceding genitival adjectives in *-ši*. Accordingly, the attested syntagmata A *X-ši lekā* should be translated as ‘with the shape of X, similar to X’, as per (4).

(4) Selected attestations of A *lekā*:

- i. A226a3: *k(apśāñño neñc) wampeši (ñēmintwāši) l(e)kā cem : mahurši lekā* ‘some ‘those (have) b(odies) in the shape of ornaments, (of jewels), some in the shape of a diadem’ (reading and translation according to Chamot-Rooke 2022: 34, 38, 40).
- ii. A226a3–a4: (– – – –) a4 *mokši kšuraši lek=ālyek saṃ* ‘some others [have bodies] in the shape (of ...), of a knife, of a razor’ (reading and translation according to Chamot-Rooke 2022: 34, 38, 40).

In view of the above, A *lekac* and A *lekā* should be segmented as A *lek-ac* and A *lek-ā* respectively and be analyzed as the allative and perlative case forms of an underlying substantive A *lek** ‘figure, shape’. A *lek-ā* is a perlative with instrumental function (cf. *TEB* 1, 85; Carling 2000: 14), as witnessed by the fixed collocations with the structure *X-ši lek-ā* ‘with the shape of X, similar to X’ (cf. (4) above). A *lek-ac* is formally an allative: however, this secondary case form turns out to be more deeply lexicalized than the perlative A *lek-ā*, since it exhibits a plain adjectival semantics ‘similar to’, without any synchronic reference to the meaning ‘figure, shape’ of the underlying substantive *lek**.⁶ In addition, A *lekac* does not govern genitival adjectives in *-ši*, but is complemented by substantives in the bare nom./obl.-stem – cf. the syntagma A *sumer lekac* ‘Sumeru-like, similar to Sumeru’ in (3) above. Structurally, one might compare the postposition A *pos-ac* ‘beside’

⁴ For the translation of A *kolām* – traditionally glossed as ‘ship, boat’ (e.g. *TEB* 2, 97; *DTA*: 207) – as ‘bassin, pond’, see Huard (2022: 410–413, 576).

⁵ This manuscript has been recently studied in detail by Chamot-Rooke (2022).

⁶ The original semantics of the frozen allative A *lek-ac* should be reconstructed as ‘*toward the figure / shape of, (coming) close to the figure / shape of’ ⇒ ‘similar to’.



(governing oblique or genitive [TG: 290; Carling 2000: 329]), which also goes back to a lexicalized allative – cf., next to A *pos-ac*, the frozen locative A *pos-am* ‘beside, below’.⁷

It follows from the above discussion that for the substantive A *lek* two synchronic meanings should be assumed, namely ‘gesture’ and ‘figure, shape’ – cf. Sieg, Siegling and Schulze’s translation (TG: 48–49) ‘Aussehen, Geste’. Remarkably, though, the latter semantics ‘figure, shape’ is restricted to (more or less lexicalized) secondary case forms. The relation between the meanings ‘figure, shape’ (cf. A *lek-ā*, *lek-ac*) and ‘gesture’ (cf. A *lek*) will be further discussed in section 3.3. below.

1.3. Tocharian B

The substantive B *lek** is translated as ‘Gebärde, Geste’ in TEB 2, 236 and ‘movement, gesture’ in DTB²: 607. It is attested twice in syntactic contexts nearly identical to those of A *lek*.

On the one hand, B *lek yām-* ‘do the gesture / movement of’ occurs in the late Sängim text B108b5 (Conversion of the Kāśyapa brothers): *iryāpathānta śwāra yāmṣate lyama śama mas=orkāntai lek yamaṣṣa lyśalyñeṣṣe* ‘il [scil. Buddha] réalisa les quatre types de mouvements: il s’assit, il se leva, il alla de-ci de-là, il fit le geste de s’allonger’ (Pinault 2008: 168); cf. the syntagma A *lek yām-* treated in (1) above.

On the other hand, in the late Sängim text B109b8 (Yaśodharā) the plural B *lekanma* ‘gestures’ is paired with the synonymous plural B *pikārānta*⁸ and functions as object of an incomplete form of the verb B *yām-* ‘do’: *lekanma pikārānta ya – –* (end of the line); cf. the collocation A *lek pikār* (*yām-*) dealt with in (2) above.

The plural ending *-(a)nma* of B *lekanma*, belonging to the nominal class II.2 according to the classification by Krause and Thomas (TEB 1, 121–122), betrays genus alternans: cf. TEB 1, 122, 2, 236; Hartmann (2013: 349); Pinault (2015: 181–182); the masculine given in DTB²: 608 is incorrect. Although no nominative singular form is attested, appurtenance to the nominal class II.2 secures the reconstruction of a nominative singular B *lek** (= oblique singular).

Note, finally, that no trace of a semantics ‘figure, shape’ beside ‘gesture’ (see 1.2. above) is recoverable for B *lek**.

⁷ I am grateful to an anonymous reviewer for having called this parallel to my attention.

⁸ As to B *pikār**, it is attested – beside B109b8 (see the main text above) – four further times, namely as perlativ singular B *pikār-sa* in B606a3Š and as second member of the pair B *yakne pikār** ‘manner / habit [and] gesture’ in PKAS171a3, b3-b4 (DA) and IOL Toch 205b4 (where an obl.pl. B *(ya)kneṃ* should be restored at the beginning of the line). Etymologically, B *pik-ār** sg.m. ‘gesture’ and its equivalent A *pik-ār* alt. ‘id.’ (see footnote 3 above) are probably related to the verbal root AB *pik-ā-* ‘paint, write’ (DTB²: 410 with references) and must have thus meant originally ‘writing, writing sign’ ⇒ ‘sign’ ⇒ ‘gesture’ (the attractive assumption of an intermediate semantics ‘sign’ was pointed out to me by an anonymous reviewer). As for the involved derivational suffix, one might compare the morpheme A *-ār* of the deverbal type A *oks-ār* (< **oks-ār*) ‘plant’, A *tsm-ār* ‘root’, etc. Note that the obl. sg. B *pik-ār** – presupposed by the perl.sg. B *pikār-sa* – points to an underlyingly trisyllabic structure B /*pik-ārā*/*.



2. INNER-TOCHARIAN RELATIONS

Since the vowel correspondence B *e* : A *e* – apart from the particular case of PToch. **æ* before nasal-plus-sibilant clusters or palatalized nasals (Hilmarsson 1987: 71–72) – cannot be *lautgesetzlich*, it is likely that one of the two Tocharian languages borrowed the word for ‘shape; gesture’ from the other or that both of them borrowed this word from a third language.

2.1. Hypothesis 1: Borrowing from a third language

Under the hypothesis of a foreign origin, the only possible source of A *lek*, B *lek** I was able to identify is the Sanskrit form *lekhā-* f.: its basic semantics is ‘scratch, line, stroke, furrow’, but among the secondary meanings also a semantics ‘drawing, likeness, figure’ is attested according to MW: 901.2. Nevertheless, this hypothesis is rather unlikely, since it remains unclear why the Tocharian languages should have borrowed Skt. *lekhā-* in its secondary semantics ‘figure’.

2.2. Hypothesis 2: Borrowing from Tocharian B to Tocharian A

Assuming that one of the two Tocharian languages borrowed the word for ‘shape; gesture’ from the other, the unmarked hypothesis for explaining the relation between A *lek* and B *lek** would be a borrowing process with direction B >> A, thus deeming B *lek** to be the inherited form. Nevertheless, such a scenario encounters several difficulties.

If one reconstructs an old *men*-stem – on the basis of the attested plural B *lekanma* –, the singular allomorph B *lek** remains unexplained, since it would be expected to show some trace of the old suffix *-*m̃*: cf. B sg. *wāk-i* (: A *wākä-m*) ~ pl. B *waka-nma* ‘difference’.⁹ Therefore, the plural suffix B *-(a)nma* should be regarded as secondary.

Alternatively, on the basis of the singular B *lek**, the following further analyses would be conceivable. (i) B *lek** continues a neuter *u*-stem: in this case, however, traces of *u*-inflection would be expected to show up both in the singular (i.e., B **lekw* like B *tañkw** ‘love’) and in the plural (cf. Pre-PToch. **uāstu-* > B sg. *ost* ~ pl. *ost-wa* ‘house’). (ii) B *lek** continues a neuter *n*-stem: however, one should reconstruct a root morpheme with *o*-grade (cf. B *-e-*), which would be hard to motivate morphologically, all the more so since primary neuter *n*-stems are usually not reconstructed as an inflectional category for Proto-Indo-European (PIE) (Melchert 2010). (iii) The only viable analysis would be parsing B *lek** as continuant of a neuter *i*-stem, although in this case no suitable root of the necessary shape PIE *(*H/u*)*leK-* presents itself (see also section 3. below).

Finally, an additional argument speaks against the assumption of a borrowing process with direction B >> A: if A *lek* really represents a loanword from Tocharian B, why is this item much more frequent in Tocharian A (6x without counting A *lekā* / *lekac*) than in Tocharian B (2x)?

⁹ On the evolution of the PIE suffix *-*m̃* in Tocharian, see, among others, Malzahn 2005: 396–398 and Pinault 2008: 495; 2020: 485.



In consideration of the appreciably larger size of the Tocharian B corpus – ‘approximately 9,000 fragments preserved, as against 2,000 for Tocharian A’ according to Peyrot (2015: 131)¹⁰ – such a difference in proportions might not be due to chance.

2.3. Hypothesis 3: Borrowing from Tocharian A to Tocharian B

Although some past scholars – eminently A. J. Van Windekens – constantly admitted borrowings from Tocharian A to Tocharian B, this is no longer *communis opinio* today (Winter 1961: 83–85; 1962; Lane 1966, esp. 119–120, 126, 129; Kim 2019: 182 n. 17). However, some particular cases, which for space reasons can be treated only briefly here, are not so easy to dismiss.¹¹

2.3.1. The prefixed adjective B *oñkipše* ‘shameless’ is regarded as a loanword from Tocharian A by Hilmarsson (1989: 102; 1991: 154–155), since the lexeme for ‘shame’ is *kwipe* in Tocharian B (cf. B *kwipassu* ‘modest’), but *kip* in Tocharian A. In addition, the rounding **#a- > #o-* before following **-nkw-* is a phonological process proper to Tocharian A, as in A *oñk* : B *eñkwe* ‘man’ (Hilmarsson 1989: 102–111). For B *oñkipše* one should thus assume that speakers of Tocharian B introduced the customary suffixal vowel *-e* in place of the *-i* they borrowed from the well-formed item Pre-Toch. A **oñ-kip-ši*. This reshaping made possible to regularly inflect the adjective in question in Tocharian B: indeed, B *oñkipše* follows the productive pattern of the adjectives in B *-š(s)e*, as shown by the vocative singular B *oñkipšu* (e.g. B89b1Š classic). Moreover, since ‘[b]efore a consonant the nasal [of the negative prefix] is lost in East Tocharian without regard to preceding or following sounds’ (Hilmarsson 1991: 193), one ought to assume that Pre-Toch. A **oñ-kipši* was borrowed quite early in Tocharian B. This assumption is confirmed by the fact that B *oñkipše* occurs already in archaic Tocharian B texts, e.g. THT1859a2 (see Huard 2020: 16, 21).¹²

2.3.2. The exact semantics of the adjective / adverb A *lyāk* is disputed. Whereas TEB 2, 137, 237 reckons with ‘bright, visible’ and Carling (2021: 85–86) with ‘well-shaped’, Pinault (2006: 77–78 with n. 27) proposes ‘flat’: the latter translation seems more likely, since it is based on the correspondence between A *lyāk širaś* and Old Uyghur *tüp tüz* ‘vollkommen gleichmäßig’ (Wilkins 2021: 773–774) in A212b6 + YQ II.4b4-b5 (cf. also Huard 2022: 40 n. 61). The equivalent form B *lyāk* occurs in contexts similar to those of A *lyāk*, e.g. as an attribute to the word for ‘chest’ in B74a4 (cf. A378a5): therefore, a semantics ‘flat’ should be assumed for B *lyāk* as well (DTB²: 615).

If both B *lyāk* and A *lyāk* are regarded as inherited, they could only continue an old *i*-stem, because a Pre-Proto-Tocharian *o*-stem would have yielded B **lyāke*, while an *u*-stem would have produced B **lyākw* (cf. B *tankw** ‘love’). However, the following arguments rather point to a borrowing process with direction A >> B: (i) A *lyāk* (10x) is much better attested than B *lyāk* (2x [B73a6Š, B74a4Š]), the latter only occurring in classical texts; (ii) A *lyāk* is at least partially declinable (cf. nom.sg.f. *lyāki* modifying A *ytār* f. ‘way’ in A147a2), whereas B *lyāk* is not – cf. B73a6 *wartsa wlaś(k)a l(y)āk pratsā(k)o* ‘bright, soft [and] flat chest’; (iii) if it does not exhibit the resegmented suffix A *-atsune*, the abstract A *lyāka-tsune* (A397b2, b3) presupposes a base A **lyāka* (> *lyāk*), whose expected Tocharian B counterpart ought to be **lyāke* rather than *lyāk*, as per above.

¹⁰ Cf. also Malzahn 2017: 157.

¹¹ For a detailed treatment of the Tocharian forms under 2.3.1.–2.3.4. below, see Imberciadori 2023.

¹² In contrast, DTB²: 117–118 regards *oñkipše* as a genuine Tocharian B formation, but his assumption that in B **eñ-kwip-äšše* [...] the rounding of *-kw-* was reassigned to the preceding vowel, giving the attested *oñkipše*, is ad hoc.



2.3.3. The next case in point is the indeclinable adjective / adverb B *akāmñc*, a hapax¹³ attested in IOL Toch 39a3 (archaic; *Udānavarga*).¹⁴ The spelling as *akāmñc* rather than **akāmñcä* or **akāmñco* in an archaic text suggests that the item at hand was underlyingly disyllabic in Tocharian B, i.e. B /ákāñc/ = **ākāñc*. Besides, one finds the indeclinable adjective / adverb A *ākiñc*, hapax in A353b4. Both Tocharian forms occur as translations of Bud.-Skt. *prāntaṃ* ‘distant(ly), remote(ly)’ (BHSD: 392.2), cf. Schmidt (1989: 105) and DTA: 35.

Although both B **ākāñc* and A *ākiñc* are clearly related to the substantives B *āke*, A *āk* ‘end’, only A *āk-iñc* can be deemed morphologically well-formed, since an adjectival morpheme *-iñc* is only known for Tocharian A – cf. A *šul-iñc* ‘north’ ⇐ *‘northern’ ⇐ *‘belonging to the mountains’ ⇐ A *šul* ‘mountain’. In contrast, B **ākāñc* is synchronically unmotivated,¹⁵ and it is thus best analyzed as a loanword from Tocharian A. The vocalic mismatch A *-i-* : B */-ä-/* (cf. A *ākiñc* : B **ākāñc*) can be explained through the assumption that Tocharian B borrowed a non-palatalized variant A **āk-āñc*, likely to have existed beside A *āk-iñc* – cf. A *ciñcār* ~ *cāñcār* ‘lovely’.

2.3.4. The secondary adjectives B *onmi-šše** ~ *onmiṃ-šše*, A *onmi-ši** ‘pertaining to remorse’ as well as B *onmi-ssu** ‘remorseful’ occur synchronically beside the substantive AB *onmiṃ* ‘remorse’. Based on B *onmiṃ-šše*, one might at first explain the coexisting variant B *onmi-šše** as well the Tocharian A form A *onmi-ši** admitting a loss of the stem final nasal before the following suffixal sibilant. However, this hypothesis is unattractive: (i) one would expect forms with and without stem final nasal to coexist also in the case of B *onmi-ssu** ‘remorseful’ (4x), but for the latter adjective no forms in °*ṃ-s°* are attested;¹⁶ (ii) in Tocharian A, a simplification *°*ṃ-s°* > °-*š°* would find several counterexamples – cf. A *puttišparāṃ-ši* ‘pertaining to the dignity of a Buddha’ (A17a5 *et al.*), A *napem-ši* ‘pertaining to a man’ (A60a5 *et al.*), etc. Thus, the joined witness of the adjectives B *onmi-šše**, A *onmi-ši** ‘pertaining to remorse’ and B *onmi-ssu** ‘remorseful’ points to the existence of an unattested substantive base with obl.sg. AB **onmi* ‘remorse’, which can be regarded as inherited in both Tocharian languages.¹⁷

As for the attested substantive AB *onmiṃ* ‘remorse’, the following observation is crucial here: whereas its morphological structure is unanalyzable within Tocharian B, it is regularly explicable within Tocharian A. In the latter language, A *onmi-ṃ* can easily be interpreted as a substantivized adjective in A *-ṃ* derived from the original substantive A **onmi* (see above): i.e., A **onmi* ‘remorse’ → *onmi-ṃ* (*‘pertaining to remorse’ ⇒) ‘remorse’. From Tocharian A, one might adduce structural parallels like A *poke-ṃ** (*‘pertaining to the arm’ ⇒) ‘bracelet’ or A *plyaske-ṃ* (*‘pertaining to meditation’ ⇒) ‘meditation’, the latter being – like A *onmiṃ* – an important notion of

¹³ The other putative attestation of the form under discussion in PKNS36 = PKNS20b2-b3DA (classic) = B93b5Š (classic-late) – namely (a)*kañc* – is highly uncertain and will therefore be left aside in the following. For two divergent views about B (a)*kañc*, see Pinault 2009: 227 and Peyrot 2013: 340 n. 390.

¹⁴ Against the interpretation of B *akāmñc* in IOL Toch 39a3 as a nominative dual, see Kim 2018: 55 n. 142 *contra* DTB²: 1.

¹⁵ Unlikely is Hilmarsson’s (1996: 6) proposal to regard B **ākāñc* as the adverbialized oblique singular of an unattested substantive B **ak-añce* (class V.2) < B *āke* ‘end’: the assumption of a derivational morpheme B */-añce/ is ad hoc, since substantives of class V.2 are otherwise synchronically primary (TEB 1, 131–132).

¹⁶ Note further the coexistence of forms with and without stem final nasal in the case of B *yälloṃ-šše** ‘pertaining to the sense functions’ (B213a1MQ archaic-classic, PKAS61a6DA classic) ~ B *yällo-šše** ‘id.’ (PKAS5Ba4 classic) < obl.pl. B *yälloṃ* ‘sense functions’ (~ nom.pl. B *yälloñ*).

¹⁷ Specifically, one might assume the paradigms B sg. nom. **onm-iye* / obl. **onm-i* and A sg. nom./obl. **onm-i*, respectively (class VI.1a according to TEB 1, 132). They ultimately presuppose a pre-form Pre-PToch. **Hón(H/d)-mu-* or *(*h*)*ñd-mu-*, which could belong either to a PIE root **ned-* ‘pierce’ or to a PIE root **h₂end^(h)-* ‘burn’. For a detailed discussion, see Imberciadori 2023: 715–718.



Buddhism. Also in typological perspective the substantivization of secondary adjectives, which often end up replacing their derivational bases (lexical renewal), is by no means isolated – cf., e.g., OAlb. **ār* ‘bear’ → Alb. *ar-í* (*‘pertaining to a bear’ ⇒) ‘bear’, replacing the expected form Alb. **ar*.¹⁸ Therefore, it is likely that B *onmiṃ* ‘remorse’ represents a loanword from A *onmi-ṃ* ‘id.’. After the completion of the borrowing process, a secondary adjectival variant B *onmiṃ-ṣṣe* (influenced by B *onmiṃ*) was created within Tocharian B beside the original variant B *onmi-ṣṣe** ‘pertaining to remorse’.¹⁹

2.3.5. Finally, a further example of inner-Tocharian lexical borrowing with direction A >> B has been most recently identified by Pan (2022: 96). In order to account for the substantive B **mastarkal* ‘crystal’ – presupposed by the secondary adjective B *mastarkal-ṣe** ‘pertaining to crystal’ (nom./obl.pl.f. in THT1107b2 classic [*Karmavācānā*]) –, Pan assumes borrowing from Middle Indic (esp. Pāli) *masāragalla-*, which indicates one of the so-called seven pearls (Skt. *sap-ta-ratna-*; cf. EWAia 3, 394). In particular, Pan proposes the following development: Pāli *masāragalla-* >> A **masārakal* > (vowel weakening) **masrakal* > (t-epenthesis) **mastrakal* > **mastārkal* >> B **mastarkal* (→ B *mastarkal-ṣe**).²⁰

2.4. Interim conclusion

On the basis of the preceding observations, I propose that also B *lek** ‘gesture’ represents a loanword from Tocharian A.²¹ Further support to this claim comes from the fact that both manuscripts where B *lek** is attested (B108 and B109) are not only late, but were also found in Sängim (Turfan region), i.e., in the easternmost part of the Tocharian speaking area. On the methodological reliability of such an argument for detecting inner-Tocharian borrowing processes, cf. *mutatis mutandis* Pinault (2017: 157): ‘this idea [of regarding B *ekañi* ‘possession’ as a loanword from Tocharian A] remains quite arbitrary, since the occurrences of B *ekañi* are not restricted to manuscripts from the eastern region, where the influence of Tocharian A would be acceptable’.

If the hypothesis of an inner-Tocharian borrowing with direction A >> B is correct, the plural B *lek-anma* must represent an inner-Tocharian-B creation.²² This would be unproblematic, since the plural suffix *-(a)nma* had become very productive in Tocharian B and could spread even beyond its original morphological environment, i.e., old *men*-stems: cf., e.g., B sg. *śaul* ‘life’ ~ pl. *śaul-anma*. Eventually, the plural morpheme B *-(a)nma* could also apply to loanwords, as in B sg. *ślok* ‘strophe’ ~ pl. *ślok-anma* (<< Skt. *śloka-*); cf. TEB 1, 122; Pinault 1989: 92; 2008: 496; Hilmarsson 1991: 172.

¹⁸ See Neri in DPEWA s.v. *ari*.

¹⁹ As remarked by an anonymous reviewer, it remains unclear why Tocharian B substituted the inherited form B **onmiye* / **onmi* (→ B *onmi-ṣṣe* and B *onmi-ssu*) with the borrowed one B *onmiṃ*. This is an interesting observation, for which at present I cannot provide a fully satisfactory explanation.

²⁰ B **mastarkal* ‘crystal’ is of unknown origin according to DTB²: 477.

²¹ Cf. also Van Windekens (1976: 260) and DTB²: 607, who do not comment any further on this point.

²² For a comparable example of renewed plural after inner-Tocharian borrowing – although in the opposite direction B >> A –, see Pinault’s (2015: 192–193) discussion of plural masculine B *yetwi* beside plural alternant A *yetweyu* / *yetweyntu* ‘jewels’.



3. ETYMOLOGICAL DISCUSSION

3.1. Previous proposals

As far as the etymology of A *lek* ‘shape; gesture’, B *lek** ‘gesture’ is concerned, the following proposals have thus far been advanced.

3.1.1. *TLT*: 271 and *IEW*: 1178 connect A *lek*, B *lek** with Ved. *ulkā-* f. ‘fiery appearance, meteor, fire’ (RV) and *ulkuṣī-* f. ‘meteor’, which are traced back to a PIE root reconstructed there as **ulek-*. According to this scenario, the Tocharian B form should be regarded as primary.

However, the etymological relation of Ved. *ulkā-* with Ved. *vārcas-* n. ‘shine, appearance’ (cf. *EWAia* 1, 231–232, 2, 516; Schaffner 2020: 172–173 n. 60) rather suggests that the root in question should be reconstructed as **uelk-* ‘burn, shine’ (with full-grade I), from which no derivative with initial AB *l-* could be derived in *lautgesetzlich* fashion.

3.1.2. With the implicit assumption of a borrowing process with direction A >> B, Pisani (1942–1943: 246)²³ connects A *lek* with OIr. *lecca* (also *lecco*, *leccu*) ‘jaw, cheek’ (? < **lik-n-*), OCS *lice* n. ‘face, person, appearance’, Ru. *lik*, *likó* n. ‘id.’, SCr. *lik*, *lice* n. ‘face, cheek’, etc. (< **leik-(i)ó-*), and OPr. *laygnan* n. ‘cheek’ (< **loik-no-*). These forms point to a root PIE **leik-*.²⁴ By operating with a semantic shift ‘face’ ⇒ ‘aspect, appearance, form’ – which could further develop to ‘gesture’ (see 3.3. below) –, such a connection might be viable.

However, the present word family remains largely obscure, since the original meaning of the underlying root PIE **leik-* is no longer recoverable. If any connection with A *lek*, B *lek** is accepted, it would not lead beyond a vague root etymology. In addition, the morphological analysis of the putative cognates from Celtic and Slavic remains unclear (see the references in n. 24).

3.1.3. Therefore, I will instead explore the potential of an alternative etymology of A *lek*, B *lek**, connecting the Tocharian lexemes with the Germanic and Baltic items Goth. *leik* n. ‘body’ and Lith. *lygūs* (~ *lygus*; accent pattern 3 [or 1]) ‘equal’ – thus in *nuce* Lane 1938: 14; cf. also Van Windekens 1976: 260 and, cautiously, *DTB*²: 607 (with pre-form **loigo-*).

Based on the discussion in *EWAh*d (5, 1264–1265 with references), I trace Goth. *leik* n. ‘body’ and Lith. *lygūs* ‘equal’ back to an underlying root PIE **leig-* ‘(be[come]) equal’;²⁵ as per (5).

²³ Cf. also Van Windekens (1976: 260) and *DTB*²: 607, without further comments.

²⁴ Cf. Pedersen 1909: 159; 1913: 110; Trautmann 1910: 367; *REW* 2, 41; de Bernardo Stempel 1999: 118 with n. 138; *EDSIL*: 278. Stüber (1998: 44, 116–117) reckons with non-Indo-European origin. The Celtic forms at hand are not treated by Matasović (*EDPC*).

²⁵ From a semantic point of view, the present root PIE **leig-* ‘(be[come]) equal’ might be viewed as related to the apparently independent root PIE **sleig-* ‘spread sth., smooth out’ → OCS *slizŭ-kŭ* ‘slippery’ etc. (*LIV*²: 566–567), since a core semantics ‘smooth’ could explain both meanings ‘equal’ (cf. PDE *even* ‘smooth’ ~ ‘equal’) and ‘slippery’. Following de Lamberterie (1990: 516–519), one may add to this cluster also Gr. λυγός ‘clear (of sounds)’ and assume a semantic shift ‘smooth’ ⇒ ‘bright, clear’ (cf. OHG *glat* ‘smooth, slippery’ ~ ‘bright’) ⇒ (specialization) ‘clear (of sounds)’ (cf. PDE *clear*). The absence of Winter’s lengthening in OCS *slizŭ-kŭ* ‘slippery’ would require the reconstruction of a barytone pre-form, since according to Neri (2017: 212–214) Winter’s Law applied in open unstressed or closed syllables but not in open stressed syllables. For an overview of the above mentioned forms, see also Imberciadori 2022: 84–86. Nevertheless, the etymological connection between PIE **leig-* and **sleig-* remains uncertain, since the Balto-Slavic data could be accounted for only under the assumption of ‘incomplete Balto-Slavic satemization’ (cf. Fortson 2010: 415–416). I am grateful to the anonymous reviewers for their helpful comments on the content of this footnote.



(5) Derivatives of the PIE root **leig-* ‘(be[come]) equal’:

- i. Thematic adjective **leig-ó-* ‘equal’ > adjective PGerm. **leik-a-* ‘equal’ (> ON *líkr* ‘id.’, OE *líc* ‘id.’) → substantive PGerm. **leik-a-* n. ‘body’ (> Goth. *leik* n. ‘id.’, ON *lík* n. ‘id.’, etc.) – more on the semantics of the latter forms in 3.3. below.²⁶
- ii. Proterokinetic (PK) *u*-stem adjective PIE **léig-u-* / **lig-éu-* ‘equal’ >> **lig-ú-* > (Winter’s Law) PBalt. **līg-ú-* > Lith. *lygūs* (accent pattern 3)²⁷ ‘equal’.²⁸

The etymological connection between A *lek* ‘shape; gesture’ (>> B *lek* ‘gesture’) and the PIE root **leig-* ‘(be[come]) equal’ – so far limited to a *Wurzeletymologie* – will be further investigated in the remainder of this paper.

3.2. Developing the **leig-* connection

On formal grounds, A *lek* can be traced back to five possible pre-forms, namely Pre-PToch. **loig-o-* (cf. DTB²: 607), **loig-u-*, **loig-i-*, **loig-η-* or **loig-*. Both reconstructions **loig-i-* and **loig-η-* can be immediately dismissed, since neither *i-* nor *n-* suffixation is well represented among the derivatives of the PIE root **leig-*. As for **loig-*, it should be interpreted as the strong stem of an acrostatic (AS) root noun **lóig-* / **léig-*. However, since AS root nouns with *ó/é-* ablaut usually exhibit agentive or resultative meaning (cf. Schindler 1972: 36), one would not expect the present root PIE **leig-* ‘(be[come]) equal’ to have built such a root noun on semantic grounds. Instead, one would expect a mobile root noun **lóig-* / **lig-*, with abstract meaning ‘equality’ according to Schindler (1972: 38): the latter, though, could not explain the *e*-vocalism of A *lek*. The choice between the pre-forms Pre-PToch. **loig-o-* and **loig-u-* is more complex.

3.2.1. If one accepts Pre-PToch. **loig-u-*, an acrostatic (AS) *u*-stem abstract **lóig-u-* / **léig-u-* should be reconstructed. Its strong stem **lóig-u-* would lead regularly to **loik^wu* > PToch. **læyk^wu* > (*u*-umlaut) **loyk^wä* > A **loykw* > **lekw* > *lek* – cf., for final *-k*, A *tuñk* : B *tañkw* ‘love’. The expected Tocharian B equivalent would be an unattested form **loykw*. Furthermore, if A *lek* really descends from a Pre-Proto-Tocharian *u*-stem, one would expect its unattested plural to have been A **lek-u* < **lek-wā*, as in the case of A pl. *wašt-u* (: B *ost-wa*) ~ sg. *wašt* alt. ‘house’. Incidentally, the existence of a plural A **lek-u* would be by no means problematic with respect to the attested plural B *lek-anma*, since – as per 2.4. above – *lek-anma* represents an inner-Tocharian-B creation.

If A *lek* points to the reconstruction of an AS *u*-stem abstract **lóig-u-* / **léig-u-*, the latter might be put in straightforward derivational relation with the PK *u*-stem adjective **léig-u-* / **lig-éu-* ‘equal’ > Lith. *lygūs* (3) ‘id.’ (see 5.ii. above). Since the derivation of PK adjectives from AS abstracts is a well-known morphological process,²⁹ the PK *u*-stem adjective **léig-u-* / **lig-éu-* likely

²⁶ For the Germanic items, see de Vries 1977: 356; EDPG: 336–337; EWAhd 5, 1263–1265.

²⁷ For Lith. *lygūs* and its Baltic cognates, see LEW 1, 370–371; ALEW: 675–677; EWAhd 5, 1265. Since the root vocalism as well as the intonation of Lith. *lygūs* (accent pattern 3) can be straightforwardly explained as the result of Winter’s Law – regularly applying in the open unstressed root syllable of the pre-form **lig-ú-* (cf. footnote 25 above and Neri 2017: 212–214) –, the alternative reconstruction of a PIE root **leiHg-* (instead of **leig-*) hinted at in EWAhd (5, 1264–1265) is unnecessary.

²⁸ To be sure, Lith. *lygūs* might also continue a thematic adjective Pre-PBalt. **lig-ó-* (type **luk-ó-* ‘bright, clear’ → ON *log* n. ‘light, flame’), because the inflectional class change **-o-* >> **-u-* is not uncommon among adjectives in Baltic (cf. Heidermanns 1993: 382–383; Casaretto 2004: 84). However, since a pre-form **lig-ó-* lacks outer-Baltic comparanda, I regard the *u*-stem inflection of Lith. *lygūs* as inherited.

²⁹ Cf., among others, Rau 2009: 173 n. 132 (with references) and Kim 2019: 183–184.



represents an internal derivative of the AS *u*-stem abstract **lóig-u-* / **léig-u-*. The latter form, in turn, might be analyzed as the *u*-substantivization³⁰ of an underlying thematic adjective, according to the derivational chain in (6).

(6) Tracing A (>> B) *lek* back to an *u*-stem:

Adjective **leig-ó-* ‘equal’ > PGerm. **leik-a-* ‘equal’ > ON *líkr* ‘id.’, OE *líc* ‘id.’;

→ AS abstract **lóig-u-* / **léig-u-* ‘equality’ > A *lek* ‘shape; gesture’ >> B *lek** ‘gesture’;

→ PK adjective **léig-u-* / **lig-éu-* ‘equal’ > Lith. *lygùs* (3) ‘equal’.

On the inner-Tocharian semantic development see 3.3. below.

3.2.2. The alternative pre-form of a A *lek* – namely PToch. **læykæ* < Pre-PToch. **loig-o-* (see 3.2. above) – might be more precisely reconstructed as **lóig-o-*, which would have yielded **laike* in Tocharian B. Morphologically, a substantive **lóig-o-* would pattern well with the adjective **leig-ó-* ‘equal’ presupposed by PGerm. **leik-a-* ‘equal’ (> ON *líkr* ‘id.’, OE *líc* ‘id.’, etc.). In particular, one might parse PIE **lóig-o-* as a substantivization of the adjective **leig-ó-*, derived through accent retraction and insertion of the *o*-grade³¹ in the root morpheme.³²

Note that the existence of a (frozen) allative A *lekac* does not tip the scale in favor of a thematic pre-form Pre-PToch. **lóig-o-* rather than **lóig-u-* (/ **léig-u-*), since the allative ending A *-ac* – although originally proper to thematic paradigms – is applied to every kind of base in Tocharian A (cf. *TEB* 1, 87; Pinault 2008: 469–470).

3.3. Semantic discussion

Since both of them represent abstract derivatives of an underlying adjective **leig-ó-* ‘equal’, it is likely that both Pre-PToch. **lóig-u-* (/ **léig-u-*) (see 3.2.1. above) and **lóig-o-* (see 3.2.2. above) exhibited an original meaning ‘equality, identity, correspondence’.

In order to understand how such an original meaning could have generated the Tocharian semantics ‘shape; gesture’, one should first look at Germanic, where the etymologically related adjective PGerm. **leik-a-* ‘equal’ (< Pre-PGerm. **leig-ó-*) has been substantivized as **leik-a-* n. Although continuants of the latter form only exhibit a semantics ‘body (alive or dead)’ (cf. Goth. *leik* n., ON *lík* n., etc.), PGerm. **leik-a-* n. must have originally meant ‘equality, identity, correspondence’, whence ‘what is equal, identical (to a person)’ ⇒ ‘image, figure, shape’ ⇒ (specialization) ‘body (shape)’ (cf. Buck 1949: 199; Casaretto 2004: 84; *EWAhd* 5, 1265). This scenario is supported by the fact that the derivation of words for ‘figure, image, (body) shape’ from adjectives meaning ‘equal’ is well attested: cf. Gr. εἶδος n. ‘image, figure’ ← ἴσος ‘equal’ (Schaffner 2020: 173 n. 60), Lith. *lygmuð* ‘portrait’ ← *lygùs* ‘equal’ (*ALEW*: 676), and Slov. *podoba* ‘picture, appearance’ ~ Pol. *podoba* ‘similarity’ (Buck 1949: 875).³³

³⁰ Cf. Nussbaum 1998: 527–528; Neri 2003: 346; Höfler 2017: 150–157.

³¹ On the *o*-grade substantivization process see, among others, Nussbaum 1997: 194; Neri 2013: 198; Höfler 2017: 133–144.

³² For the assumed derivational model adjective R(*e*)-*ó-* → substantive R(*ó*)-*o-* see, among others, Neri 2013: 198; 2018: 150 n. 1 and Hackstein 2019: 111. For a different analysis cf. Nussbaum 2017, esp. 252 and passim, according to whom substantives of the type R(*ó*)-*o-* are primary – i.e., directly derived from the underlying root – and function as derivational bases for adjectives of the types R(*o*)-*ó-* and/or R(*e*)-*ó-*.

³³ For other possible sources of the meaning ‘figure, image, (body) shape’, see Buck 198–199 s.v. *body*; 874–875 s.v. *shape*.



If one is willing to reckon with the same development ‘equality, identity, correspondence’ \Rightarrow ‘image, figure, shape’ for (Pre-)Proto-Tocharian as well, (s)he only needs the further assumption that such a semantics ‘figure, shape’ was not specialized to ‘body (shape)’ as in Germanic, but rather developed to ‘gesture’. Notably, both involved meanings ‘figure, shape’ and ‘gesture’ are attested for A *lek*, whereas B *lek** only exhibits the semantics ‘gesture’.

For the proposed inner-Tocharian development ‘figure, shape’ \Rightarrow ‘gesture’, the parallels in (7) can be adduced.

(7) Parallels for the semantic development ‘figure, shape’ \Rightarrow ‘gesture’:

- i. Gr. μορφή not only means ‘form, shape, beauty of form’, but also – especially in the plural – ‘gesticulations’: cf. the syntagma κατά τε μορφὰς καὶ φωνάς ‘through gesticulations and cries’ in Dionysius of Halicarnassus (*Ant. Rom.* 14.9.4), referring to the discomposed and wild way in which barbarians were used to attack enemy armies. The semantics ‘gesticulation(s)’ of Gr. μορφή is further witnessed by the derivatives Gr. μορφάζω ‘gesticulate’ (Xen.), μορφασμός ‘gesticulation’ (Athenaeus), etc. (*LSJ*: 1147; *GEW* 2, 257–258).
- ii. Skt. *ākāra-* m. not only means ‘form, figure, shape’, but also ‘external gesture, expression of the face’ according to MW: 127.2 (cf. also Chamot-Rooke 2022: 61).
- iii. The polysemic Celtic item W *ystum* ‘shape, form; posture, gesture; curve, bend’ (cf. *GPC* s.v.) belongs to the same word family as Brit. *stum* ‘aspect, form; manner’, although the exact semantics of the underlying root remains uncertain: ‘to bend’ according to Greene (1958: 44), Schrijver (1995: 419) and *EDPC*: 356–357, but ‘to swell’ according to Stüber (1998: 68–69).

Moreover, the assumed development ‘figure, shape’ \Rightarrow ‘gesture’ might have been catalyzed by the occurrence of A *lek** in the binomial expression A *lek pikār* (see 1.1. above), where A *pikār* could have favored the semantic specialization of A *lek* – originally ‘figure, shape’ – as ‘gesture’.³⁴

Finally, the examples in (7) above provide further support for the proposed idea of an inner-Tocharian borrowing process with direction A \gg B. On the one hand, B *lek** only exhibits the secondary semantics ‘gesture’. On the other hand, A *lek* ‘gesture’ \sim ‘figure, shape’ still preserves traces of the older meaning ‘figure, shape’, although the latter is confined to (more or less lexicalized) secondary case forms and was thus on the way of being replaced by the more recent semantics ‘gesture’. If speakers of Tocharian B borrowed the basic form A *lek* after the completion of the latter process, A *lek* would have exhibited – by that time – exclusively the secondary meaning ‘gesture’, which is indeed the only one attested for B *lek**.

4. CONCLUSION

It emerges from the above discussion that the substantives A *lek* ‘shape; gesture’, B *lek** ‘gesture’ likely represent a further example of an inner-Tocharian borrowing process with direction A \gg B.

4.1. The primary form A *lek* belongs to the PIE root **leig-* ‘(be)(come) equal’ and plausibly continues an abstract formation derived from the thematic adjective **leig-ó-* ‘equal’ ($>$ PGerm. **leik-a-* ‘equal’ $>$ ON *líkr* ‘id.’, etc.). Due to the regular apocope in Tocharian A, it cannot be decided whether this abstract formation ought to be reconstructed as Pre-PToch. **lóig-o-* – derived

³⁴ I am grateful to an anonymous reviewer for having pointed out to me this insightful observation.



from **leig-ó-* through *o*-substantivization – or as Pre-PToch. **lóig-u-* (/ **léig-u-*) – derived from **leig-ó-* through *u*-substantivization. If the latter was the case, **lóig-u-* / **léig-u-* (> A [>> B] *lek*) might in turn represent the derivational base of the PK *u*-stem adjective **léig-u-* / **lig-éu-* ‘equal’, continued in Lith. *lygūs* (accent pattern 3) ‘equal’ with regular application of Winter’s Law.

4.2. From a semantic point of view, the original meaning ‘equality, identity, correspondence’ of Pre-PToch. **lóig-o-* or **lóig-u-* (/ **léig-u-*) underwent a two-step evolution. First, it developed to ‘figure, shape’: such a semantics is still attested in Tocharian A, although it is restricted to the secondary case forms A perlativ *lek-ā* ‘with the figure / shape of’ and A allative *lek-ac* (*‘toward / close to the figure / shape of’ ⇒) ‘similar to’. Second, ‘figure, shape’ further developed to ‘gesture’, which is the meaning attested for the basic forms A *lek* and (borrowed) B *lek**.

A semantic parallel for the first step of the above development is supplied primarily by Germanic, where the etymologically related adjective PGerm. **leik-a-* ‘equal’ was substantivized with the meaning ‘equality, identity, correspondence’ and then evolved to ‘figure, shape’ ⇒ ‘body (shape)’ (cf. Goth. *leik* n.). A semantic parallel for the second step of the above development can be found primarily in Greek: cf. the substantive μορφή sg. ‘shape, form’ ~ pl. ‘gesticulations’ and its verbal derivative μορφάζω ‘gesticulate’.

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ABBREVIATIONS

- ALEW = HOCK, Wolfgang *et al.* 2021. *Altaltaisches etymologisches Wörterbuch*. Version 2.0. <https://alew.hu-berlin.de/> (last access: 29 May 2023).
- BHSD = EDGERTON, Franklin 1953. *Buddhist Hybrid Sanskrit Grammar and Dictionary*. Vol. 2: *Dictionary*. Delhi: Motilal Banarsidass.
- CEToM = *A Comprehensive Edition of Tocharian Manuscripts*. <https://www.univie.ac.at/tocharian/> (last access: 29 May 2023).
- DPEWA = DEMIRAJ, Bardhyl, Olav HACKSTEIN, Fatos DIBRA, Giulio IMBERCIADORI, Sergio NERI and Anila OMARI 2018–. *Digitales philologisch-etymologisches Wörterbuch des Altalbanischen (15. bis 18. Jahrhundert)*. <https://www.dpwa.gwi.uni-muenchen.de/dictionary/?lemmaid=9538>.
- DTA = CARLING, Gerd, in collaboration with Georges-Jean PINAULT and Werner WINTER 2009. *A Dictionary and Thesaurus of Tocharian A*. Vol. 1: *Letters a–j*. Wiesbaden: Harrassowitz.
- DTB² = ADAMS, Douglas Q. 2013. *A Dictionary of Tocharian B. Revised and Greatly Enlarged*. [2nd ed.] Amsterdam and New York: Rodopi.
- EDPC = MATASOVIĆ, Ranko 2009. *Etymological Dictionary of Proto-Celtic*. Leiden and Boston: Brill.
- EDPG = KROONEN, Guus 2013. *Etymological Dictionary of Proto-Germanic*. Leiden and Boston: Brill.
- EDSIL = DERKSEN, Rick 2008. *Etymological Dictionary of the Slavic Inherited Lexicon*. Leiden and Boston: Brill.



- EWAhd = LLOYD, Albert L. *et al.* 1988–2021. *Etymologisches Wörterbuch des Althochdeutschen*. Thus far 7 vols. Göttingen–Zürich: Vandenhoeck & Ruprecht.
- EWaia = MAYRHOFER, Manfred 1992–2001. *Etymologisches Wörterbuch des Altindoarischen*. 3 vols. Heidelberg: Winter.
- GEW = FRISK, Hjalmar 1960–1972. *Griechisches etymologisches Wörterbuch*. 3 vols. Heidelberg: Winter.
- GPC = THOMAS, R. J., Gareth A. BEVAN and Patrick J. DONOVAN. *Geiriadur Prifysgol Cymru. A Dictionary of the Welsh Language*. <http://www.welsh-dictionary.ac.uk/>.
- IEW = POKORNY, Julius 1959. *Indogermanisches etymologisches Wörterbuch*. Vol. 1. Bern–München: Francke.
- JWP = Ji, Xianlin, Werner WINTER and Georges-Jean PINAULT 1998. *Fragments of the Tocharian A Maitreyasamiti-Nāṭaka of the Xingjiang Museum, China*. Berlin: de Gruyter.
- LEW = FRAENKEL, Ernst 1962–1965. *Litauisches etymologisches Wörterbuch*. 2 vols. Heidelberg: Winter.
- LIV² = RIX, Helmut *et al.* 2001. *Lexikon der indogermanischen Verben. Die Wurzeln und ihre Primärstammbildungen*. [2nd ed.] Wiesbaden: Reichert.
- LSJ = *The Online Liddell-Scott-Jones Greek-English Lexicon*. In: Maria PANTELIA (ed.) *Thesaurus Linguae Graecae. A Digital Library of Greek Literature*. <http://stephanus.tlg.uci.edu/ljsj/#eid=1> (last access: 29 May 2023).
- MW = MONIER-WILLIAMS, Monier 1872. *A Sanskrit-English Dictionary: Etymologically and Philologically Arranged with Special References to Cognate Indo-European Languages*. Oxford: Clarendon.
- REW = VASMER, Max 1953–1958. *Russisches etymologisches Wörterbuch*. 3 vols. Heidelberg: Winter.
- TEB = KRAUSE, Wolfgang and Werner THOMAS 1960–1964. *Tocharisches Elementarbuch*. 2 vols. Heidelberg: Winter.
- TG = SIEG, Emil and Wilhelm SIEGLING, in collaboration with Wilhelm SCHULZE 1931. *Tocharische Grammatik*. Göttingen: Vandenhoeck & Ruprecht.
- TLT = POUCHA, Pavel 1955. *Thesaurus Linguae Tocharicae Dialecti A*. Praha: Státní Pedagogické Nakladatelství.

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