

Tocharian AB *tänk*- ‘check, stop, hinder’ and PIE **teng^h* ‘pull’

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Tocharian AB *tänk-* ‘check, stop, hinder’

- well-represented in both languages, cf.
 - Krause & Thomas §§ 35,2; 36,1; 44,3c.; 45,3a.
 - DTB: 306
 - DThTA: 209
 - Malzahn 2010: 648
- described as going back to PIE **teng^h* ‘pull’
 - but this connection, as well as the root itself, shows some semantic and phonological difficulties
 - for parts of this problem, we propose a solution today

Roadmap

- Part I: reconstruction of PIE **teng^h* with comments on
 - root structure
 - semantics
- Part II: Tocharian evidence
 - investigation of attested forms in TA and TB including
 - textual parallels with other languages
- Conclusion

Part I – PIE **teng^h* ‘pull’

- reconstructed as **t^heng^h* with voiceless aspirated **t^h* in LIV²: 657 because of Iranian *θ-* in, e.g., YAv. (-) *θanjaiia-*
- but corrected to **teng^h* with “Hauchumsprung” **tang^h-* > **t^hang-* in Iranian (LIV-Addenda = Kümmel 2025: 87 following Hoffmann)

**t^h-*

**t^heng^h-*¹ ‘ziehen’²

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Aorist	?*t ^h éng ^h -/t ^h ng ^h -	[aksl. (+) -tęže ‘zog’]
Präsens	?*t ^h éng ^h -/t ^h éng ^h -	[toch.B <i>cenkem</i> ‘sie hemmen’ ³
	?*t ^h ng ^h -ié-	aksl. (+) <i>tęžō</i> , (<i>tęžati</i>) ‘fordern, fragen’ ⁴
Kaus.-It.	*t ^h ong ^h -éje-	jav. - <i>θanjaiieiti</i> ‘zieht’ russ. (+) <i>túžit</i> ‘anspannen’ ⁵

Neubildungen:	<i>s</i> -Aorist	toch.A <i>cañkār</i> ‘hemmten’
	Nasalpräs.	aksl. (+) - <i>tęgnō</i> , (<i>tęgnōti</i>) ‘ziehen’ ⁶
	<i>se</i> -Präs.	toch.B <i>tañksām</i> , A <i>tāñkāštār</i> ‘hemmt’
	Perfekt	toch.B Opt. <i>tañci</i> ‘würde hemmen’ ⁷
	Essiv	lit. <i>tingiu</i> , <i>tingėti</i> ‘träge sein’ aksl. (+) <i>pri-tęžō</i> , - <i>tęžati</i> ‘erwerben, arbeiten’

(M. K.)

¹ Durch Verlust von *s* mobile aus **st^heng^h-* < **sd^heng^h-?*; der iran. Anlaut **θ* ist anders nicht zu erklären, gegen **th₂* spricht z.B. **e* in germ. **pinhslō-* f. ‘Deichsel’; **g^h* wegen an. *þungr* = lit. *tingùs* ‘schwer’ < **t^hng^hu-*.

² Aus ‘nach unten ziehen’ auch ‘schwer sein’.

³ Offenbar thematisiert mit R(ē), ‘hemmen’ vielleicht aus ‘schwer sein, an etw. ziehen (und so am Fortkommen hindern)’.

⁴ Mit *pro-* ‘ausstrecken, spannen’, *o-* ‘umfassen’, Bedeutung des Simplex wohl aus ‘herausziehen’. Vielleicht Imperfektivneubildung zu -*tęgnōti*.

⁵ Aksl. *tęžiti* ‘bedrückt sein’ (russ. *tužit*) ist wohl eher Denom. von *tęga* f. ‘Bedrückung’.

⁶ Neubildung zum thematischen Aorist, gegenüber russ. *tjanút* mit analogisch restituiertem *g*.

⁷ Setzt athem. Konj. I voraus, der normalerweise Perfekt fortsetzt; beim Optativ wäre aber auch Fortsetzung des Wurzelaoists möglich.

Part I – Reconstruction of PIE **teng^h* ‘pull’: two issues

1. root structure – constraint against **TV(R)D^h* ?
 2. semantics – ‘pull’ $\leftarrow \rightarrow$ ‘(be) heavy’ ?
- ad 1.
 - “Wurzelerweiterung” from **ten* ‘tighten, tense, stretch’ (LIV²: 626–7)
 - comparative evidence of the attested forms points to reconstruction **teng^h* (e.g. no acute long vowel in BSl.)
 - “rare” does not mean “excluded”!
 - Cooper 2009: IE root structure constraints often similarity avoidance – does not hold for **TVD^h*

Part I – Reconstruction of PIE **teng^h* ‘pull’: two issues

- ad 2. ‘pull’ $\longleftrightarrow$ ‘(be) heavy’ ?
 - LIV² FN 2: “Aus ‘nach unten ziehen’ auch ‘schwer sein’ ” ~ “from ‘pull down’ also ‘(be) heavy’”
 - Heidermanns (1993: 629) on Germ. *Deichsel*: “[ü]ber eine Bedeutung ‘schwer ziehen’ ” ~ “via ‘pull [smth.] heavy’, ‘pull hard’ ”
 - ‘(be) heavy’ $\rightarrow$ ‘pull’ has also been proposed (e.g., Majer 2017: 263; 276)
- semantic shift seems not counterintuitive, but is not easy to pin down with objective criteria
 - not many typological parallels in other varieties / language families
- we’ll get to Tocharian in a minute!

Part I – A possible *Scharnierform* **teng^h-os-* n.

- based on comparative evidence from Balto-Slavic and Germanic, we propose that
 - the semantic shift from ‘pull’ to ‘(be) heavy’ may have occurred via abstract noun formations
 - that originally meant ‘pulling’ or ‘what is pulled’
 - from which ‘weight, heaviness, burden’ was derived
 - at least in Slavic, this may have happened via a neuter *s*-stem **teng^h-os-* > OCS *tęgo* n., Gen. *tęžese*
 - if this *s*-stem is also the base of German *Deichsel* (e.g., EWDS: 185), this could be a “Northern Indo-European” isogloss
 - which would also explain the *u*-adjective that is attested in those branches: Old Norse *þungr* ‘heavy’, PSl. **tęgъkъ* ‘id.’, Lith. *tingùs* ‘lazy’ < ‘weighted, burdened’

Part I – A possible *Scharnierform* **teng^h-os- n.*

- fits well into what we know about the derivational morphology and semantics of other PIE *s*-stems
 - cf. Stüber (2002) and Höfler (2023)
- supported by similar behaviour of other Slavic abstract formations that can mean ‘traction’ or ‘weight’ or *both* in the individual languages (cf. EDSIL: 493)
- comparable development in Iranian: Middle Iranian forms point to abstract **ǰanga-* ‘weight, burden’ (cf. Kümmel 2016)

Part I – Interim summary

- based on comparative evidence, the root should be reconstructed as **teng^h*
- with basic PIE semantics ‘pull’
- from which ‘(be) heavy’ is derived via abstract formations
- cf. Reiter under review

But what about Tocharian?

- how do we get from ‘pull’ to the synchronic meaning of *tänk-* ‘check, stop, hinder’?
- proposals:
 - ‘being heavy, pulling (and thus obstructing progress)’ (LIV²)
 - ‘making something difficult for someone’ (Heidermanns 1993: 630)
- but again: semantic reasoning without morphological or cross-linguistic support
 - N.B.: Middle Iranian has reflexes of this root that mean ‘hold back’, ‘retain’, ‘to restrain’, but use preverbs (e.g., **ni-* in MP *nhh-* /*nihax-*/ ‘to hold back’; Parth. *nhynj* ‘to retain, hold back’) – Tocharian does not do that!

=> etymology has been met with scepticism (cf. de Vaan 1999: 16; Majer 2017: 263)

But what about Tocharian?

- Can we use the same explanation as in the other languages for the semantic shift from ‘pull’ to ‘hinder’?
 - e.g., abstract formations as *Scharnierformen*
 - or specific constructions
- in order to answer this question, we conducted a comprehensive investigation of attested verbal and nominal formations of AB *tänk-*
 - drawing on the CEToM database <https://cetom.univie.ac.at/>
 - including newly discovered texts



Part II – Tocharian evidence

- three selected parts of the data:
 1. what gets hindered/checked/stopped – attested forms and their direct objects
 2. parallel texts from other languages
 3. a nominal formation - *tenke*
- for full data please check out the handout after the talk

Part II – Tocharian evidence: What gets hindered/checked/stopped

Form		Meaning	Example	Source
TB <i>tañktsi</i>	Infinitive	“to hold back”	<i>tañktsi yolaiñe</i> “to hold back evil”	THT 238 b2 <i>īme tsāksate ñi aškār tañktsi yolaiñe</i> “... illuminated my mind to hold back evil ”
TB <i>tāñktsi</i>	Postposition	“up to”	<i>kau(ṃ) ya(pts)i (tāñktsi)</i> “up to the sunset”	THT 1459 a5 : /// (<i>aśiya</i>)nats (<i>p</i>)elaikne ākṣtsi tākaṃ <i>kau(ṃ) ya(pts)i (tāñktsi)</i> /// “... if the preaching of the law to the nuns continues (till) the sunset ... ”.
TA <i>cañkär</i>	Preterite III, 3.pl.act.	“to stop”	<i>cañkär swāñcem</i> “(They) stopped the rays [of the sun]”	A 63 a4: -(s) 3σ – – – (<i>nām</i>)tsuṣ puk wrasañ : panwar walānās ṣontsaṃ orpañksaṃ wotār ārkyant wätsyās śāwaṃ <i>cañkär swāñcem</i> ko- “... all the beings have been (busy (?)). They stretched garlanded arches over the streets [and] the marketplaces, [and] put [up] large white sunshades a4+ [and thus] stopped the ray[s] of the sun”.
TA <i>tāñklune</i>	Abstract noun, obl.sg.alt.	“obstacle, hesitation”	<i>sne tāñklun(e)</i> “without hesitation”	A 68 a5: <i>kātsaṣiṃ warmaṃ prutko ṣeṣ kārūṃ kritānyo nu pontsām saṃsārṣinām riyam sne tāñklun(e) me(täs) /// 7σ (bo)-</i> “[the embryo] was [for ten months] concealed in the cavity of the belly; but through compassion [and] gratitude he mo(ved) to the city of the Saṃsāra without obstacle ... ”.

Part II – Tocharian evidence: Parallel texts

Fragment / Form	Language	Source	Parallel : Tocharian
U 101 a3 TB <i>etaṅkätte</i> priv., 'unhindered'	Old Uyghur	<i>tidiḡsızın</i> (adv.) "unimpeded", cf. Wilkens 2021, s.v.	TB <i>etaṅkätte</i> /// <i>śemt wikäṣṣeṃca</i> : OU <i>tidiḡsızın birtäm kälir</i> "... (completely) unimpeded ... you came (here as a destroyer) ..."
THT 198 b3 TB <i>taṅksi</i> inf., 'to obstruct'	Sanskrit	<i>na hi tasyaikaḥ prakāraḥ ṣaṣṭhaḥ phalaṃ sakṛdāgāmi</i> <i>phalaṃ vighnayituṃ samartha</i> <i>iti</i> (cf. Yasomitra, Abhidh-k-vy 556) "... is not capable of obstructing the fruit ..."	Skt. <i>na</i> [...] <i>vighnayituṃ samartha</i> : TB <i>taṅksi mā ṣ ṣampām</i> "... (it) cannot hinder [the fruit] ..."
A 387 b4 A <i>tāṅṣantāñ</i> pres. part., 'stopping'	Sanskrit	<i>vāyugati</i> <i>pratibaddhaśailavacca</i> "... stopping the course of the wind ..."	Skt. <i>vāyugati</i> <i>pratibaddhaśailavacca</i> : TA wantis yme <i>tāṅṣantāñ</i> ṣulaññ oki "Like the mountains stopping the course of the wind"

Part II – Tocharian evidence: a nominal formation

- abstract noun *teñke* (n.) ‘(sheep)fold, pen’ (DTB: 322; Malzahn 2013: 168)
 - interpreted as ethnic or tribal name
 - cf. Chin. *dèng* 鄧, see Ching and Ogiwara 2010: 83-85
 - but more plausibly an abstract noun *R(o)-o- meaning ‘checkpoint’ = Old Uyghur *kargul(a)rig* “Beobachtungstürme (Akk.)” (cf. Peyrot 2015: 224)
 - original *tómos*-formation ‘hinderance, hindering’ → ‘place of hinderance’ → ‘checkpoint’ (which could also be used as a placename)
 - cf., e.g., TB *leke* ‘bed, resting place’ (= *nomen loci* ‘place where one lies’ ← ‘the lying (down)’ [vel sim.]])



Kizil Gaha watch tower

Photo: Georges-Jean Pinault 1994 (kindly provided by Melanie Malzahn)

Part II – Conclusions from the Tocharian evidence

- Tocharian evidence shows
 - that the root *tānk-* is deeply embedded in the morphological system of both TA and TB
 - high number of different verbal formations
 - as well as nouns
 - that the semantics in TA and TB align
 - i.e., whatever shift happened, it must have been between PIE and Tocharian,
 - can't be a loanword from TB to TA,
 - and no loanword from (Old/Middle) Iranian – must be inherited!
 - that there is no Buddhist corpus bias

Conclusion: Tocharian AB *tänk*-...

- ...shows no evidence of a development similar to the other reflexes of the PIE root
 - which should be reconstructed as **teng^h* with the basic meaning ‘pull’ and a semantic shift to ‘heavy’ via abstract formations (e.g., s-stem)
- but both verbal and nominal reflexes of the root in TA and TB point to ‘check, stop, hinder’
 - which means the *root semantics* must have shifted between PIE and Proto-Tocharian
 - N.B.: operating with a semantic archaism in Tocharian does not solve any of our problems
- further research is necessary to formulate a hypothesis beyond semantic speculation:
 - comparable developments in neighbouring languages (e.g., Middle Iranian, Chinese, Uyghur, Mongolian)?
 - comparative investigation of other ‘pull’-roots and -reflexes (**ten* and extensions **ten-C*)

Tänk you for your attention!

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