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The thematic optative in Tocharian

Louise S. Friis

1. The Tocharian Second hypothesis

The position of Tocharian in the Indo-European family tree is a long debated issue. Throughout the previous century, scholars have linked the branch with almost every other Indo-European branch (Malzahn 2016: 281–2 with references). Since the 1990s, however, the *communis opinio* has shifted in favour of the hypothesis that Tocharian was the second highest branch to separate from the Indo-European trunk. In 1998, Melchert concluded “that there is a growing consensus among many in favor of model I.D.”, I.D. being the tree model which places Anatolian and Tocharian as first and second nodes, respectively (Melchert 1998: 25, 27). References to this consensus has only grown more numerous since then (see a.o. Carling 2005: 48; Adams 2017: 455; Kim 2018: 113; Weiss 2018: 373; Olander 2019: 9). From an interdisciplinary point of view, the use of phylogenetic analysis has long been acknowledged as an important element in establishing a viable model of the Indo-European homeland (Mallory 2013: 146); in the case of Tocharian, a high position in the family tree is consistent with the possible identification of pre-Tocharian speakers with the Afanasevo archaeological culture (Mallory 2015: 37–42; Kroonen, Barjamovic & Peyrot 2018: 8).

While the consensus about the position of Tocharian is well-established, it is surprising that there is much less agreement about the evidence used to support the hypothesis. Three main types of evidence can be identified: lexical isoglosses (Schmidt 1992; Winter 1998; Carling 2005), results from computational phylogenetics (Ringe, Warnow & Taylor 2002; Nakleh, Ringe & Warnow 2005), and morphological isoglosses in the verbal realm (a.o. Jasanoff 1998; 2003; 2019; Ringe 1998; 2000); see Friis (2024: 20–37) for further discussion. The current paper concerns one isogloss in the latter category, namely the potentially archaic profile of the Tocharian optative suffix to thematic stems (Ringe 1998: 35–6; Jasanoff 2009).¹

2. The optative to thematic stems in Tocharian

The optative is formed to the subjunctive stem in both Tocharian A and B, each using two different suffixes dependent on the stem type. In *a*-final stems, Tocharian A uses the non-palatalising suffix *-i-*, while Tocharian B uses the suffix *-oy-*, for instance in the *a*-subjunctive (class 5): TA opt.act.3pl. *štm-i-ñc* to subj. *štäm-ā-* ‘stand’, TB opt.act.3sg. *stam-oy-Ø* to subj. *stám-a-/stám-a-* ‘stand’ (Pinault 2008: 607; Malzahn 2010: 346–52). In stems without final TB *-a-*, TA *-ā-*, which include both thematic and athematic stems, both languages use the palatalising suffix *-i-*. In Tocharian B, the imperfect is formed by adding these exact suffixes to the present stem, meaning that the Tocharian B optative and imperfect are formally identical in present-subjunctive stems (Pinault 2008: 607–8).

In the root subjunctive (class 1) and the simple thematic subjunctive (class 2), the formation of the optative is identical:

¹ This paper is based on work from my recently defended PhD dissertation, primarily Chapter 6 about the thematic optative in Tocharian (Friis 2024: 335–77).

root subjunctive (class 1) ²		
Tocharian B	sbj. <i>tek-/tək-</i> ‘touch’	opt.act.3sg. <i>taś-i-Ø</i>
Tocharian A	sbj. <i>tsāk-</i> ‘glow’	opt.mid.3pl. <i>tsās-i-ntār</i>
simple thematic subjunctive (class 2)		
Tocharian B	sbj. <i>triś-ə-/trik-e-</i> ‘hear’	opt.act.3sg. <i>trīś-i-Ø</i>
Tocharian A	sbj. <i>länc-ä-/länt-a-</i> ‘go out’	opt.act.1sg. <i>läñc-i-m</i>

Formally and functionally, the Tocharian optative must be a descendant of the Proto-Indo-European optative. However, the Tocharian optative allomorph in *-i-* in the thematic stems seems to go back to athematic **-ih₁-*; cf. TA *wir* ‘young’ < **uih₁ró-* ‘strong, vital’ (Ringe 1996: 25; Hackstein 2017: 1314). From a diachronic perspective, this is of course surprising, since several other Indo-European languages form optatives to thematic stems using what looks like the *o*-timbre of the thematic vowel plus the zero-grade of the optative suffix: **-o-ih₁-*; cf. prs.opt.mid.3sg. **b^her-o-ih₁-t* > Ved. *bhāret*, YAv. *baroīt*, Gk. *φέποι*, Goth. *baírai*. In the words of Ringe (1998: 36), the “core languages form the thematic optative in the obvious way”, for instance, parallel to the thematic active participle **-o-nt-*. Due to this transparency, he and others argue that the Tocharian optative to thematic stems constitutes an archaic state before the thematisation of the optative suffix (Ringe 1998: 36; Ringe, Warnow & Taylor 2002: 69; Jasanoff 2009).³ In addition to this, Jasanoff (2009: 52–4, 62–3) argues that the reflexes of the thematic optative in Indo-Iranian and Greek, where the glide of the suffix seems to show a double reflex (e.g., Ved. act.1sg. *-eyam*, 3pl. *-eyur*, Gk. act.3pl. *-οιεν*) indicates that the optative suffix was disyllabic at a late stage of the proto-language, and thus of recent origin; see also Pinault (2015: 181–3) who discusses the phonological problems of the conglomerate suffix in detail.

This hypothesis ties in with another potential archaism of Tocharian, namely the evident sparsity of inherited simple thematic presents in Tocharian (Adams 1978: 280; Jasanoff 1998; Ringe 1998: 35; 2000).⁴ Ringe (1998: 36) suggests that the development of the thematic optative “lagged somewhat behind the development of a class of simple thematic presents”. If we only take the simple thematic presents into account, this scenario is plausible, as some simple thematic presents could have come about as thematized root presents, possibly former subjunctive forms. Their optative formation could have remained athematic for longer than the new indicative forms.

There are only two verbs which show certain inherited simple thematic presents in Tocharian and form an optative to that stem (since the present and subjunctive stems are identical). In both, the optative suffix is consistent with the reconstruction **-ih₁-*:

TB 1sg. *śayim*, 3sg. *śāyi* < PT *śay-’i-* to prs.-sbj.[2] PT *śay-’ə/e-* ‘live’ < PIE **g^w₁(e)h₃u-e/o-*
 TA 3sg. *śāwiṣ*

TB 3sg. *lyaši* < PT *lak-’i-* to prs.-sbj.[2] PT *lak-’ə/e-* ‘lie’ < PIE **leg^h-e/o-*

² Classes according to the classification system of Krause & Thomas (1960).

³ Later, Ringe seems to have changed his mind about this isogloss: “The situation in Tocharian is less clear, but it looks as if the thematic vowel of stems may actually have been deleted before the subjunctive and optative suffixes were added” (Ringe 2006: 31).

⁴ It is important to note that while there are indeed only a few direct cognates between simple thematic presents in Tocharian and in the Core Indo-European languages, Tocharian does not show archaic presents in roots that have reconstructible simple thematic presents. An actual archaic state is therefore difficult to establish (Friis 2024: 107–55).

On the face of it, this isogloss (*-o-ih₁- vs. *-ih₁-) thus shows all the features of a significant cladistic argument in terms of identifiability, directionality, and salience (cf. Peyrot 2022: 90). However, as we delve into the details of the optative, especially on the Tocharian side, it becomes clear that the situation is much more complicated than that.

In the following sections, seven problems are identified. Firstly, the apparent absence of the sequence *-o-ih₁- in Italic and Celtic is discussed in §3. In §4 and §5, the high degree of regularity in the Tocharian optative and the necessary structural changes that must have happened between PIE and the Tocharian languages are treated. Two specific structural issues are discussed in detail: the Tocharian B imperfect which uses the same morphological marking as the optative (§5.1.) and the problem of the thematic optative to complex thematic stems like *ske/sko-presents (§5.2.). Finally, the expected phonological and morphological outcomes of *-o-ih₁- are investigated in §6 and §7 to see what would have happened to it if it was inherited into pre-Proto-Tocharian.

3. The Italic and Celtic evidence

The first issue with the thematic optative as evidence for the Tocharian Second hypothesis is that the suffix *-o-ih₁- seems to be lacking from the Italic and Celtic branches as well. These two branches are often hypothesised to make up the third node on the Indo-European tree together in the supernode Italo-Celtic, in which case the proposed development of the thematic optative in *-o-ih₁- must be subsequent to that (Ringe 1998: 36–7; Jasanoff 2009: 62–3). In Italic, thematic stems form the subjunctive using a suffix *-ā-, e.g., 3sg. *ferat* ‘would bear’, *pāscat* ‘would pasture’, which has been equated with the Old Irish *ā*-subjunctive, e.g., abs.3sg. *beraid* ‘would carry’, and used as an example of a significant morphological innovation in favour of the Italo-Celtic hypothesis. This equation, however, remains controversial; see a.o. McCone (1991: 85–113), Jasanoff (1994), Darling (2019: 49–59). In a recent article, Bonmann (2024) proposes that the Italic *ā*-subjunctive does descend from the Proto-Indo-European thematic optative *-o-ih₁-. The hypothesis hinges on a chain of proposed phonological developments, in themselves possible, but the evidence besides the optative in favour of the sound changes mostly seems to be explainable through other means. In any event, it is not clear, phylogenetically speaking, what impact it would have for the position of Tocharian if Italic did have the thematic optative in *-o-ih₁-, since Bonmann (2024: 257–8) concludes that the same explanation cannot account for the Celtic *ā*-subjunctive. Additionally, even if the thematic optative marker is absent from both Italic and Celtic and therefore cannot be used to argue for Tocharian Second in the strict sense, this does not preclude the possibility that the optative formant of thematic stems in Tocharian is archaic compared to the rest.

4. Regularisation

Thorough regularisation of the Tocharian optative poses certain problems for the diachronic analysis of the formation. There are almost no irregular forms attested in either language. The few that are attested e.g. TA opt.mid.3sg. *pāknāšitār* to *pāk-* ‘intend’ and TB opt.mid.3sg. *kāñiyoytār*, *kñyoytār* to *kən-* ‘occur’, can be explained through late inner-Tocharian innovation (Malzahn 2010: 353; Hackstein 1995: 237 fn. 93). This makes internal reconstruction of the formation difficult.

Additionally, there is no evidence of ablaut in the athematic stems; we only find the zero-grade reflex PT **-’i-* < PIE **-ih₁-*, never the full-grade **-ieh₁-* (in stems without final **-a-*). One exception is probably found in the irregular imperfects TA *še-*, TB *šay-/šey-* ‘was, were’ and TA *ye-*, TB *yey-* ‘went’ discussed in §5.1, if they go back to **h₁s-ieh₁-* and **h₁i-ieh₁-* (Pedersen 1941: 204–8; Pinault 2008: 609–10, Malzahn 2010: 256), but in the productive optative, the ablaut must have been fully abandoned already by Proto-Tocharian.

Neither of these two observations directly contradicts the hypothesis that the Tocharian thematic optative is archaic, but the regularity of the formation indicates a high level of secondary restructuring and obscures earlier layers of development, while the abolition of ablaut in the athematic stems could have been a motivating factor for PT **-’i-* < **-ih₁-* to spread secondarily within the system.

5. Structural change in Tocharian

Although the identification of the Tocharian optative with the Proto-Indo-European optative is beyond doubt due to their formal and functional similarities, there have been some structural shifts in the Tocharian verb that have obscured the development of the formation.

The primary realm of the thematic optative in Proto-Indo-European was the present aspect, since that is where we find the majority of thematic verbal stems. While it is well established that the Tocharian present is the primary descendant of the PIE present (Pinault 2008: 576–88), the Tocharian optative is not formed to the present stem, as mentioned above. Rather, it is formed to the subjunctive, an inner-Tocharian category with several sources, including PIE aorist and present stems.⁵ Similarly, the thematic aorist, which forms an optative in **-o-ih₁-* in Greek (e.g., aor.opt.act.3sg. λίποι ‘may leave’) and Sanskrit (e.g., aor.opt.act.3sg. *videt* ‘may see’), is continued as a relic preterite formation in Tocharian (e.g., TA prt.act.3sg. *lāc*, 3pl. *lācār*, TB 3sg. *lac*, 3pl. *latem* < **h₁lud^h-e/o-*) and forms neither an optative nor an imperfect.

Thus, there are only two options when it comes to finding potential direct descendants of the PIE optative in the Tocharian system: in the Tocharian B imperfect built to the present stem and in subjunctive stems that go back to old PIE presents.

5.1 The Tocharian B imperfect

In Tocharian B, as mentioned above, the imperfect tense is morphologically identical to the optative, including the endings (Peyrot 2013: 17), except that it is formed to the present stem rather than the subjunctive. There can be no doubt that the optative was the original locus of the optative-imperfect morphology in Tocharian B. This has led scholars to suggest that the Tocharian B imperfect to the verb *pār-* ‘carry’, attested in the 3pl. *priyem*, is a direct continuation of the archaic non-thematic optative **b^her-ih₁-*, contrasting with the multipart word equation Ved. *bhāret*, YAv. *baroīt*, Gk. *φέροι*, Goth. *baírai* (Adams 1978: 285; Jasanoff 2009: 64).

From a Proto-Tocharian perspective, however, the imperfect is interesting, because its formation in Tocharian A is completely different. Here, it is also formed to the present stem, but using morphology associated with the preterite. What is more, it shows several different

⁵ The origin of the Tocharian subjunctive has been extensively debated throughout the past century; see among many others Lane (1959), Cowgill (1967), Malzahn (2010: 265–342) and Peyrot (2013: 395–613). For the most part, I follow Peyrot in attributing the majority of subjunctive stems to the PIE aorist and a minority to the PIE present.

types of stems, some of which look decidedly archaic within Tocharian morphology, e.g., TA ipf.mid.3sg. *pārat* ‘carried’, ipf.act.3sg. *lyāk* ‘saw’ (Peyrot 2012: 97–100).

Only two imperfect stems can be reconstructed for Proto-Tocharian, TA *še-*, TB *šay-/šey-* ‘was, were’ (suppletive to prs. TA *nas-*, TB *nes-* ‘be’) and TA *ye-*, TB *yey-* ‘went’ (to prs. TA *y-*, TB *y-* ‘go’). The origin of these two stems is debated. I follow the traditional account by Pedersen (1941: 204–8) who takes both stems as original athematic optatives, **h₁s-ieh₁-*/**h₁s-ih₁-* and **h₁i-ieh₁-*/**h₁i-ih₁-*, reinterpreted as imperfects in pre-Proto-Tocharian; see a.o. Adams (1988: 98), Pinault (2008: 609–10), Malzahn (2010: 253–6), and Friis (2024: 350–3) for further discussion.

Besides these two archaic optatives, there is no overlap in imperfect stems between Tocharian A and B, and it is difficult to determine which of the two systems is more archaic. On the one hand, it is unattractive to assume that the clear morphological distinction between optative and imperfect found in Tocharian A would be given up in pre-Tocharian B, where the present and subjunctive stems are identical in many verbs (Peyrot 2013: 154–7). On the other hand, the idea that the neat system of optative-imperfect found in Tocharian B was replaced by several preterital formations in pre-Tocharian A is not compelling either (Norbruis 2021: 229 fn. 23). A simpler solution would be to assume that the imperfect category was only nascent in Proto-Tocharian, possibly comprising just the archaic stems **šey-* and **yey-*, and that the two languages innovated independently to a large extent (Friis 2024: 355–6). Since present-subjunctive stems are fairly frequent in Tocharian B, they are a likely locus for the reanalysis from optative to imperfect function: pre-TB opt.act.3sg. **klyausi* ‘may hear’ ⇒ ‘would hear, heard’ (prs.-sbj. *klyaus-* ‘ə/e-’ ‘hear’).⁶ From there, new imperfect forms could be created to other exclusively present stems.

This conclusion casts serious doubt about the antiquity of forms like TB *priyem*. It is highly unlikely that this stem functioned as an imperfect in Proto-Tocharian in light of the Tocharian A imperfect 3sg. *pārat* (A340 a4), 3pl. *pārant* (A310 a3), which looks far more archaic within the system. It is difficult to see what function **pār-i-* could have served in Proto-Tocharian, since **pār-* ‘carry’ is suppletive outside the present and there would have been no subjunctive stem to “host” the stem before it was reinterpreted as an imperfect. I therefore find it unlikely that an inherited optative form could have survived in the system long enough to be reinterpreted. Since the stem is completely regular within the Tocharian B system, it is more likely that it was created within pre-Tocharian B as per Pinault (2015: 184–5).⁷ The comparison between TB *priyem* and Skt. *bhāret*, Gk. *φέροι*, etc., should therefore be given up.

5.2 Optatives to **ske/o-*presents

While the optatives to the simple thematic subjunctive in Tocharian are consistent with the hypothesis that the thematic optative is a post-Tocharian innovation (see §2), the optatives to subjunctives going back to complex thematic presents in **-ske/sko-* pose a significant problem. This present suffix is demonstrably old, as shown by its presence in both Anatolian and Tocharian as well as many other ancient Indo-European languages. In Tocharian, the optative

⁶ The functional shift from optative to habitual past tense is observed in many Indo-European languages including in English ‘would’ (Lane 1953: 280). According to Pinault (2002: 244), the shift in Tocharian could have been motivated by contact with Middle Iranian languages.

⁷ The same reasoning can be applied to the other imperfect form attested to an inherited simple thematic present: TB ipf.mid.3sg. *kälyitār* to *kāl-* ‘stand’ (Friis 2024: 357–8).

to the subjunctive in PT **-ššə/ske-* (TA class 8, TB class 9) is formed exactly like the other thematic stems with the suffix *-’i-*:

Tocharian B	sbj. <i>wikə-ššə/ske-</i> ‘remove’	opt.act.3sg. <i>wikä-šš-i-Ø</i>
Tocharian A	sbj. <i>lmā-šä/sa-</i> ‘set’	opt.act.3sg. <i>lmā-š-i-š</i>

There are three possible explanations for this: 1) the **ske/sko*-present did not form an optative in the proto-language, 2) the optative was formed with an athematic suffix **-sk-ih₁-*, or 3) the optative was formed with a thematic suffix **-sk-o-ih₁-*. As for option 1), it is difficult to see any morphological or semantic reason for a prohibition against an optative to this present stem. Option 2) fits the Tocharian facts very well, but it raises difficult questions about the origin of the **ske/sko*-present and the thematic conjugation in general. Do we have to assume that the suffix was gradually thematized as in the simple thematic present?⁸ These questions take us outside the scope of the present paper, but they will be important for any proponent of an archaic “thematic” optative suffix **-ih₁-* to address. Option 3) alleviates these concerns of deep PIE reconstruction, but it carries the necessary assumption that the Proto-Tocharian optative **-šš-i-* is a later analogical replacement.

6. The outcome of **-o-ih₁-*

An additional consideration in the debate is the phonological outcome of **-o-ih₁-* in Tocharian. If that suffix existed in pre-Proto-Tocharian, what would it have looked like?

In initial syllables, the diphthong **-oi-* is preserved as a diphthong *-ai-* in Tocharian B and monophthongises to Tocharian A *-e-*, probably going through an intermediate stage **-ey-* in Proto-Tocharian, cf. PIE **moiuo-* ‘little’ > TB *maiwe* ‘young’, PT **aykāre* > TA *ekār*, TB *aikare* ‘empty’ (Ringe 1996: 84; Hackstein 2017: 1315). There are no exact parallels to **-oih₁C* in final syllable. Final **-oi#* seems to yield a monophthong in both languages: PIE **-oi#* > PT **-ey* > TB *-i*, TA *-e*, cf. PIE nom.pl. **h₁ék^wōs* → **h₁ek^woi* > PT **yākwēy* > TB *yakwi* ‘horses’ (Del Tomba 2020). The same development is probable for the sequence **-oih₁#*, if the Tocharian B numeral *wi* ‘two’ goes back to **d(u)uoih₁* (Pinault 2008: 553; Kim 2018: 71).

Since most final obstruents must have been lost before Proto-Tocharian (Ringe 1996: 74–5), it is highly likely that the outcome of the singular forms of the thematic optative (if they did exist) would have been the same as that of **-oi(h₁)*: **-oih₁-m*, **-oih₁-s*, **-oih₁-t* > TB *-i*, TA *-e* (Hackstein 2017: 1326). In light of the lack of ablaut in the athematic optative, it would be a trivial matter for this suffix variant to spread to the plural. We would, however, have to accept that the palatalisation caused by the suffix was introduced analogically from the athematic allomorph. In addition, the expected Tocharian A reflex **-e-* would have to be entirely replaced by *-’i-* from the athematic stems, which could perhaps be motivated by a desire to reduce allomorphy.

While the path to the suffix TB *-’i-*, TA *-’i-* is admittedly more straightforward if we start from **-ih₁-* than from **-oih₁-*, none of the assumptions needed to posit the latter are unreasonable.

⁸ Jasanoff (2009: 63–4) argues that **ske/sko*-presents derived from former *s*-presents may have preserved their older optative form in **-s-ih₁-* until late PIE. This scenario seems quite unlikely; if there had been a form in **-sih₁-*, which in Jasanoff’s model would have had a full-grade in the root due to the Narten ablaut of the *s*-present, e.g., **prék-s-ih₁-* ‘may ask’, it probably would have been reinterpreted as an *s*-aorist optative, especially if the present stem to which it structurally belonged, had already been renewed to **prk-ske/sko-*.

7. Stem vowel deletion

The final – and perhaps the most important – consideration casting doubt on the archaicity of the optative to thematic stems in Tocharian is the fact that in optatives to subjunctives characterised by the suffix TA *-a-*, TB *-e-* (class 3), the optative suffix is added directly to the root:

	subjunctive (class 3)	optative
Tocharian B	3sg. <i>nk-e-tār</i>	3sg. <i>ns̄-ī-tār</i>
Tocharian A	3sg. <i>nk-a-tār</i> 'will perish'	3sg. <i>ns̄-i-tār</i> 'may (s)he perish'
Tocharian B	1sg. <i>cm-e-mar</i>	1sg. <i>cm-ī-mar</i>
Tocharian A	3sg. <i>cm-a-tār</i> 'will be born'	1sg. <i>cm-ī-mār</i> 'may (s)he be born'

Synchronically, it looks like the optative suffix causes deletion of the vocalic element of the stem, just like in the optatives to thematic subjunctives. In the class 3 subjunctive, however, this pattern can easily be understood diachronically. I follow the hypothesis that the subjunctive in TB *-e-*, TA *-a-* < PT **-e-* goes back to a root stem with the non-dental middle 3sg. ending **-o*, **CeC-o*, to which productive Tocharian middle endings have been added (Kortlandt 1994: 63; Jasanoff 2003: 201–3; Friis 2024: 172–9);⁹ for different views and more discussion, see a.o. Rasmussen (2002: 381–2), Malzahn (2010: 327–31) and Pinault (2012). Both the subjunctive and the optative of these verbs can therefore be understood as different modal forms to the same original root stem. When, later in Tocharian, the optative became morphologically dependent on the subjunctive stem, it would look as if the optative suffix had deleted the subjunctive suffix. It is possible that this served as an analogical model to the thematic stems.

indicative	<i>*nék-o</i>	→ <i>*n'ək-e-tār</i> ¹⁰	→ TB sbj.mid.3sg. <i>nk-e-tār</i> TA sbj.mid.3sg. <i>nk-a-tār</i>
optative	<i>*nk-ih-</i>	> <i>*nək-'i-tār</i>	> TB opt.mid.3sg. <i>ns̄-ī-tār</i> , TA opt.mid.3sg. <i>ns̄-i-tār</i>

There is one specific verb where the deletion of the stem vowel is even more salient, namely PT **k^wəm-* 'come' from PIE **g^wem-* 'come'. The simple thematic subjunctive stem to this verb almost certainly continues an original Proto-Indo-European root aorist subjunctive (Hackstein 1995: 151; Ringe 2000: 131; Pinault 2008: 592; Peyrot 2013: 423–4). In this verb, the exact relationship between the Tocharian thematic subjunctive and its associated optative is predicted by the original PIE morphology.

⁹ Of course, the models in which Kortlandt and Jasanoff embed the form **CeC-o* are very different, but the form and its required developments into Tocharian are very similar.

¹⁰ There is conflicting evidence for root-initial palatalisation in this subjunctive class; it is found consistently in the subjunctive stem TB *cme-*, TA *cma-* to *tām-* 'be born' as well as a few other forms in Tocharian B (Malzahn 2010: 324). It is possible that the non-palatalised stems continue the oxytone type **CC-ó*, cf. Ved. mid.3sg. *duhé*, while the palatalised forms continue the barytone variant **CéC-o* (Watkins 1969: 94), but it is more economical to assume secondary depalatalisation in the non-palatalised forms (Jasanoff 2003: 201).

subjunctive	<i>*g^wém-e/o-</i>	> <i>*k^w’ám-’ə/e-</i>	→ TB sbj.act.3sg. <i>śānm-ä-m</i> , 3pl. <i>śānm-e-ṃ</i> ¹¹
			> TA act.3sg. <i>śm-ä-š</i> , 3pl. <i>śm-e-ñc</i>
optative	<i>*g^wm-ih₁-</i>	> <i>*k^wm-’i-</i>	→ TB opt.mid.1sg. <i>śm-ī-mar</i>
			TA opt.act.3sg. <i>śm-i-š</i>

Other possible inherited subjunctive stems include the Tocharian B subjunctives *palk-’ə/e-* ‘will burn (tr.)’ and *špark-’ə/e-* ‘will go astray’ (Hackstein 1995: 112–3; Ringe 2000: 133). The old subjunctive stems next to their inherited root optatives could have served as analogical models to thematic stems that originally belonged in the present but were relegated into the subjunctive within the prehistory of Tocharian, e.g., PT sbj. **wik-’ə/e-* ‘will avoid’ < PIE prs. **ueig-e/o-* ‘move away (from)’, PT sbj. **pask-’ə/e-* ‘protect’ < PIE prs. **ph₂-ske/sko-* ‘protect’ (Hackstein 1995: 134–5, 177–8), replacing the inherited thematic optatives in **-o-ih₁-*:

	subjunctive	optative	optative
class 3	<i>*nək-e-</i>	<i>*nək-’i-</i>	
class 2 (old sbj.)	<i>*k^w’ám-’ə/e-</i>	<i>*k^wm-’i-</i>	
class 2 (old sbj.)	<i>*palk-’ə/e-</i>	<i>*palk-’i-</i>	
		↓	
class 2 (old prs.)	<i>*wik-’ə/e-</i>	<i>*wik-ey-</i>	→ <i>*wik-’i-</i>
class 2 (old prs.)	<i>*pask-’ə/e-</i>	<i>*pask-ey-</i>	→ <i>*pask-’i-</i>

8. Conclusions

If we tally up the observations and arguments from sections §4–7, it is possible to make a fairly good case for how and why the thematic optative suffix **-oih₁-* was ousted in favour of **-ih₁-* in the prehistory of Tocharian. First of all, it is an observable fact that in old athematic stems the ablaut alternation **-ieh₁/ih₁-* was given up, leaving the zero-grade as the only variant. Among these stems, there would have been several descendants of old root stems, in which the optative suffix seemed to elide the vocalic suffix of the subjunctive since both formations were originally formed directly to the root. At that point, there would be two ways to form an optative in the thematic subjunctive: either **g^wm-ih₁-* > **k^wm-’i-* or **ueig-o-ih₁-* > **wik-ey-*, **-sko-ih₁-* > **-skey-*. We would only have to assume that the second variant was replaced by the former in an effort to regularise the system and reduce allomorphy. In Tocharian B, any potential relics of **-ey-* would through regular sound change become **-i-* in the singular forms, after which introduction of the palatalised variant in the paradigm would be trivial.

The opposite hypothesis – that *-’i-* continues **-ih₁-* in the thematic stems directly – needs fewer analogical changes to work. For some of the simple thematic stems, it is a simpler hypothesis. However, it creates a real problem on a structural level for the complex thematic stems like **-ske/sko-* and their optatives in PIE, and in view of the system-wide regularisation of the optative in Tocharian, it is very difficult to see how one could prove the hypothesis with any certainty. These considerations raise serious doubts about the thematic optative as a

¹¹ With intrusive *-n-* from the present (Pinault 2008: 592).

useful morphological isogloss in favour of the early separation of the Tocharian branch.

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