David M. Goldstein, Stephanie W. Jamison, Brent Vine (eds.)

Proceedings of the 31st Annual UCLA Indo-European Conference

November 8th and 9th, 2019

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Wheeled vehicles depicted on Bronze Age vessels and petroglyphs,
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Preface

We take great pleasure in thanking all those who contributed to the success of the conference reflected in these *Proceedings*, the Thirty-First Annual UCLA Indo-European Conference (November 8th and 9th, 2019). Special thanks is owed, first and foremost, to the graduate students comprising the Indo-European Conference Student Organizing Committee: John Clayton, Ian Hollenbaugh, Anahita Hoose, Valentina Lunardi, Thomas Motter, Benjamin Niedzielski, Teigo Onishi, Alex Roy, and Chengzhi Zhang. We are also grateful for significant help from members of the Dodd Humanities Group: Bret Nighman, Carolyn EmBree, Paul Gass—and above all, for crucial help and support, Savannah Shapiro. We also gratefully acknowledge the financial support furnished by the A. Richard Diebold, Jr. Endowment in Indo-European Studies.

We are especially indebted to the scholars whose papers appear below, not only for their stimulating conference presentations, but also for their cooperation and patience throughout the editing process, a good deal of which coincided with the difficult circumstances imposed by the COVID-19 pandemic; and we are especially grateful to our two featured speakers James Clackson and Ashwini Deo. (As usual, not all papers presented at the conference appear here, for a variety of reasons, including publication or planned publication elsewhere.)

We are also happy to repeat our annual praise of Dr. Ute Hempen for her continuing support of our project and of Angelo Mercado for his consummate skill and professionalism in the preparation of the camera-ready copy.

David M. Goldstein, Stephanie W. Jamison, and Brent Vine
December, 2020

Internal and External Factors behind the Development of the Tocharian Secondary Cases[*]

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This paper examines the evolution of secondary cases in Tocharian. First, I will discuss the etymology of the comitative case markers, A -*aśśäl* and B -*mpa*. I follow Pinault (2011:392–3) in assuming that A -*aśśäl* results from the reanalysis of oblique plural *-*as* + postposition **śäl* 'together with', while B -*mpa* is likely to represent [βa], which, in my opinion, reflects a PIE particle starting with a labial-vowel sequence. Second, I will treat the origin of agglutination in Tocharian. Given that some elements in the traditionally reconstructed PIE case endings, whose traces are absent in Tocharian, were not grammaticalized as components of fusional case markers until the Proto-Nuclear-Indo-European period, I propose that contact between Tocharian and non-IE languages resulted in the preservation of pre-existing (quasi-)agglutinative features. Third, I will discuss several parallelisms between Tocharian and Turkic— *Gruppenflexion*, sharing of one adjectival suffix by multiple coordinated nouns, nasal elements in pronouns, and [+human] morphemes—which point to intense contact between the two languages that may well have affected the evolution of the Tocharian case system.

1. Introduction

1.1. Tocharian secondary cases

The Tocharian case system consists of eleven cases, traditionally classified into two categories:

(1)   Primary cases: fusional—nominative, oblique (= accusative), dative-genitive, vocative (only in B)

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[*]   I am grateful to Georges-Jean Pinault for critical comments and discussion on early drafts of this paper. I would also like to thank David Goldstein and Brent Vine for several corrections and suggestions. Any remaining errors are my own.

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(2)   Secondary cases: agglutinative

	A	B
Perlative	*-ā*	*-sa* (< *-sā*)
Comitative	*-aśśäl, -śäl*	*-mpa*
Allative	*-ac*	*-ś(c), -śco* [a]
Ablative	*-äṣ, -aṣ* [b]	*-meṃ*
Locative	*-aṃ*	*-ne*
Instrumental	*-yo*	—
Causal	—	*-ñ(ä)*

a   Archaic and attested only in metrical texts (Pinault 2011:392).
b   Archaic and attested only in fixed expressions (Pinault 2011:391).

While the primary cases are marked by fusional endings, the markers of the secondary cases are agglutinative suffixes. These suffixes are indifferent to number and gender, and they are added to oblique forms of nouns. They originated as postpositions and do not continue PIE case endings. The development of these suffixes has traditionally been regarded as an innovation resulting from contact with non-Indo-European languages of the Caucasus or Central Asia (or both).

This paper aims to examine the evolution of secondary cases in Tocharian. First, I will discuss the etymology of the comitative case markers, A *-aśśäl* and B *-mpa*, whose origins have been considered uncertain. Second, I will treat the origin of agglutination in Tocharian. Third, I will focus on the supposed non-IE influences on Tocharian morphology.

2. On the etymology of comitative case markers

2.1. Tocharian A -aśśäl ~ -śäl

With regard to the origin of the Tocharian A comitative marker, which alternates between *-aśśäl* and *-śäl*, several different analyses have been proposed, including those by Pinault (2011:392) and Koller (2018:172–5).[1]

2.1.1. Pinault (2011)

Pinault (2011:392) argues that the variant *-aśśäl* resulted from a resegmentation of Common Tocharian (CToch.) OBL.PL *-æns* (< PIE thematic ACC.PL *-o-ns*)

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1   Cf. also Van Windekens 1979:253, Gippert 1987:33, Klingenschmitt 1994:346–50, and Kim 2014:134–6, all of whom were refuted by Koller (2018:171–2).

followed by the postpositional *śælæ 'together with, accompanied by', the latter of which is also reflected by the adverbs/prepositions A śla, B śale/śle 'together with':[2]

(3)   CToch. *-æns śælæ   : thematic OBL.PL + 'together with'
                > Pre-A *-as + śäl(a) : univerbation
                > *-aśśäl(a)   : assimilation of s to ś

                                                (Pinault 2011:392)

2.1.2. Koller (2018)

Koller (2018:172–3) proposes an alternative analysis to explain the gemination of ś in -aśśäl; he regards this affix as a "compound case," whose underlying structure is [ALL -ac + -śla[3]]:

(4)   A   sey -ac -śla
             son ALL COM   (Koller 2018:172–4)

He further argues that -ac is optional:

(5)   a.   metraknaśśäl 'with Maitreya' → underlyingly [ALL[OBL metrakn]-ac]-śla

        b.   sisāṃśäl 'with Sītā' → underlyingly [OBL sisāṃ]-śla

                                                (Koller 2018:174)

According to his analysis, while the allative -ac governs the oblique case, the comitative -śla governs either the allative (5a) or the oblique (5b), which would explain the existence of the two variants. I will review the arguments for this proposal.

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2   Three other case markers are thought to have undergone a similar process of resegmentation of final elements of thematic nouns in the oblique case, followed by an ancient postposition:

        Locative: *yäkwæ +*næ 'horse.OBL.SG + LOC' > A yuka-ṃ > A yuk-aṃ
        Allative: *yäkwæ + *cä 'horse.OBL.SG + ALL' > A yuka-c > A yuk-ac
                    *yäkwæns + *cä 'horse.OBL.PL + ALL' > Pre-B *yäkwenś-cä > B yakweṃ-śc
        Perlative: *yäkwæns + *ā 'horse.OBL.PL + PERL' > A yukas-ā; B *yäkwens-ā > yakwent-
                    sa (Pinault 2008:470, 2011:392)

3   The underlying form can be alternatively represented as [-ac + *-śäl]. A śla (: B śale/śle) is a prepositional reflex of *śælæ, whose final vowel was preserved due to its employment as the first component of compounds (equivalent to Skt. sa-), for example, A śla wrasas 'avec les êtres vivants' (Pinault 2011:392).

2.1.2.1. Function of the dative

Koller (2018:173) explains that, cross-linguistically, it is not uncommon for the dative case to be governed by adpositions expressing a comitative or instrumental sense (e.g., Gk. σύν, Germ. *mit*, OIr. *co^N*). Since, as he remarks, the Tocharian allative case is known to assume "a prototypical dative function" (Koller 2018:173), the underlying structure of *-aśśäl* can be regarded as just another example of such a construction.

However, Tocharian possesses, besides the allative, the genitive-dative, which reflects partially the PIE dative and can function as the dative of possession and of attribution (Pinault 2008:463). This analysis necessitates an explanation as to why the allative case, and not the case with an inherited dative value, was employed in the construction in question.

2.1.2.2. Comparable constructions in Tocharian and in other languages

Koller (2018:175–6) points out that similar constructions can be found both in Tocharian and in other languages. In A, the postposition *ane* 'in' can either directly govern the oblique case or be added to nouns in the locative:

(6)   a.   … *śäkk-okät-pi ṣonts   -ane*
            eighteen   streets.OBL.PL in

            … in the eighteen streets   (CEToM 2013:A 227–228 a3[4])

       b.   … *kausalṣiṃ wärt   -aṃ ane tsalpar*
            Kosala   forest.OBL.SG LOC in   entered

            … they entered into the Kosala forest   (CEToM 2013:A 395 b1)

                                            (examples adopted from Koller 2018:175)

Yet it must be noted that, from a semantic point of view, the suffix *-aṃ* and the postposition *-ane* are synonymous, so in (6b), *ane* simply serves to reinforce the meaning already expressed by the case suffix. This example does not indicate that, in Tocharian, there are constructions in which a noun in the oblique case is governed by a suffix, which, in turn, is governed by a postposition with which it does not correspond semantically.

On the other hand, Koller (2018:176) presents an instance of postpositional phrases in Gujarati that perfectly parallels the proposed underlying structure of *-aśśäl*:

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4   Cf. Pinault 2019:132 for the full translation of the passage in which this phrase is found.

(7) Gujarati *chokrā (nī) sāthe*
boy.OBL GEN with

with the boy (from Masica 1991:234)

In the above example, the postposition *sāthe* 'with' "optionally governs a primary or a secondary case" (Koller 2018:176), similar to the Tocharian comitative in his analysis.[5]

There is, however, one crucial difference between Gujarati expressions like (7) and the proposed structure in Tocharian. In NIA, secondary affixes such as *sāthe* 'with' are regularly, but not obligatorily, preceded by the genitive; "Layer III[6] in turn would be definable as mediated by a Layer II element, most often a Genitive … However … in a number of NIA languages such an element is *optional*" (Masica 1991:234, emphasis in original). The Tocharian allative is not employed this way; in Tocharian, there is no attested syntagm in which a case suffix is regularly preceded by another. In Koller's (2018) analysis, the comitative case would, therefore, be exceptional among the secondary cases in that it is the only case that can take a "mediator."

2.1.3. Interim conclusion

For the aforementioned reasons, the analysis of this morpheme as a compound [ALL -*ac* + -*śäl*] is speculative at best, pace Koller (2018). The alternative analysis by Pinault (2011) (cf. §2.1.1) would be more plausible, for it only presupposes a change that other affixes are thought to have undergone, namely, the resegmentation of nouns in the oblique case followed by an ancient affixal morpheme (cf. n.2).

Admittedly, this analysis does not give a direct account of the origin of the variant -*śäl*, but it is possible that this variant was formed secondarily through yet another resegmentation process: *yukaśśäl* → *yukaś-śäl* by analogy with the

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5 Koller (2018:175–6) discusses another such construction, found in Icelandic:

með þér vs. *með þig*
COM you.DAT COM you.ACC

However, as explained by Stolz, Stroh, and Urdze (2006:322–48, 603), cited by Koller (2018: 175–6), there is a difference between these two phrases: the dative is employed for an agent NP, while the accusative is used for a patient.

6 The nominal system of NIA consists of three "Layers." Layers I and II are comparable to the Tocharian primary and secondary cases, respectively. Layer III is defined by Masica (1991:231) as "[a] second layer of affixes (= secondary affixes)" which can also be considered as "a first layer of postpositions" (cf. Masica 1991:230–9 for a fuller description).

synonymous adverb *śälœ or, as suggested by Pinault (p.c.), that it is a straightforward reflex of *śälœ attached to singular nouns, i.e., *yäkwœ + *-śälœ > Pre-A *yuka-śäl(a), which is a hypothetical form.

2.2. Tocharian B -mpa

2.2.1. Phonological interpretation of ⟨mp⟩

The etymology of this morpheme is uncertain. There exists a free adverbial morpheme *mpa* 'together with,' which makes the reconstruction of this morpheme as *mäpā* implausible, for such a proto-form would have become B ˣmápa (cf. B śále < *śälœ) (Pinault 2011:393).

From an orthographical point of view, ⟨mp⟩ regularly represents [β], an intervocalic allophone of /p/ (cf. Pinault 2009:235–40). Notably, this suffix (as well as the free variant *mpa*) is the only known morpheme in Tocharian B starting with ⟨mp-⟩ (cf. Adams 2013:514); in other words, [β] is not normally found in word-initial position.[7] One way to account for a form like /βa/ would be to regard it as a morpheme that used to form part of a complex noun but was reinterpreted as a "freer" morpheme that could function either as a separable affix or an independent adverb, through so-called "degrammaticalization."[8]

2.2.2. Possible Proto-forms

With regard to possible proto-forms, in PIE we find some particles expressing a sociative sense or the notion of proximity, to which this suffix could be at least indirectly related (reconstruction and examples based on Dunkel 2014 s.vv.):

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7   There is at least one Turkic loanword transcribed with word-initial ⟨mp-⟩:

    B *mpek* ← Turkic *bäg* 'chef' (Pinault 2009:237, 2011:393)

However, it is possible that loanwords such as this contain sounds that are not normally found in inherited words (e.g., French *chatter* /tʃate/ 'to chat' starting with /tʃ/, which occurs only in loanwords).

8   The phenomenon of "degrammaticalization" is treated by Kiparsky (2012:37–49), according to whom it can be explained as a change by analogy. In Saami, for instance, the abessive suffix -*taga* became a clitic ⸗*taga* by analogy with the comitative clitic, which is "its antonym and closest paradigmatic partner" (Kiparsky 2012:33, 37–8). Given that (Proto-)Tocharian possessed several adverbs (undergoing grammaticalization) that could have served as a basis for analogy, it would not have been impossible for an originally inseparable morpheme to eventually become an independent morpheme in a similar manner.

(8) a. *bʰe ~ *bʰo⁹ 'wahrlich, fürwahr; gerade, eben'
        cf. Lith. bè 'und; wenn'; PAnat. *obo- 'der neben dir'

     b. *bʰí¹⁰ 'bei, neben' (lokativ-instrumentalische Adverbialendung)
        cf. Goth. bi- < PGmc. *ƀi 'bei, neben, an'; Lat. nōbīs 'uns, von uns'

     c. *épi ~ *ḗpi ~ *ópi ~ *pi 'auf, darauf; auf – hin'
        cf. Gk. ἐπί 'auf, an; bei'; Ved. āpí- 'Freund' < *ēpi(-o)- 'Freund'; Osc. **úp**
        'bei' < PItal. *opi 'darauf, bei'; Myc. o-pi 'auf'; Lith. pie, -pi, -p 'bei, neben'

     d. *pós 'zu – hin; bei'
        cf. Gk. πος 'zu – hin'; Lith. pàs 'zu – hin; bei, an'

Unfortunately, the radical restructuring of the Tocharian consonant inventory makes it very difficult, or perhaps even impossible, to identify the exact proto-form of this morpheme. However, from both phonological and semantic points of view, the origin of B -mpa /βa/ may be traced back to one of these PIE particles.

3. Origin of agglutination

3.1. Traditional and recent views of the PIE nominal case system

The agglutination characteristic of Tocharian nominal morphology has long been considered an innovation resulting from contact with non-IE agglutinative languages; it has been the general consensus that Tocharian first lost the inherited IE inflectional case system and then developed the attested system consisting of agglutinative suffixes.

     However, recent literature demonstrates that some elements in the traditionally reconstructed PIE case endings, including *-bʰi and *-m, presumably adverbial in origin, were not grammaticalized as components of fusional case markers until the post-PIE period (cf. Kim 2013, with references).

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9   This morpheme, as well as *mé 'inmitten, einschliesslich; mit', are suggested by Dunkel himself as possible etymologies of mpa. However, the implausibility of the reconstruction of this morpheme as nasal-initial *mäpā (cf. §2.2.1) makes the latter an unlikely candidate.

10 Pinault (p.c.) proposed that, if the suffix in question is indeed etymologically connected to this particle, its development may have been as follows: PIE *-o-bʰi (thematic noun + locatival/instrumental adverb) > CToch. *-æ-pä > B -e + -mpa /-e-βa / (reanalysis as a form in oblique, e.g.,*yäkwæ > yakwe, followed by the postposition -mpa).

3.2. Lack of traces of plural endings

The view that the inflectional nominal case system was still underdeveloped during the period of PIE can be further corroborated by a fact about the Tocharian nominal system which seems to have gone unnoticed.

The supposed loss of the inherited case endings is attributed to the diachronic deletion of word-final consonants. This change accounts for the loss of mono-consonantal endings, such as NOM.SG *-s and ACC.SG *-m. On the other hand, it is worth noting that Tocharian preserves no trace of consonantal elements traditionally associated with plural endings—namely, *b^h in *-$b^h i$ and *s in *-su—and that the absence of such non-final elements can be attributed neither to this sound change nor any other phenomena that are thought to have affected Tocharian phonology.[11] One possibility is that the inflectional system reconstructed for PIE was not yet fully developed by the time Tocharian branched off,[12] in which case it would be conceivable that the PIE nominal system possessed some (quasi-)agglutinative morphemes that should be regarded as adverbial or postpositional rather than as inseparable, fusional endings.

3.3. Stabilizing influence of non-IE languages?

Given the above observation, it would not be quite accurate to say that agglutination in Tocharian is a contact-induced innovation that took place after the loss of the inherited inflectional system. On the other hand, it is also hasty to conclude that the emergence of the agglutinative system in Tocharian was a natural development, as other IE branches eventually developed an inflectional system. In any case, Tocharian morphology surely was influenced by one or more agglutinative languages.

Specifically, I propose that the consequence of the contact between Tocharian and non-IE languages was the *preservation* of pre-existing agglutinative features,

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11   The situation in Tocharian contrasts with that in Baltic. Similar to Tocharian, Baltic developed secondary cases originating from postpositional morphemes: inessive, illative, adessive, and allative. Despite this restructuring of the case system, however, a trace of the inherited locative *-su is preserved in inessive plural forms; for example, OLith. *rañkosu* 'in the hands' → **rankosen* (replacement of *-su* by *-sen* under the influence of the singular counterpart **rankojen*) > MLith. *rañkose* (Petit 2007:331–2, emphasis mine). This indicates that *-su* had already been incorporated into the (post-)PIE case system when Balto-Slavic branched off.

12   I follow Jasanoff 2003, Carling 2005:48–9 (with references), and Weiss 2018 (with references), among others, in assuming that Tocharian was the second branch to split from PIE.

rather than an *innovation* thereof; this apparent non-IE influence on Tocharian can be best characterized as a stabilizing one.[13]

4. External influence on the nominal system

4.1. Turkic as the most likely candidate from a chronological point of view

Tocharian was in contact with multiple language families in the Caucasus and Central Asia. These include Uralic, Caucasian, and Turkic, all of which are agglutinative, and which therefore have been tentatively mentioned as languages that possibly affected the Tocharian case system (cf. Thomas 1985:61–2, Schmidt 1988:219, Bednarczuk 2015:58–9, among others).[14]

From a chronological point of view, however, Turkic is the most likely to have had a direct influence on the development of Tocharian; given that Tocharian A and B developed secondary cases differently from one another (cf. §1.1), it is natural to assume that the contact between Tocharian and the language(s) by which it was influenced took place fairly late in the history of Tocharian and continued after the separation of the two variants. Among the above-mentioned non-IE languages, Turkic is the only one that is known to have interacted with Tocharian around this period.[15]

4.2. Gruppenflexion

Tocharian and Turkic nominal syntagms are structurally similar; in both languages, nouns may be marked by a plural suffix (Tocharian *-ā > B -a / A -ā, *-wā > B

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13   For some typological examples of the stabilizing influence of one language on another, cf. Kulikov 2011:302–3.

14   As mentioned in §2.1.2.2, New Indo-Aryan (NIA) languages also have case systems comparable to that of Tocharian. Although this might lead one to suspect mutual influence between them, this possibility must be ruled out on chronological grounds. For details, see Carling 2005:51–2.

15   Studies on the history of linguistic contact between Tocharian and other languages of Central Asia show that Tocharian speakers had already arrived in the Tarim Basin around the beginning of the Common Era, and that, at the time, A and B were not yet separate (Carling 2005:60, 64–5). The contact between Turkic and Tocharian is thought to have started during the period of Common Tocharian and continued after the separation of the two variants (for detailed discussions of their contact, cf. Lubotsky and Starostin 2003, Pinault 2001, and Carling 2005).

-wa / A *-u*, **-nā* > B *-na* / A *-äṃ*, **mnā* > B *-nma* / A *-mnā*, **-ntā* > B *-nta*, A *-nt* [Pinault 2008:491–7]; Turkic *-lAr*) after which a case suffix follows:[16]

(9) a. Tocharian B

krenta   pelaikne -nta -sa
good.OBL.PL law   PL   PERL

with good laws   (CEToM 2013:B 547 a1)

  b. Turkic

ädgü ayïg nom   -lar -nïŋ
good bad   principle PL   GEN

of good and bad principles
                        (BuddhUig II 447, translation by Erdal 2004:169–70)

These languages are also characterized by group inflection (*Gruppenflexion*). That is, multiple nouns forming a coordinative or attributive syntagm share only one case suffix, added after the final constituent:

(10) a. Tocharian A

kuklas   yukas   oṅkälmās   -yo
chariot.OBL.PL horse.OBL.PL elephant.OBL.PL INST

with chariots, horses, and elephants   (Pinault 2008:466)

  b. Turkic

… *tegit-lär-in   kunčuy-lar-ïn   tözün-lär-ïn   -lugun*
  prince-PL-POSS.3PL wife-PL-POSS.3PL retinue-PL-POSS.3PL COM

… together with their princes, wives and retinue   (Erdal 2004:141, 186)

It is also worth noting that, in (10b), the comitative suffix *-lugun* is shared by the three nouns, while the possessive *-In* (ACC) is not. Besides, *-lugun* does not show the expected vowel harmony (i.e., *˟-lügün*) (Erdal 2004:141).

According to Erdal (2004:186), an example such as this indicates that "the case system originally was a two-tier one," just like that of Tocharian consisting of two layers (i.e., primary and secondary).

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16 In Tocharian, this holds true only for nouns whose nominative and oblique forms are identical. Nouns whose oblique forms differ from their nominative forms are marked by inherited nominative and accusative plural endings, with some modifications (Pinault 2008:491, 498–502).

4.3. Other parallelisms between Turkic and Tocharian

In this last section, I will present a few other similarities shared by Turkic and Tocharian at morphological and syntactic levels.

4.3.1. Adjectival suffix

A -*ṣi* / B -*ṣṣe* are productive adjectival suffixes added to nouns in the oblique case (Pinault 1992:101–2; 2008:515). They can be shared by coordinated nouns, just as case suffixes can:

(11) Tocharian B -*ṣṣe*

    kektseñ   *reki*   *pälsko*   -*ṣṣe*
    body.OBL.SG word.OBL.SG mind.OBL.SG ADJ

    (a pure exercise) of body, word, [and] mind
                            (CEToM 2013, cited by Kuritsyna 2018:267)

The same holds true for the adjectival suffix -*lXg* in Old Uyghur (examples and translations adopted from Kuritsyna 2018:274):

(12) a. *ört yalïn* -*lïg*
       fire flame ADJ

       fiery and flaming   (Nadeljaev, Nasilov, Tenišev, and Ščerbak 1969:389)

     b. *asïğ*   *tusu*   -*lug*
        advantage benefit ADJ

       advantageous and beneficial   (Maitr 5 v25, Erdal 1991:148)

     c. *ačmak* [*suvsa*]*mak busuš kadgu* -*lug otïn*
        hunger thirst   sorrow distress ADJ fire

       (suffering from) fire of hunger (and) thirst, sorrow (and) distress
                         (MaitrHami, XX, leaf 14, 10–11)

    Erdal (1991:141–2, cited by Kuritsyna 2018:273–4) remarks on the functional similarities between these suffixes, and he mentions that "it must be an areal phenomenon common to Uigur and Tocharian."

4.3.2. Pronominal -n

The first- and second-person singular pronouns in Old Turkic contain a medial nasal, which Erdal (2004:191) calls "the pronominal +*n*+." For instance:

(13)

	1SG	2SG
NOM	*bä**n** / mä**n***	*sä**n***
ACC	*bi**n**i / mi**n**i*	*si**n**i*
GEN	*bä**n**iŋ / mä**n**iŋ*	*sä**n**iŋ*

<div align="right">(Erdal 2004:192, emphasis mine)</div>

Tocharian pronouns are also characterized by a nasal. While the first-person sin-gular pronouns go back to a form that already had this element:

(14)   1SG.GEN (from which *$\tilde{n}$ was extended to other 1SG forms[17])

PIE *$m\acute{e}ne$ > *$m'\ddot{a}n'\ddot{a}$ > *$n'\ddot{a}n'\ddot{a}$ > *$\tilde{n}\ddot{a}$

<div align="right">(Pinault 2008:538, Dunkel 2014:506–7, Jasanoff 1989:125–6)</div>

it is notable that the $\tilde{n}$ found in two other pronominal forms—CToch. *$t\ddot{a}\tilde{n}\ddot{a}$ > B *tañ* / A *tñi* '2SG.GEN' and CToch. *$\d{s}\ddot{a}\tilde{n}\ddot{a}$ > B *ṣañ* / A *ṣñi* 'one's own (reflexive)'— is not present in their proto-forms: PIE *$t\underset{\cdot}{u}\acute{o}$-, *$s\underset{\cdot}{u}e$ (Dunkel 2014:754, 814).[18]

This element has been considered analogical to 1SG *$\tilde{n}\ddot{a}$ (Pinault 2008:537–8, Jasanoff 1989:125–6), yet it is possible that these forms were affected by the Turkic pronouns starting with a consonant-vowel-nasal sequence, as illustrated in example (13).

4.3.3. The Feature [+human]

Tocharian exhibits the phenomenon of differential object marking (DOM), a term coined by Bossong (1985). In the oblique singular, a distinction is made between entities that are [+human] and [–human], only the first of which are marked by -*ṃ* /-n/, unlike other IE languages in which nouns in accusative singular are marked by a reflex of *-*m* regardless of semantic categories.

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17 Tocharian pronouns (Pinault 2008:534):

	B	A
NOM	*ñäś* (*ñiś*)	*näṣ* (M) / *ñuk* (F)
OBL	*ñäś* (*ñiś*)	*näṣ* (M) / *ñuk* (F)
GEN	*ñi*	*ñi* (M) / *nāñi* (F)

18 The enclitic pronouns A -*ṃ* / B -*ne* '3SG,' on the other hand, reflect forms that already contained a nasal: PIE *h_1eno-/h_1ono- (cf. Adams 2013:362–3 for the etymology of these pronouns).

(15)   B *eṅkweṃ* / A *oṅkaṃ* 'man.OBL.SG'

vs.

B *yakwe* / A *yuk* 'horse.OBL.SG'

<div align="right">(Pinault 2008:474, emphasis mine)</div>

Although there is no such systematic distinction in Old Turkic, there is at least one morpheme that seems to be associated with the notion of [+human]: +*lAr*.

+*lAr* is "[t]he common Turkic plural suffix" (Erdal 2004:104; cf. also examples 9b and 10b). However, according to Zieme (1969:97, cited by Erdal 2004:389), in Manichean texts, this suffix may be attached to quantified nouns if they denote humans or mythological figures, while it is normally not employed for other entities.

Taken together, these multiple similarities between Tocharian and Turkic point to fairly intense contact between the two languages that may well have affected the evolution of the Tocharian secondary cases.

5. Conclusion

This paper discussed some internal and external factors that are supposed to have affected the evolution of secondary cases in Tocharian. With regard to the comitative case marker A -*aśśäl*, I argued, following Pinault (2011), that it results from the reanalysis of [OBL.PL *-*as* + postp. *śäl* 'together with'], and that the alternative analysis of this morpheme as a compound of [ALL -*ac* + *śäl*] is speculative at best, pace Koller (2018). On the other hand, B -*mpa* [βa], which is the only word in this language starting with *mp*-, appears to have originated as a bound suffixal morpheme reflecting some PIE particle of the structure with an initial labial-vowel sequence but eventually evolved into a "freer" (i.e., separable) morpheme.

Second, I clarified the origin of agglutination in Tocharian. As is argued in recent literature, the PIE nominal case system seems to have been underdeveloped as an inflectional one, some elements in the traditionally reconstructed endings presumably being adverbial in origin. Moreover, the absence of traces of the endings such as *-*bʰi* and *-*su* in Tocharian cannot be explained by any known sound changes. These factors led me to propose that, contrary to the traditional view, PIE possessed (quasi-)agglutinative morphemes, and that a consequence of the contact between Tocharian and non-IE languages was the preservation of such features, rather than an innovation.

Third, I argued that, among the non-IE languages with which Tocharian was in contact, Turkic is the most likely to have affected its case system. Tocharian and

Turkic share several characteristics, including not only *Gruppenflexion* but also sharing of one adjectival suffix by multiple coordinated nouns, nasal elements in pronouns, and [+human] morphemes. These morphological similarities indicate a fairly intense contact between these languages, to which the evolution of the nominal system of Tocharian may be at least partially attributed.

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The Phrygians from Βρίγες to Φρύγες: Herodotus 7.73, or the Linguistic Problems of a Migration[*]

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According to Herodotus (7.73), as long as the Phrygians lived in Europe with the Macedonians they were called Βρίγες. Only after their migration to Anatolia did they change their name to Φρύγες. Previous scholarship has considered Φρύγες and Βρίγες to be etymologically related, attributing the difference in the initial consonants to a regular phonological change PIE *b^h > Greek /p^h/ ⟨φ⟩, Phrygian /b/, and identifying the oscillation between /i/ and /u/ of the root vowel as a Phrygian phonological feature. Since the outcomes of PIE *i and *u are stable in Phrygian and in Greek, this assumption must be reconsidered. In the Greek sources, several ethnonyms referring to the Phrygians and to their European ancestors/relatives can be found: Φρύγες, Βρίγες, Βρύγες, Βρύγοι/Βρῦγοι. These Greek *exonyms* can be split into two groups according to their radical vowel, and can then be analyzed separately. The standard ethnonym Φρύγες designating the Phrygians, as well as the ethnonyms of the Thracian populations Βρύγοι and Βρύγες, can be traced back to the same "proto-ethnonym" reconstructible as *$B^h rug$-. A "proto-ethnonym" *$Wreg$/k- can be posited to account for the Macedonian form Βρίγες, and possibly for the Phrygian form *vrekes*, which might be a good candidate for the Phrygian *endonym*.

1. Introduction

The ethnonym Φρύγες 'Phrygians' is attested for the first time in Greek literature in the *Iliad*. According to Homer, young King Priam helped the Phrygians to fight against the Amazons (*Iliad* 3.185). In return, the Phrygians came to Troy to support

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the Trojans against the Achaeans (*Iliad* 2.862). Thus in the Homeric tradition, the Phrygians appear as a population well rooted in Anatolia.[1]

On the other hand, the first evidence in Greek literature for a Phrygian migration from the Balkans (ca. 12th century BCE) is provided by Herodotus (5th century BCE). While describing the imposing army assembled by Xerxes to attack Greece (480 BCE), the historian describes the Phrygian contingent and provides precise indications concerning the origin of this population (7.73). In particular, he points out a bizarre name change. As long as the Phrygians lived in Europe with the Macedonians they were called Βρίγες;[2] only after their migration to Anatolia did they change their name to Φρύγες:

7.73   […] Οἱ δὲ Φρύγες, ὡς Μακεδόνες λέγουσι, ἐκαλέοντο Βρίγες χρόνον ὅσον Εὐρωπήιοι ἐόντες σύνοικοι ἦσαν Μακεδόσι, μεταβάντες δὲ ἐς τὴν Ἀσίην ἅμα τῇ χώρῃ καὶ τὸ οὔνομα μετέβαλον ἐς Φρύγας.

          […] The Phrygians, as the Macedonians say, were called "Briges" as long as, living in Europe, they dwelled with the Macedonians; it was when they moved to Asia that, at the same time as they changed their country, they also changed their name to "Phrygians."[3]

If we follow Herodotus (6.45), even after the migration, a population named Βρύγοι, likely to be descended from the same ethnos as the Phrygians before their migration, still inhabited Thrace. The historian lists the Thracian populations, including the Βρύγοι,[4] among Xerxes' suppliers of ground forces (7.185):

6.45   Μαρδονίῳ δὲ καὶ τῷ πεζῷ στρατοπεδευομένῳ ἐν Μακεδονίῃ νυκτὸς Βρύγοι Θρήικες ἐπεχείρησαν· καί σφεων πολλοὺς φονεύουσι οἱ Βρύγοι, Μαρδόνιον δὲ αὐτὸν τρωματίζουσι.

          While Mardonius was encamped in Macedonia with the land army, the Brygi of Thrace attacked them at night: and the Brygi killed many of them [i.e. of his soldiers], and wounded Mardonius himself.

7.185   Πεζοῦ δὲ τὸν Θρήικες παρείχοντο καὶ Παίονες καὶ Ἐορδοὶ καὶ Βοττιαῖοι καὶ τὸ Χαλκιδικὸν γένος καὶ Βρύγοι καὶ Πίερες καὶ Μακεδόνες καὶ

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1   On the subsequent synonymous usage of the ethnonyms "Phrygians" and "Trojans" in Greek tragedy, see Anfosso 2018.

2   The ethnonym Βρίγες can be found as well in Strabo (geographer, 64/63 BCE–24 CE) 7.3.2, 7.7.12, and Aelius Herodianus (grammarian, 2nd century CE) 3.1.61.

3   Translations are mine, except as indicated.

4   The ethnonym Βρύγοι is mentioned by Strabo 12.3.20, and by Pseudo-Scymnus (geographer, 2nd century BCE) 434.

Περραιβοὶ καὶ Ἐνιῆνες καὶ Δόλοπες καὶ Μάγνητες καὶ Ἀχαιοὶ καὶ ὅσοι τῆς Θρηίκης τὴν παραλίην νέμονται.

Thracians, Paeonians, Eordi, Bottiaei, Chalcidians, Brygi, Pierians, Macedonians, Perrhaebi, Enienes, Dolopes, Magnesians, Achaeans, and all the dwellers on the seaboard of Thrace sent ground troops.

Later on, Strabo (1st century BCE) presents a similar account of the Phrygians' migration (7.7.12). Although originally settled on Mount Bermion, in Macedonia, at some point the Βρίγες moved to Anatolia, where they changed their name to Φρύγες. Strabo (7.3.2) specifies that the Βρίγες were a Θρακῶν ἔθνος, i.e., a population of Thracian origin:

7.3.2   Καὶ αὐτοὶ δ' οἱ Φρύγες Βρίγες εἰσί, Θρᾴκιόν τι ἔθνος […].

And the Phrygians themselves are Briges, a Thracian population […].

7.7.12   Ὅτι αὐτοῦ που καὶ τὸ Βέρμιον ὄρος, ὃ πρότερον κατεῖχον Βρίγες Θρακῶν ἔθνος, ὧν τινες διαβάντες εἰς τὴν Ἀσίαν Φρύγες μετωνομάσθησαν·

Mount Bermion, also, is somewhere in this region [sc. in Macedonia]; in earlier times it was occupied by Briges, a Thracian tribe; some of these crossed over into Asia and their name was changed to Phrygians.

Strabo then asserts the ethnic identity of Brygi, Bryges, and Phrygians (12.3.20):

12.3.20   […] ὁμοίως δὲ καὶ Βρῦγοι/Βρύγοι καὶ Βρύγες καὶ Φρύγες οἱ αὐτοί […].

[…] Likewise, Brygi and Bryges and Phryges are the same people […].

Thus in the Greek sources, several ethnonyms related to the Phrygians and to their European ancestors and/or relatives, located in different parts of the Balkans (Thrace, Macedonia, Illyria), can be found:

- Φρύγες (*Iliad*+);
- Βρίγες (Herodotus 7.73; Strabo 7.3.2, 7.7.12; Aelius Herodianus 3.1.61);
- Βρύγοι/Βρῦγοι (Herodotus 6.45, 7.185; Strabo 12.3.20; Pseudo-Scymnus 434);
- Βρύγες (Strabo 12.3.20, followed by the Byzantine lexical encyclopedia *Etymologicum Magnum* [12th century CE] 179.19G; the nom. sg. form Βρύξ is attested by Stephanus of Byzantium, *Ethnica* [6th century CE] 187.17).

Gusmani (1958:859–60) and Detschew (1976:91–2) considered Φρύγες and Βρίγες to be etymologically related, attributing the difference in the initial consonant to a regular phonological change PIE *b^h > Greek /pʰ/ ⟨φ⟩, Thracian and

Phrygian /b/. More specifically, Gusmani identified the oscillation between /i/ and /u/ of the root vowel as a typical feature of Phrygian phonology ("una delle ben note caratteristiche della fonetica frigia"), and Detschew considered Φρύγες, Βρύγες, Βρῦγαι, Βρύγοι, Βρίγες, Βρίγοι, and Lat. *Brigae* to be derivations from the same root ("Bruchteile von einem Stamm"). Beekes (*EDG* s.v. βρίκελοι) suggested that we might be dealing with a Pre-Greek word βρικ-/βρυκ- meaning in his view 'barbarian, foreigner'. For him, the variation between ι and υ is "well known" (quoting Furnée 1972:116[5]), though he admitted (2014:25) that he did not know how to interpret this phenomenon, whereas -ελ- is "a Pre-Greek suffix."

In my opinion, these hypotheses need to be reconsidered. First of all, these ethnonyms are not genuine Phrygian forms, but rather Greek forms attested in Greek sources, i.e., *exonyms* (Jordan 2015:163).[6] Thus it is incorrect to consider the variations in question as direct reflections of Phrygian (or Thracian) phonology. Moreover, the outcomes of PIE *i and *u are stable in Phrygian (Ligorio and Lubostky 2018:1821), and they do not converge under any circumstances. Concerning Greek: at the time of Herodotus—the author of the earliest text where Φρύγες and Βρίγες are recorded at the same time—we are still far from the regular Byzantine outcome /ü/ > /i/, leading to confusions or overlaps between ⟨υ⟩ and ⟨ι⟩ in the graphic system (Miller 2014:58). Since, moreover, the people in question, although "barbarian" from a Greek perspective, spoke Indo-European languages—i.e., Phrygian, Macedonian Greek, and possibly Thracian dialects—it is not strictly necessary to invoke a Pre-Greek origin for their ethnonyms. It seems worthwhile, then, to provide an alternative explanation.

With that in mind, the goals of this paper are as follows. First of all, I will split the different ethnonyms designating the Phrygians and their ancestors/relatives into two groups according to their radical vowel (i.e., Φρύγες, Βρύγες, Βρύγοι/Βρῦγοι on the one side, and then Βρίγες on the other), with a view to analyzing them separately. Then, I will elaborate an alternative explanation in order to account for all the variations found in the Greek exonyms to designate the Phrygians and their ancestors/relatives. Finally, I will propose a hypothetical Phrygian endonym (Jordan 2015:163) after a careful reading of the Paleo-Phrygian corpus (9th–4th

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5   "βρικόν = βάρβαρον (H.), woneben (Latte) βρυκός = βάρβαρος (H.): cf. βρίγες = βάρβαροι. οἱ δὲ σολοικισταί (H.). Hierher auch βρίκελοι = βάρβαροι (H.)."

6   External naming is always created on the basis of a specific viewpoint, often involving an unequal power relationship between the naming and the named entities. For a theoretical framing of the exonym/endonym issues in Ancient Anatolia, see Durnford 2013:51–3.