



Universiteit  
Leiden  
The Netherlands

## The Tocharian Gender System: A Diachronic Study

Tomba, A. del

### Citation

Tomba, A. del. (2020, March 24). *The Tocharian Gender System: A Diachronic Study*. Retrieved from <https://hdl.handle.net/1887/87130>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/87130>

**Note:** To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/87130> holds various files of this Leiden University dissertation.

**Author:** Tomba, A. del

**Title:** The Tocharian Gender System: A Diachronic Study

**Issue Date:** 2020-03-24

## CHAPTER FIVE

### RETROSPECTIVE AND CONCLUSION

This study has dealt with the Tocharian grammatical gender, its synchronic description, and diachronic evolution. The main findings are recapitulated below.

#### 5.1. SYNCHRONIC ANALYSIS

The main questions to be answered in Chapter 2 were whether the *genus alternans* is a real gender value and, consequently, how many genders Tocharian has. After a general introduction to the linguistic typology of grammatical gender (§2.1) and a short description of the reconstructed Proto-Indo-European gender system (§2.2), the synchronic analysis of Tocharian gender has been discussed (§2.3). In §2.4, the mechanism of synchronic gender assignment has been examined, individuating inflectional, derivational, and semantic strategies to predict gender of Tocharian nouns.

On the basis of typological and cross-linguistic comparisons with Romance languages in general and Standard Italian and Romanian in particular, it has been demonstrated that Tocharian has three gender values, including the *genus alternans* (§2.3.1). The reasons behind this analysis are recounted below:

- (1) alternating nouns have specific agreement patterns, which are different from those of the masculine and the feminine;
- (2) alternating nouns belong to individual inflectional classes, whose peculiarity is that they have no formal distinction between nominative and oblique in either the singular or the plural;
- (3) alternating nouns form a productive group: loanwords and inherited words are inserted into this class of nouns;
- (4) alternating nouns are only inanimate;
- (5) the agreement of an alternating noun provides for a nominal concord where a controller agrees with a target inflected as masculine in the singular but as feminine in the plural. This agreement set is respected even when coordinated NPs headed by alternating nouns agree with nominal modifiers or pronouns. Indeed, they regularly select a feminine plural agreement.

Finally, in §2.3.2, terminological problems of naming the third Tocharian gender have been discussed. It has been shown that the label “alternating”, as opposed to “neuter”, is to be preferred. Indeed, although alternating nouns historically derived from PIE neuters, the Tocharian *genus alternans* is the outcome of formal and functional mergers between the

three inherited genders. In Tocharian, the term “neuter” is more appropriately used for a relic class of forms limited to pronouns and ordinal numerals. Although these relics derive from the PIE neuter, they do not form a distinct gender from a functional-synchronic perspective, since they do not share any exponent in any agreeing word class: they are used for non-gender reference.

## 5.2. DIACHRONY OF THE MASCULINE

The evolution of the PIE masculine in Tocharian is not complex. Nouns reconstructed as masculine for the proto-language are synchronically continued as masculine in Tocharian, in both the thematic and the athematic type.

In the singular inflection, the opposition between nom.sg. \*-s, acc.sg. \*-m was lost, caused by the Proto-Tocharian apocope of final consonants. This produced the formal merger of the nominative and the oblique (< PIE accusative) in the singular. In the thematic type, they coalesced in PTch \*-æ < PIE \*-o- (§3.8.1.1).

In the inflection of the noun, a distinction between nominative and oblique was reintroduced, through the addition of PTch \*-n to the obl.sg. This new obl.sg. \*-æn (thematic) ~ \*-ən (athematic) was confined to male human beings (cf. obl.sg. TchB *enkweṃ*, A *oñkaṃ* ‘man’; obl.sg. TchB *lykaṃ* /*lġkən*/, A *lykäṃ* ‘thief’). In Tocharian A, the obl.sg. -ṃ /-n/ became more productive and it was used for feminine nouns as well. On the other hand, some other types continuing the athematic inflection generalised the original weak stem to the oblique in order to remark the opposition (cf. TchB *pācer* ‘father’ < PTch \**pācer* < PIE \**ph<sub>2</sub>tēr* vs. obl. *pātär* < PTch \**patär* < PIE \**ph<sub>2</sub>tr-*; TchB *mašce* ‘fist’ < PTch \**mašcæ* < PIE \**mustē(i)* vs. obl. *mašc* < PTch \**māscə* < PIE \**musti-*; TchB *yriye* /*yräye*/ ‘lamb’ < PTch \**wäräyæ* < PIE \**uerh<sub>2</sub>en* vs. obl. *yari* /*yäräy*/ < PTch \**wäräy* < PIE \**uerh<sub>2</sub>en-*). Usually, Tocharian A levelled the paradigm with the generalisation of one of the two stems (cf. nom.obl.sg. TchA *pācar* ‘father’).

In the inflection of the adjective, different strategies have been employed. In particular, analogical palatalisation was introduced after the inflection of the demonstratives (§4.3.1, §4.3.3). The palatalisation affected all the masculine paradigm with the exception of the nom.sg., thus remarking the opposition between nominative and oblique (cf. e.g. TchB *allek* [A *alak*] ‘other’ vs. obl. *alyek* [A *alyak-äm*]; TchB *trite* [A *trit*] ‘third’ vs. obl. *trice* [A *tricäm*], TchB *ayämätte* ‘not done, not able to do’ vs. obl. *ayämäcce*, etc.). On the other hand, those adjectival suffixes which could not have any palatalised counterpart took the obl.sg. marker \*-n, which, in the adjectival inflection, became a mandatory ending after the Proto-Tocharian period (§4.3.3.1, §4.3.4.1; cf. TchB *-em* vs. TchA *-äm* [not \*\**-am*] in TchB *astareṃ*, A *ašträṃ* ‘pure’). Indeed, in Tocharian A the obl.sg.m. -ṃ has been generalised only after the Tocharian A loss of final vowel (cf. TchA obl.sg. *tricäm* ‘third’ [cf. TchB *trice*] < Pre-TchA \**tric* < PTch \**tricæ*; TchA gerundival obl.sg. *-läṃ* [cf. TchB *-lye*] < Pre-TchA \*-l (apocope and depalatalisation) < PTch \*-(*l*)*læ*; cf. also TchA obl.sg. *-i* vs. *-im* in the *i*-adjectives, TchA obl.sg. *ñäcki* ‘divine’ [cf. TchB *ñäck(i)ye*] vs. *ñäckim*).

In the plural inflection, the thematic nom.pl.  $*-oi$  has been clearly continued in adjectives and pronouns. In Proto-Tocharian, it evolved into  $*-æy$ , and was then monophthongised in TchB  $-i$ , A  $-e$  (non-palatalising; see §4.3.4.1). In Tocharian B, word-final PTch  $*-æy$  was maintained only in monosyllables (cf. nom.pl. PIE  $*toi$  ‘these’ >> PTch  $*cæy$  > Archaic TchB *cai* > Classical TchB *cey*; du. PIE  $*toih$ , ‘these (du.)’ > PTch  $*tæy$  > TchB *tai*). There is no evidence for an alleged early monophthongisation of PIE  $*-oi$  > (palatalising) PTch  $*-e$ .

In the noun inflection, the nom.pl.  $-i$  is the marker of a productive class of Tocharian B  $e$ -stems, which can be traced back to the thematic type (§3.8.1.1). On the other hand, nom.pl. TchA  $-e$  cannot be found in the noun inflection (with the exception of *pracre* ‘brothers’, where it is unexpected). Indeed, the Tocharian A counterparts of Tocharian B  $e$ -stems probably remade the expected nom.pl.  $*-e$  with TchA  $-a\tilde{n}$ , levelling the  $a$ -vocalism of the stem (<  $*-æ-$  < PIE  $*-o-$ ; cf. obl.pl.  $-as$ ). In the athematic type, the PIE nom.pl.  $*-es$  caused palatalisation of the preceding consonant. When apocope took place in Proto-Tocharian, this palatalised consonant was reanalysed as the nominative plural marker (cf. nom.pl. TchB  $-ñc$ , A  $-mś$  < ( $*-ñc$ ) < PTch  $*ñcə$  < PIE  $*-nt-es$ ; nom.pl. TchAB  $-ñ$  < PTch  $*-ñə$  < PIE  $*-n-es$ ).

As far as the development of the thematic oblique plural is concerned, I side with those scholars who claimed PIE  $*-ons$  evolved into PTch  $*-əns$  > TchB  $-e\tilde{n}$ , A  $-as$  (without vowel raising in Tocharian A; §4.3.4.1). In Tocharian A, the obl.pl.  $-as$  can be regularly found in the continuants of the PIE  $o$ -stems. On the other hand, in the adjectival and pronominal inflection we find obl.pl. TchA  $-es$ . It has been attempted to explain the  $e$ -vocalism in this marker as the result of analogical levelling from the nom.pl.  $-e$ . In the athematic type, PIE  $*-ns$  regularly evolved into PTch  $*-əns$  > TchB  $-ä\tilde{n}$ , A  $-äs$  (without vowel raising in Tocharian A).

### 5.3. DIACHRONY OF THE FEMININE

Among the issues discussed in the thesis, the evolution of the feminine gender has been a central point of study. Indeed, it has recently been claimed that Tocharian inherited a gender system different from that reconstructed for the other Indo-European languages: in this system, the feminine had either not yet risen as a grammatical category, or marked by the suffix  $*-ih_2$  /  $*-iéh_2-$  in both thematic and athematic declension. As a matter of fact, in the thematic inflection of Tocharian several endings seem to continue a declension in PIE  $*-ih_2$ , which is conversely attested in the athematic inflection in the other Indo-European languages. These theories have been scrutinised in §4.3.4.3, where it has been concluded that they cannot account for the Tocharian evidence; therefore, another solution was needed.

In §4.3.4.5, the generalisation of the  $*ih_2$ -inflection in place of the non-ablating  $*éh_2$ -inflection in the adjectival paradigm is explained as a secondary innovation, internal to Tocharian. This has been caused by a gradual and heterogeneous set of developments caused by formal and functional mergers of the feminine within the inherited

\**eh*<sub>2</sub>-inflection and with the neuter plural in the thematic paradigm (§4.3.4.4). At this stage, endings and forms that originally belonged to the neuter paradigm started to shift to the plural paradigm of the feminine, which, synchronically, does not attest any differentiation between nominative and oblique plural (e.g. f.pl. TchB *-na*, A *-ṃ* < PTch *\*-na* < PIE *\*-nh*<sub>2</sub> or f.pl. TchB *-nta*, A *-nt* < PTch *\*-nta* < PIE *\*-nth*<sub>2</sub>). In order to solve these mergers in some case markers, the thematic type took over endings from the athematic type, reintroducing a distinction between singular and plural in the feminine paradigm. The process involved can be interpreted as a “synergetic drift”, i.e. a set of changes aimed at reorganising linguistic traits through new parameters governing them (Lazzeroni 1997).

The drift began when the Proto-Indo-European opposition between the feminine *\*eh*<sub>2</sub>-inflection of the thematic derivatives in *\*(i)io-*, and the feminine *\*ih*<sub>2</sub>-inflection of the athematic stems started to be conveyed only by the difference between *\*<sub>[-+pal.]ā-</sub>* vs. *\*<sub>[-+pal.]a-</sub>* in the singular. In an attempt to solve the cases of homophony mentioned above, the vowel *\*-a-* (< *\*-h*<sub>2</sub>-) has been generalised, in place of the inherited *\*-ā-* (< *\*-eh*<sub>2</sub>-). This ending must have become too ambiguous, being used to mark e.g. the nominative singular (< *\*-eh*<sub>2</sub>), the oblique singular (< *\*-eh*<sub>2</sub>-*m*), the nominative plural (< *\*-eh*<sub>2</sub>-*es*), as well as the plural of the thematic neuter (< *\*-eh*<sub>2</sub>). The generalisation of *\*-a-* first affected those thematic formations that continued Proto-Indo-European suffixes derived with *\*(i)io-*. The pattern *\*<sub>[-+pal.]a</sub>* was then abstracted as a morphological marker of the feminine singular, and it spread to the rest of the thematic type (§4.3.4.5). The opposition between the new singular stem *\*<sub>[-+pal.]a-</sub>* and old plural stem *\*<sub>[-pal.]ā-</sub>* has been retained in those derived adjectives whose suffix was not etymologically palatalising (cf. sg. TchB *-rya*, A *-ri* vs. pl. TchB *-rona*, A *-raṃ*; sg. TchB *-lya*, A *-lyi* vs. pl. TchB *-llona*, A *-laṃ*; sg. TchB *-cca*, A *-cci* vs. pl. TchB *-(t)tona*, A *-(t)taṃ*), but it has been lost in the other types formed with *\*(i)io-*, which have levelled the vowel *\*-a-* also in the plural (cf. sg. TchB *-ṣṣa*, A *-ṣi* vs. pl. TchB *-ṣṣana*, A *-ṣāñ* | *-ās*; sg. TchB *-ñña*, A *-ñnaṃ* (obl.) vs. pl. TchB *-ññana*, A *-ññāñ* | *-ās*). The final result of this process was the attested bipartition of the feminine inflection of Class I, which continues the PIE thematic type (§4.3.4.6). The mismatching plural paradigm TchB *-ana* vs. TchA *-āñ* | *-ās* has been explained as a secondary innovation of Tocharian A (§4.3.3.1).

The diachronic evolution of the pronominal inflection has been investigated in §4.2.3, where it has been demonstrated that the majority of the endings of Tocharian demonstratives and pronominal adjectives can directly be traced back to Proto-Indo-European.

A main point in Chapter 3 was to track down the PIE *\*eh*<sub>2</sub>-type and the PIE *\*ih*<sub>2</sub>-type in the Tocharian noun morphology. It has been argued that Tocharian inherited and generalised a hysterodynamic ablaut paradigm in *\*(e)h*<sub>2</sub> throughout the inflection of the noun. The outcome of this reconstructed paradigm has been maintained in the Tocharian B *kantwo*-type (§3.7.1), where the PIE opposition between strong and weak stem *\*-eh*<sub>2</sub>/-*h*<sub>2</sub>- has produced the contrast between nom.sg. *-o* (PIE *\*-eh*<sub>2</sub>) and obl.sg. *-a* (< *\*-h*<sub>2</sub>-). A similar paradigm has also been reconstructed for the Proto-Tocharian ancestor of the *okso*-type (*ai*-stems with nom.sg. *-o*, obl.sg. *-ai*), and the *arṣāklo*-type (*a*-stems with nom.sg. *-o*,

obl.sg. *-ai*). The original situation has been preserved in Tocharian A, where the three inflectional types mentioned above more clearly correspond to just one type with an  $\bar{a}$ -stem (< PTch  $*a$ -stem). In §3.7.2, I have investigated the possible conditions that caused the merger between  $*(e)h_2$ -stems and  $*\bar{on}$ -stems. Finally, some  $*(e)h_2$ -stems may have been continued in the *oko*-type, where they have been reinterpreted as alternating as a result of the morpho-phonological merger of some case endings of the  $*(e)h_2$ -stems (cf. nom.sg. PTch  $*-ā$  < nom.sg. PIE  $*-eh_2$  and acc.sg. PIE  $*-eh_2-m$ ) and the neuter plural (cf. nom.obl.pl. PTch  $*-ā$  < nom.acc.pl. PIE  $*-eh_2$ ).

The members of the *šana*-type have been traced back to two different PIE stem types, which both inflected proterodynamically in Proto-Indo-European (§3.5.1): TchB *šana*, A *šām* ‘wife’ is from a stem in PIE  $*-h_2/-eh_2-$ , while TchB *lāntsa*, A *lānts* ‘queen’ and TchB *šarya* ‘(beloved) lady’ are from a stem in PIE  $*-ih_2/-ieh_2-$  (of the *devī*-type). Also in this class, the contrast between nom.sg. *-a*, obl.sg. *-o* mirrors the ablauting alternation between strong and weak stem of the suffix  $*(i)h_2/(i)eh_2$ . The generalisation of the PIE weak stem in some Tocharian obliques has been caused by the formal merger of the inherited nominative and accusative in many inflectional types. To solve this homophony, a trend of development in the evolution of Tocharian nominal morphology has been to reanalyse the inherited genitive or dative singular as the new oblique (cf. obl.sg. TchB *-a* < gen.sg. PIE  $*-h_2és$  vs. nom.sg. TchB *-o* < nom.sg. PIE  $*-éh_2$ ; obl.sg.  $\text{yo}$  < gen.sg. PIE  $*-jéh_2s$  vs. nom.sg.  $\text{ya}$  < nom.sg. PIE  $*-ih_2$ ; obl.sg. *-ai* < dat.sg. PIE  $*-h_2éi$ ).

On the other hand, it has been shown that, apart from few exceptions, the nouns of the *ašiya*-type are all of recent origin and they have calqued their paradigm from the adjectives of Class I.2. (§3.5.2, §4.3.3.1). From the adjectives, the *šana*-type and the *ašiya*-type also took the plural marker PTch  $*-na$ .

Furthermore, it has been argued that Tocharian inherited the feminine suffix  $*-ih_2$  of both the *devī*-type and the *vrkī*-type, and that these two formations merged in Proto-Tocharian. The outcome of this merger formed the inflection of the *wertsiya*-type (§3.7.3).

#### 5.4. DIACHRONY OF THE *GENUS ALTERNANS*

The Tocharian *genus alternans* reflects the PIE neuter, but it originated after morpho-phonological mergers, of which its peculiar alternating agreement is a direct outcome.

As suggested by a typological comparison with languages with similar gender systems and further confirmed by a close reconstruction of the Proto-Tocharian adjectival paradigms, the thematic neuter must have become homophonous with the masculine singular in the singular and with the feminine singular in the plural. This coalescence first took place in the adjectival system, and it was a gradual process. Indeed, in some pronouns and adjectives, we still find relics of crystallised neuter forms. Synchronically, they are either used adverbially or with pronominal function (i.e. non attributively). Since these relics are found in paradigms where, in the masculine, the contrast between nominative and oblique singular has been secondarily remarked by analogical palatalisation, the

neuter probably survived for a while also in the inflection of the modifiers, where it was differentiated from the masculine in the oblique singular. When the new alternating agreement was grammaticalised, these old neuter forms could not correlate any more with any neuter nouns and were reanalysed. On the other hand, in the plural inflection, historical neuter forms have spread to the feminine in some adjectival paradigms.

In the noun inflection, the development of both the thematic and athematic neuter has been analysed. It has been attempted to track down PIE thematic neuters in Tocharian: some of these have been continued as alternating and thus have converged in the *āke*-type, while some others have been reassigned to the masculine gender, as they synchronically belong to the *yakwe*-type. This fluctuation has been caused by the formal merger of the PIE masculine and neuter in the thematic paradigm of the singular. A similar coalescence also characterised the PIE neuter plural and the feminine. Evidence of this merger can be found in the *oko*-type, where old thematic plural forms may have been reanalysed as singular (§3.8.2.1).

I have also investigated in detail the outcome of those athematic neuters that have played an important role in the creation of new endings and in the evolution of the Tocharian gender system in general. In particular, isolated pluralia tantum and lexical plurals have been discussed in §3.8.2.2; *s*-stem formations and neuter root nouns have been treated in §3.7.1.2.

Particular attention has been paid to the evolution of an archaic class of nominals, the heteroclitics in PIE *\*r/n*. We have seen that some heteroclitic stems have been continued in Class II.1 (pl. TchB *-na*, A *-ām*), where Tocharian A has maintained both the *r*-stem of the singular and the *n*-stem of the plural. The final outcome of this development was a blended plural with the *r*-form as the stem and the *n*-form as the ending (§3.6.2). The evolution of the PIE *\*ur/n*-stems has been carried out in §3.6.1.2, where the basis for the postulation of a sound law PIE *\*-ur > \*-ru* has been laid. This metathesis can account for the origin of *r*-stem nouns with plural in TchB *-wa*, A *-u* (*-wā*, *-unt*), the unexpected *o*-vocalism in some isolated forms, and the origin and the spread of the plural marker TchB *-una*.

## 5.5. OUTLOOK

In this thesis, it has been argued that, despite the many peculiarities of its gender system, Tocharian has not preserved a more archaic gender marking than the other non-Anatolian Indo-European languages. Indeed, these peculiarities have been caused by internal developments that took place within the historical evolution of the language. Therefore, Tocharian inherited a regular three-gender contrast. In a nonattested stage, formal mergers took place, and the masculine, the feminine and the neuter influenced each other morphologically, before being fixed in the attested agreement classes. These mergers caused the functional loss of the neuter as a target gender, the rise of the new alternating agreement class, and other morphological developments aimed at remarking the



feminine. Therefore, the results of this study indicate that the gender system cannot be used to support the early split-off of Tocharian.

It is generally assumed that Tocharian offers relatively little of Indo-European interest in the domain of nominal morphology. Although the nominal system has certainly innovated and eroded, the statement that Tocharian is of only minor importance for the reconstruction of the PIE nominal system has been proven to be wrong. We have seen that extensive reductions and phonological changes have caused several irregularities in the nominal paradigms, which have mostly been solved by analogical changes to restore regularity in morphological patterns. This has led to a heavy restructuring in morphology. However, both in the regularities and in the irregularities of its nominal system, Tocharian has mostly used and refunctionalised inherited material. It is hoped that new studies will do justice to the Tocharian nominal system in the future, as this thesis has tried to do.