



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 TWO

THE GENDER SYSTEM OF TOCHARIAN:

A SYNCHRONIC OVERVIEW

In this chapter, I present a general overview of the terms and concepts that are crucial to the investigation of the category of gender in Tocharian, from both a synchronic and a diachronic perspective. In general linguistics, the literature on this topic is quite inconsistent, especially with regard to the terminology used. Therefore, an introduction to some basic notions like gender, noun class, agreement, agreement target, and agreement controller is required (§2.1). This will be followed by a brief discussion of the reconstruction of the gender system in Proto-Indo-European, including the question whether the feminine gender was recently created (§2.2). Subsequently, I will deal with the Tocharian gender system from a synchronic perspective. Particular attention is paid to the problematic status of the third Tocharian gender, the so-called *genus alternans* (§2.3). I will put forward some typological arguments and cross-linguistic comparisons to demonstrate that the *genus alternans* is a separate gender in Tocharian (§2.3.1, §2.3.2). Finally, some principles of gender assignment in Tocharian will be treated, from both a formal and a semantic point of view (§2.4).

2.1. GRAMMATICAL GENDER: TERMS AND DEFINITIONS

In linguistics, GENDER (from Lat. *genus* ‘origin, kind, species’, via Old French *gendre* ‘id.’) represents a grammatical category that has attracted a great deal of studies oriented towards both the synchronic and the diachronic investigation of the languages of the world.

In western linguistic scholarship, it has become a matter of special interest since the fifth century BCE, when the Greek philosopher Protagoras (c. 480 - c. 410 BCE) recognised three genders in Ancient Greek, classifying and dividing the nouns in ἄρρενα ‘masculine’, θήλεα ‘feminine’, and σκεύη ‘inanimate, pertaining to things’. The analysis of Protagoras is reported in the *Rhetorics* 1407b of Aristotle (c. 384 - 322 BCE), who, in view of the lack of a sex correlation for the σκεύη gender, claims that it should be defined as τὸ μετὰξὺ ‘that which stays in the middle’ (*Poetics* 1458a).² The term οὐδέτερον ‘not either, neuter’ appears

² As Belardi (1985: 82-3) clarified, Aristotle believed that, in Greek, the stem of masculine nouns had to end with an ἡμίφωνον (i.e. N, P, Σ [and Ψ, Ξ]), the stem of feminine nouns with a φωνήεν μακρόν or a δίχρονον (“two-timed”, i.e. long vowels, except for I and Y), while the stem of the third class of nouns, i.e. the neuter, could end either with an ἡμίφωνον or a δίχρονον (so, τὸ μετὰξὺ

in later grammatical traditions (Stoycs and Dionysius Thrax).³ It is remarkable that early Greek scholars already recognised that there is often no straightforward correspondence between natural and grammatical gender. That is to say, the semantics of the referent and sex, in particular, must be distinguished from linguistic gender. Strictly speaking, gender refers to a grammatical category, i.e. GRAMMATICAL GENDER, which basically fulfils two essential functions: (1) classifying nominals, and (2) referring to constituents through agreement patterns. An important analytical tool in order to understand these functions is consequently the distinction between the notion of gender and that of AGREEMENT CLASS.

According to a famous definition by Hockett (1958: 231), gender is reserved for “classes of nouns reflected in the behaviour of associated words”. An agreement class is a set of lexemes whose members each select the same set of inflectional realisations (Zaliznjak 1967: 30; Aronoff 1994: 182). The most significant pattern according to which gender is identified is consequently AGREEMENT, which commonly refers to “some systematic covariance between a semantic or formal property of one element and a formal property of another” (Steele 1978: 610).⁴ This relation is very often made by means of specific markers on one or all the elements that are linked together morphosyntactically. It follows that agreement provides the most reliable basis for defining gender and establishing the number of genders that a given language has (Corbett 1991: 105, 2000: 348).

Nouns belong to the same agreement class if they take the same agreement form under the same conditions; if a given language has nouns that belong to different agreement classes, this language has, usually, more than one gender. In the scientific literature, we sometimes find the expression NOUN CLASS as a blanket term for gender (Aikhenvald 2000: 18-20). Properly, a noun class is a specific group of substantives that have some characteristics in common, either semantic (e.g. the meaning and the features of the referent) or formal (e.g. phonological and/or morphological). However, this nomenclature is mostly found within studies on non-Indo-European languages: languages with noun classes have more than three “genders”, sometimes without a distinction between masculine and feminine.⁵ As a consequence, the difference between gender and noun class is correlated with grammatical tradition rather than linguistic data.

‘intermediate’). As a consequence, what Aristotle did was transposing Protagoras’ distinction between ἄρρενα, θήλεα, and σκεύη “dal piano delle caratteristiche del denotato al piano delle caratteristiche del segno linguistico [...]” (p. 83).

³ For a synthetic account of Greek and Latin linguistic terminology on grammatical gender, see recently Kilarski (2013: 59-82) with references therein.

⁴ A distinction is sometimes made between “agreement” and “concord”. This is based on the type of domain: the former is sometimes preferred for agreement within the verbal domain, the latter for agreement within the nominal domain. Since there is no evident advantage in using such a distinction for Indo-European studies, I will consistently use the term “agreement” for referring to both nominal and verbal domains.

⁵ See mainly Corbett (1991: 146, 2007), who argues that there is no real difference between “gender” and “noun class”: the former is preferred in Indo-European and Dravidian studies, and the latter in Caucasian, African, and Australian studies. Cf. also Kilarski (2013: 8): “[T]he term ‘gender’ is usually

As mentioned above, languages use grammatical categories to group together words or morphological forms that share semantic and/or formal features. Morphosyntactically, agreement allows to overtly mark that a certain adjective refers to a given noun, and not to others.

In nominal agreement, we can find different types of entities, namely a noun and its modifier(s). The element triggering gender agreement is the AGREEMENT CONTROLLER and the element that shows agreement is the AGREEMENT TARGET. Thus, a language has a gender system if noun phrases have an agreement target that shows gender marks (Corbett 2006: 4f.). See for instance the following example from Latin:

<i>bona</i>	<i>ancilla</i>	<i>dominās</i>	<i>amat</i>
good:NOM.SG.F	maid:NOM.SG.F	mistress:ACC.PL.F	love:3SG.PRS.ACT

“The good maid loves the mistresses”.

DOMAINS	<i>bona ancilla</i>	<i>ancilla amat</i>
TYPE	nominal agreement	verbal agreement
CONTROLLER	<i>ancilla</i>	<i>ancilla</i>
TARGET	<i>bona</i>	<i>amat</i>
FEATURES	number, gender, case	person, number
VALUES	singular, feminine, nominative	third, singular

In the example, there are two different domains: the first is between the noun *ancilla* ‘maid’ and its modifier, the adjective *bona* ‘good’ (NOMINAL DOMAIN), while the second is between the subject of the sentence, i.e. *ancilla*, and *amat* ‘loves’, its predicate (VERBAL DOMAIN). The noun *ancilla* is the agreement controller in both domains, while the adjective *bona* and the verb *amat* are the agreement targets. The features expressed are case (nominative), gender (feminine), number (singular), and person (third).

The controller and the target stand somehow in asymmetric relation to each other and this asymmetry has a formal and a semantic side. On the semantic side, the information in the agreement marking is pertinent to the controller, but not to the target (Corbett 2006: 1). On the formal side, the target depends directly on the controller, implying that changing the controller is expected to have consequences for the target, but not vice versa.

Now, it may be clear that the category of gender has a different status with respect to some other nominal categories, such as number. Indeed, if a given language expresses both the category of gender and of number, a noun usually has a set of inflected forms that depends on the number values that this language has. On the other hand, nouns typically cannot have different inflected forms according to gender, given that it is inherently stored

reserved for the relatively small, sex-based system of the Indo-European type”. An in-depth and clear discussion on the differences between noun class, agreement class, and inflectional class has been offered by Babou & Loporcaro (2016) in a paper dealing with the noun classes of Wolof, a Niger-Congo language.

in each substantive. Taking the nominative of Lat. *ancilla* as an example, we have two different inflected forms for the category of number, the singular *ancilla* and the plural *ancillae*, but only one with respect to the category of gender, i.e. the feminine. This means that we cannot find any masculine or neuter counterpart of Lat. *ancilla*. In the agreement targets, both gender and number are properties expressed by inflection (Booij 1994). In other words, adjectival and pronominal gender are inflectional and have a syntactic function, while the noun gender, i.e. the gender of the controller, is lexically specified and stored.

Although many languages normally show oppositions of gender, the modality through which these oppositions are expressed is not always the same. First of all, gender is not a universal category: many languages completely lack it (e.g. Turkic languages), while others display *formal* gender distinctions only in particular lexical classes (e.g. English only in the pronominal system).

The mechanisms by which nouns are allotted to genders – the ASSIGNMENT SYSTEM – may involve two basic principles: the meaning and the form.

The first principle is found in those languages where the gender system is assigned by semantic patterns: there are STRICT SEMANTIC ASSIGNMENT SYSTEMS and PREDOMINANTLY SEMANTIC ASSIGNMENT SYSTEMS (Corbett 1991: 8-30).

On the contrary, in many other languages semantic rules are not enough to assign gender to nouns, but other rules are required. Usually, if there is an opposition between masculine and feminine, one of the semantic factors that encodes gender is the sex: nouns denoting males are masculine, and nouns denoting females are feminine. However, this is often only a tendency (cf. the common example Germ. *Mädchen* ‘girl’, which is neuter, not feminine). As a matter of fact, the vast majority of nouns in these languages are classified according to formal mechanisms, i.e. the signifier. As a consequence, they have a FORMAL ASSIGNMENT SYSTEM. Among the formal criteria, some languages employ phonological information, like initial phonemes, final phonemes, or the prosodic structure of a given word. Another type of formal gender assignment is morphological, where the gender of a noun can be detected from morphological information, like inflection, derivation, and compounding. Usually, a morphological assignment system requires knowledge of the inflectional classes. However, gender crucially differs from the notion of inflectional class, which is defined as “a set of lexemes whose members each select the same set of inflectional realizations” (Aronoff 1994: 182). That is to say, an INFLECTIONAL CLASS includes nouns with the same inflectional characteristics, but it may consist of nouns with different genders. It follows that in formal assignment systems gender may be particularly difficult to predict, because the gender of many nouns turns out to require knowledge of the inflectional classes. The vast majority of the Indo-European languages show this typical formal assignment system.

To conclude, one can say that genders are paradigmatic classes of nouns, established on syntagmatic evidence, since they can be identified on the basis of the agreement with nominal modifiers. They can be assigned according to semantic or semantic/formal principles and form a relatively small, closed system.

2.2. AN INTRODUCTION TO THE GENDER SYSTEM OF PROTO-INDO-EUROPEAN

Since the late nineteenth century, the Proto-Indo-European category of gender has been one of the most enduring issues within Indo-European studies and it keeps being the topic of controversial analyses oriented towards the historical, the typological, as well as the areal perspective.⁶

In the Indo-European domain, semantic associations are a rather useless predictor to establish the gender of nouns. Indeed, the vast majority of the oldest Indo-European languages display a three-gender system, constituted by the MASCULINE, the FEMININE, and the NEUTER, with a predominantly formal assignment system. Natural sex certainly played an important role in the distinction between masculine and feminine. The third gender is the neuter, which is typical of those nouns referring neither to male, nor to female referents and to non-human entities in general. However, a given noun may certainly be masculine or feminine, even when it does not refer to animate entities (e.g. Gk. πόλεμος ‘war’ m.; Lat. *rosa* ‘rose’ f. etc.). This state of affairs is attested in many ancient Indo-European languages, like Sanskrit, Avestan, Ancient Greek, and Latin, and still today in some modern ones (e.g. in Modern Greek, German, Russian, etc.). On the other hand, amongst others, Romance languages (with the exception of e.g. Romanian), most of the modern Indo-Aryan languages (e.g. Hindi and Rajasthani languages), and modern Celtic languages have reduced the number of genders, as they have just two, the masculine and the feminine. This type of binary system is not semantically based, because the distribution of the substantives in a given gender is highly idiosyncratic. The idiosyncrasy mirrors the fact that the referent of most words has no sex. This has been a general property of Indo-European languages insofar as they preserve gender distinctions.

In several ancient Indo-European languages, the correlation between gender and inflectional class is not a one-to-one relationship. In Latin and Ancient Greek, for instance, *ā*-stems (the so-called “first declension”) are predominantly feminine and *o*-stems (the so-called “second declension”) are masculine or neuter, but still we find inconsistencies in the distribution of the genders in these two declensions. For example, Lat. *poēta* ‘poet’, *agricola* ‘farmer’, *frātrīcīda* ‘fratricide’ and Gk. ὁ πολίτης ‘citizen’, ὁ νεανίας ‘young man’, ὁ στρατιώτης ‘soldier’ are all of masculine gender but they belong to the first declension, while Lat. *platanus* ‘planetree’, *domus* ‘house’, *alvus* ‘womb, belly’ and Gk. ἡ νῆσος ‘island’, ἡ ἔρημος ‘desert, wilderness’, ἡ ὁδός ‘road’ are feminine second declension nouns. In the athematic type (Greek and Latin third declension), which includes several inflectional classes, almost no relevant pattern allows to distinguish *a priori* the masculine from the feminine.

⁶ For recent bibliography and up-to-date discussions on the PIE gender system, see Ledo-Lemos (2003), Matasović (2004), Luraghi (2006, 2009, 2011), Melchert (2000, 2014), and the papers collected in Neri & Schuhmann (2014). See also the accurate recent overview by Lundquist & Yates (2018).

As already noticed above, the analytical tool that allows to recognise the genders of a language is agreement. The Indo-European tripartite system is accordingly identified through a morphosyntactic agreement system that involves nouns, adjectives, pronouns, participles, etc. The same system of gender is reconstructed also for the proto-language, or at least it was up until the late 19th century. Indeed, even before Anatolian was discovered, leading scholars already recognised that the feminine gender was created the latest, through the application of internal reconstruction. According to this theory, (Pre-)Proto-Indo-European appears to have had originally a binary noun class opposition between an animate and a neuter gender. The feminine would have arisen later.

However, thanks to the decipherment of Hittite texts, it was discovered that the Anatolian language completely lacks a *grammatical* feminine gender, since it only displays a distinction between common (or animate) gender and neuter (or inanimate) gender (Hitt. *kāš antuḫšaš* ‘this man’, common gender, vs. *kī ḫuitar* ‘this animal’, neuter gender).⁷ As a matter of fact, one of the most enduring questions within the Indo-European field has been the origin of the feminine gender, from the inception of modern historical linguistics by Rask and Bopp, through the work of the Neogrammarians (e.g. Brugmann 1891), but a special impetus for this continuing debate was provided by the decipherment of Hittite.

The French Indo-Europeanist Antoine Meillet (1921: 211-229, 1931) questioned the three-gender system for the older stage of Proto-Indo-European. He proposed that the distinction between masculine and feminine within the “animate” gender would have been a recent innovation: “[a]u genre animé, marqué par le masculin, avec une différenciation éventuelle pour le cas particulier du féminin, s’oppose le genre inanimé, le «neutre»” (Meillet 1921: 213). Meillet further observed that in many ancient Indo-European languages we can find pairs of words with similar meanings, but one is either masculine or feminine, while the other is neuter. This peculiar gender-contrast in some limited sections of the lexicon would be the preservation of an old state of affairs where an opposition between active/agentive and inactive/inagentive entities can be reconstructed. Furthermore, it is well known that some old Indo-European languages have adjectival classes that exhibit only two-way sets of forms, making no distinction between the masculine and the feminine, which are condensed in one form. This is different from that of the neuter (cf. Lat. *trīstis* m./f. vs. *trīste* nt. ‘sad’; Gk. *ἄδικος* m./f. vs. *ἄδικον* nt. ‘unjust, wrong’).

There are two different hypotheses concerning the lack of feminine gender in Anatolian. The *Schwundhypothese* claims that the feminine was not attested in Anatolian simply because this Indo-European branch has lost this category value that consequently should be reconstructed for the proto-language. On the other hand, the *Herkunftshypothese* (whose most radical variant is the Sturtevant’s Indo-Hittite hypothesis) claims exactly the opposite, stating that the proto-language started to grammatically encode feminine gender only after the split of Anatolian from the rest of

⁷ For a recent discussion on the feminine gender in Hittite and the functions of the suffix **-eh₂* in Anatolian and in Proto-Indo-European, see Melchert (2014: 257-271).

the Indo-European family. As a consequence, there would never have been a separate feminine gender in Proto-Anatolian. After almost a century of debate, it is today commonly agreed that the three-gender system⁸ known from most Indo-European languages has replaced an earlier animacy-based two-gender system and that the Anatolian situation is actually archaic (see recently Melchert forth.; Kim 2018a with references), even though it is still a matter of discussion how exactly this development has come about.⁹ In this reconstructed system, animate and inanimate gender were prototypical categories, where a given noun could be assigned to a given gender even if it did not share all the features of a certain category (Luraghi 2014).

I therefore agree with the current scholarly mainstream according to which the emergence of a grammatical feminine gender is a late phenomenon in the evolution of the prestages of Proto-Indo-European, which resulted in a reconstitution of the entire gender system of the proto-language. As we have seen, beside the Anatolian data, strong evidence from other Indo-European languages points unambiguously to the late creation of the feminine gender and to the subsequent reconstruction of a two-gender system for the oldest phases of Proto-Indo-European. A similar conclusion is suggested by the fact that in archaic inflectional classes, masculine and feminine gender do not attest formal differences in the declensions. These differences are only limited to the masculine and the neuter (e.g. in some Latin and Ancient Greek adjectival and pronominal inflections). On the other hand, feminine nouns are often characterised by suffixation, being therefore more marked. Furthermore, where there was a necessity to make a difference between masculine and feminine explicit, different nouns were used. Examples are numerous from the kinship lexicon: Skt. *mātár-* ‘mother’ f. (< PIE **méh₂tēr*) : *pítár-* ‘father’ m. (< PIE **ph₂tér*); Gk. *υῖός* ‘son’ m. (< PIE *suH₂i-*) : *θυγάτηρ* ‘daughter’ f. (< PIE **d^hugh₂tér*); Lat. *frāter* ‘brother’ m. (< PIE **b^hréh₂tēr*) : *soror* ‘sister’ f. (< PIE **suesōr*). Etymologically, the last word contains PIE **sor-*, which can be found in Anatolian as an independent feminine suffix, e.g. Hitt. *išhaššaraš* ‘lady, mistress’ from *išhaš* ‘sir’, Hitt. *haššuššaraš* ‘queen’ from *haššuš* ‘king’ (Ledo-Lemos 2003: 133-5).

⁸ Actually, there is another view on the PIE gender system, which assumes that a fourth gender should be added to the commonly assumed three, i.e. the collective. The supporters base this view on the peculiar agreement pattern of the collective nouns ending in **-ā* (< **-eh₂*), like in the Ancient Greek type *ἕτερα καὶ ἕτερα ὕδατα* (nom.pl.) *ἐπιρρεῖ* (3sg.) ‘sundry and different waters flow’. This agreement of a neuter plural with a singular verb would represent the relic of the PIE fourth gender. This hypothetical fourth gender would have subsequently been reanalysed as a mere inflectional mark and would have given rise to the neuter plural ending in *-a/-ā*. See Loporcaro & Paciaroni (2011) and Hackstein (2012). On the other hand, some other scholars argue that the collective was a category of number, instead of gender, reconstructing a four-way contrast for animate nouns (namely, singular, dual, count plural, and collective plural), while inanimate nouns completely lack count plural. See Melchert (2000, 2011).

⁹ On the so-called “*i*-mutation” in Luwian and Lycian, see Starke (1990: 85-9) and Oettinger (1987). Rieken (2005) has recently shown that “*i*-mutation” has nothing to do with either the *devi-* or the *vrki-* suffix.

Some functional proprieties that invite to reconstruct an old opposition between animate and inanimate gender have also been identified. Meillet (1931) first pointed out that an important feature marking the division between what is animate and what is inanimate is linked to the capability to move and cause an action and/or an event. Confirmation of such a subdivision comes from the lexical level. Indeed, by comparison of some old Indo-European languages, we can find substantives that describe the same referent as a dynamic entity, on the one hand, and a static entity, on the other hand. The first kind of substantives pertains to the masculine or the feminine gender, while the second kind of substantives to the neuter gender.¹⁰

All these data clearly point to the fact that the gender system of the Anatolian languages may be archaic. From a morphological point of view, the original twofold system consisted only of the masculine and the neuter (mirroring the Anatolian common and neuter genders), while the feminine gender was later formed through the addition of special suffixes. There is little agreement about the details of this development and, in particular, on how the suffixes **-ih₂/-ǵeh₂* (“athematic”) and **-(e)h₂* (“thematic”) started to mark the feminine gender. In this field, the position of Tocharian is open to questions that still need to be definitively answered. Indeed, it has recently been claimed that Tocharian departed from Proto-Indo-European immediately after Anatolian and that the unexpected distribution of the grammatical feminine markers would be a strong evidence for such an early split (see e.g. Kim 2009, 2014; Hackstein 2012). We will deal with this diachronic issue in the following chapters.

2.3. THE GENDER SYSTEM OF TOCHARIAN

Although the modalities of expressing gender contrasts are not always clear, for the great majority of the Indo-European languages there is generally no dispute as to the number of genders they have. For a few others, however, the matter is more complex. Tocharian is one of those languages.

Like in most of the languages with gender, also in Tocharian the element triggering gender agreement is usually a noun: the agreement controller. Gender agreement occurs in adjectives, numerals from ‘one’ through ‘four’, demonstrative pronouns, some interrogative and relative pronouns, some participles and gerundives: these are the agreement targets.

According to a classical theory, Tocharian displays only two grammatical genders in both the controller and the target. These are the MASCULINE and the FEMININE. Remnants of the Indo-European neuter are indeed limited to some “crystallised” forms, like the singular of the demonstrative pronoun TchB *te*, A *ta-* < PIE **tod* (Skr. *tát*, Gk. *τό*, etc.; cf.

¹⁰ On these pairs, see also Lazzeroni (1998b).

§2.3.2, §4.2.3). In the following, some typical examples of masculine agreement are presented:¹¹

TH113 a2-3

SG.	^T <i>še</i>	^C <i>šamāne</i>	<i>postaiñe</i>	<i>tenkän-c</i>
	one:NOM.SG.M	monk:NOM.SG.M	even	hinder:3SG.SBJ-2SG.SUFF

“If only one monk stops you”. (cf. Peyrot 2013: 311)

B337 a1

PL.	^C <i>šamāni</i>	^T <i>makci</i>	<i>nauniyenta</i>	<i>parem</i>
	monk:NOM.PL.M	self:NOM.PL.M	jewel:OBL.PL.A	bring:3PL.PRS

“The monks carry off the jewels by themselves”. (cf. Ogihara 2009: 327)

A394 b1

SG.	^T <i>šom</i>	^C <i>koṃ</i>	^T <i>wäc</i>	^C <i>koṃ</i>	<i>šwāḱsi</i>	<i>mā</i>	<i>tāp</i>
	one:OBL.SG.M	day:OBL.SG.M	second:OBL.SG.M	day:OBL.SG.M	food	NEG	eat:3SG.PRT

“On the first and on the second day, he did not eat food”. (cf. Thomas 1957: 128)

A151 a1

PL.	^T <i>cesām</i>	<i>špät</i>	^C <i>koṃsam</i>
	this:OBL.PL.M	seven	day:LOC.PL.M

“In these seven days”.

Some examples of feminine agreements are the following:

IT248 b5-6

SG.	<i>omte</i>	<i>kr,i</i>	^C <i>ašiya</i>	^T <i>šär(ps)emaneñña</i>	^T <i>stmausa</i>	<i>tākoy</i>
	there	if	nun:NOM.SG.F	pointing out:NOM.SG.F	stand:PRT.PTC.N.SG.F	be:3SG.OPT

“If a nun were standing there, giving instructions”. (cf. Peyrot 2013: 348)

AS18B a2

PL.	^T <i>toy</i>	^C <i>ašiyana</i>	<i>po</i>	^T <i>lalāṃšuwa</i>	<i>stare</i>
	this:NOM.PL.F	nun:NOM.PL.F	all	carry out:PRT.PTC.NOM.PL.F	be:3PL.PRS

“These nuns have arranged all”. (cf. Meunier 2013: 155)

¹¹ In the examples below, ^Tx and ^Cx indicate the agreement target and the agreement controller respectively.

A187 a1

SG.	^T <i>lyāki</i>	^T <i>kālkālyi</i>	^C <i>tkam</i>	<i>naṣ</i>
	flat:NOM.SG.F	accessible:NOM.SG.F	earth:NOM.SG.F	be:3SG.PRS

“The earth is flat and walkable”. (cf. Knoll 1996: 16)

A59 a1

PL.	<i>sarkk</i>	<i>oki</i>	<i>tākar</i>	^T <i>ñākcyāñ</i>	^C <i>tkañi</i>
	sequence	like	be:3PL.PRT	divine:NOM.PL.F	earth:NOM.PL.F

“The divine earths were like gradual stage(s)”. (cf. Sieg 1952: 42)

As is clear, the substantives TchB *ṣamāne* ‘monk’, TchA *koṃ* ‘day, sun’, and TchB *asıya* ‘nun’, TchA *tkam* ‘earth’ are the controllers, while the various modifiers – adjectives, pronouns, participles – are the targets. As demonstrated by the agreeing modifiers, the first pair of nouns is masculine, while the second is feminine.

In addition, Tocharian has a large and productive class of nouns that constitutes a third, separate category: the *GENUS ALTERNANS*. As pointed out by Igartua (2006: 58), the term *genus alternans* “was coined to cover the specific nature of the third gender in Tocharian, which combines agreement traits of the other two, the masculine and the feminine”. See the following examples:

B11 a5

SG.	<i>päst</i>	<i>kl(au)tkoträ</i>	^T <i>se</i>	^C <i>lakle</i>
	away	turn:3SG.PRS.MID	this:NOM.SG.A	suffering:NOM.SG.A

“This suffering turns away”. (cf. Schmidt 1974: 273)

B88 b5

PL.	<i>sū</i>	^T <i>toṃ</i>	^C <i>läklenta</i>	<i>lkāṣṣäm</i>
	he:NOM.SG.M	this:NOM.PL.F	suffering: NOM.PL.A	see:3SG.PRS

“He sees these sufferings”. (cf. Schmidt 2001: 318)

A341 b3

SG.	^T <i>cam</i>	^C <i>oko</i>	<i>wärpnätär</i>
	that:OBL.SG.M	fruit:OBL.SG.A	enjoy:3SG.PRS

“[She] enjoys that fruit”. (cf. Sieg 1952: 40)

A57 b2

PL.	^T <i>s,kaṣinās</i>	^C <i>okontu</i>	<i>eṣāntās</i>	<i>pñintu</i>	<i>ese(ñc)</i>
	happy:OBL.PL.F	fruit:OBL.PL.A	giving: PRT.PRS.PL	merit:OBL.PL.A	give:3PL.PRS

“[They] give merits giving fruits of happiness”.

Although the agreement targets display only two distinct sets of forms, one for the masculine (nom.sg. TchB *se* ‘this’; obl.sg. TchA *cam* ‘that’) and one for the feminine (nom.pl. TchB *toṃ* ‘these’; obl.pl. TchA *s,kaṣinās*), they stand in agreement with the same

noun (TchB *lakle* ‘suffering’ and TchA *oko* ‘fruit’), revealing a third agreement environment that combines traits of both the masculine and the feminine. And this agreement is precisely *alternans*, because it “alternates” masculine agreement in the singular and feminine agreement in the plural.

From a historical point of view, the *genus alternans* in part mirrors the Proto-Indo-European neuter, because a number of alternating nouns historically reflect Indo-European neuters (e.g. TchB *yasar*, A *ysār* alt. ‘blood’ < PIE **h₁ésh₂-r* or the collective **h₁ésh₂-ōr* nt. see §3.6.2.1).

At this point, in order to better understand the Tocharian gender system, an important analytical tool that needs to be mentioned is the distinction between CONTROLLER GENDER and TARGET GENDER.¹²

Using the nomenclature and the definitions by Corbett (1991: 151), we can state that the controller gender is the gender into which nouns are divided, while the target gender is the gender which is marked on the modifiers. This means that there is no specific set of forms in the modifiers that specifically mark a given gender. In other words, the controller gender is lexically marked on a given noun, while the target gender provides, on the morphosyntactic level, the creation of sets of agreement patterns that are related to the gender of the noun.

From a typological point of view, one could therefore say that Tocharian has an opposition between two target genders – the masculine and the feminine – and three controller genders – the masculine, the feminine, and the *genus alternans* – which are regularly defined on the basis of the agreement between a noun and its modifier(s).

Table II.1. Correlation between gender and number in Tocharian

GENDER	NUMBER	
	SINGULAR	PLURAL
MASCULINE	masculine	masculine
<i>GENUS ALTERNANS</i>	masculine	feminine
FEMININE	feminine	feminine

In other words, the intraparadigmatic opposition between the three Tocharian agreement classes is based on the fact that the feminine is opposed to the *genus alternans* in the singular, while the masculine is opposed to the *genus alternans* in the plural. The masculine and the feminine are opposed to each other both in the singular and in the plural.

¹² I used this terminology because it seems to be better known and used in the literature. The pair target vs. controller gender mirrors Hockett’s selective vs. inflectional gender (1958: 230) and late Corbett’s non-autonomous vs. autonomous gender (2011: 459f.).

2.3.1. THE STATUS OF THE TOCHARIAN *GENUS ALTERNANS*

The Tocharian system of gender is uncommon and typologically rare within the Indo-European domain. For this main reason, both its synchronic and diachronic analysis have become controversial. From a synchronic point of view, the main matter of debate has been the linguistic analysis of the *genus alternans*. This problem is linked to a central working question: how many genders did Tocharian have? The answer is not obvious, as one might imagine. In what follows, I will deal with the synchronic status of the third Tocharian gender, putting forward typological arguments and cross-linguistic comparisons with the Romance languages, in general, and with Romanian and Standard Italian, in particular. I argue that the Tocharian *genus alternans* is to be regarded as a fully-fledged gender value, formally and semantically opposed to both the masculine and the feminine.

Almost all relevant grammars and handbooks on Tocharian start the discussion on the category of gender reporting that both Tocharian languages would display only two genders, the masculine and the feminine (but cf. Winter 1998: 159).¹³ This statement is, for example, present in the *Elementarbuch* (TEB §65-66), in the introduction to Tocharian by Krause (1971), more cautiously in the two excellent handbooks on Tocharian by Pinault (1989, 2008), but also in Schmidt (2018: 215f.; cf. also Kim 2006: 726). Also in other works on Tocharian nominal morphology, the *genus alternans* has been usually treated as a “group of nouns”, or, more specifically, as an “agreement class” (Kim 2009: 73-4; Fellner 2014: 16). It is consequently not referred to as a gender in its own right, but a sort of gender-like category, paradigmatically different from the masculine and the feminine.

The books and articles quoted before are mainly historically orientated, so that a discussion on the gender system from a synchronic and a typological point of view is not expected. As we have seen, a new publication in this field is Hartmann (2013), whose aim is to provide a detailed account of the synchronic aspects of the category of gender in Tocharian (pp. 26-8). However, Hartmann only claims that in the historical attestation of Tocharian languages, they display two target genders (masculine and feminine) and three controller genders (masculine, feminine, and the alternating gender). He also argues that in the literature on gender (he refers to Busmann 2008), the term *Genus* is sometimes employed as a synonym of *Nominalklasse*. However, Hartmann affirms that it is more correct to use *Genus* instead of *Nominalklasse* for Tocharian, because in these languages male entities are sorted in the masculine gender and female entities in the feminine

¹³ Some handbooks (e.g. Krause & Thomas 1960) report that Tocharian has three genders including the neuter. On the status of the Tocharian neuter gender, i.e. lexical “crystallised” forms that go back to the PIE neuter, see the next paragraph.

gender (p. 26).¹⁴ No matter whether we accept this argument or not, I think it does not say anything new on the analysis of the *genus alternans*.

Given the special role Tocharian has acquired within the study of the gender system, I believe it is important to shed new light on the typological status of the *genus alternans*. The problem here is not only interpreting whether nouns of this class are neither masculine nor feminine, or are both masculine and feminine, but rather if we have to consider a controller gender like the Tocharian *genus alternans* as a real gender or not. Therefore, the issue is not purely definitional.

Various analyses can be put forward in order to interpret the Tocharian alternating gender. It can be or it has been considered as:¹⁵

- (1) a real gender: a gender value;
- (2) an “inquate” gender: a group of substantives lexically marked as exceptions;
- (3) an agreement class;
- (4) a problematic category that mainly refers to derivational instead of inflectional matters.

The latter possibility (4) has been advocated by Acquaviva (2008: 148f.) for the Italian type *braccio* : *braccia* ‘the arm(s)’, which shares, in many respects, similarities with the Tocharian alternating gender (see below).¹⁶ However, the third Tocharian gender cannot be regarded as a derivational category, because alternating nouns evidently have a morphological plural and not a lexical plural. Furthermore, they are not limited to only one inflectional class with a single specific plural ending (see §2.4). As a consequence, this option is not to be further considered.

Before analysing the Tocharian *genus alternans* as an agreement class (3), some terminological details must be clarified. As noticed above, the agreement class can be considered as the tool thanks to which we deduce gender (Zaliznjak 1967). That is, the gender of a noun is inferred from the gender-marking on associated elements. As a consequence, suggesting that Tocharian has two genders and three agreement classes does not say anything on the status of the *genus alternans*: once we have recognised that a language has two or more agreement classes, we must proceed further to establish if those agreement classes can be analysed as real gender values.

Usually, any language has as many genders as agreement classes. On the other hand, there are some cases that make the relation between gender and agreement class not straightforward. For our discussion, a comparison with Standard Italian is useful. Like most of the other Romance languages, Italian has reduced the three-gender system of

¹⁴ Hartmann (2013: 26) further says that the term *Nominalklasse*, i.e. noun class, should be used as a synonym of *Deklinationssklasse*, e.g. inflectional class, but I cannot agree with this terminological choice for the reasons showed above (§2.1).

¹⁵ See also Loporcaro (2018: 92f.).

¹⁶ For criticism on Acquaviva’s account, see Loporcaro & Paciaroni (2011: 403f.).

Latin into a two-gender system, losing the neuter as a category value. As a consequence, we would expect only two agreement classes, one for the masculine and one for the feminine. However, Standard Italian shows a limited class of nouns that behaves exactly as the Tocharian *genus alternans*. Some examples are given below:¹⁷

Table 11.2. Italian “alternating” nouns

	SINGULAR			PLURAL	
MASCULINE	<i>il braccio</i>	‘the arm’	FEMININE	<i>le braccia</i>	‘the arms’
	<i>il dito</i>	‘the finger’		<i>le dita</i>	‘the fingers’
	<i>il lenzuolo</i>	‘the bed sheet’		<i>le lenzuola</i>	‘the bed sheets’
	<i>l’uovo</i>	‘the egg’		<i>le uova</i>	‘the eggs’
	<i>il paio</i>	‘the pair’		<i>le paia</i>	‘the pairs’

This peculiar group of nouns shows masculine agreement in the singular and feminine agreement in the plural, as is clearly demonstrated by the article, which is inflected as masculine in the singular (It. *il, lo*) and feminine in the plural (It. *le*).¹⁸ Applying the rules given above, it must be concluded that the Italian type *braccio : braccia* constitutes a third gender value. However, there is broad consensus among scholars (and Italian speakers) that it does not constitute a separate gender in Standard Italian. The main argument adduced to support the latter analysis is that this kind of agreement is limited to only one inflectional class with more or less thirty members.¹⁹ This class is very unproductive and closed, and it has been progressively eroded over the last centuries (Loporcaro, Faraoni & Gardani 2014: 5-6), developing a more recent masculine plural variant that is clearly based on the (masculine) singular form, e.g. *il braccio : i bracci, il lenzuolo : i lenzuoli* (Dressler & Thornton 1996: 16; Acquaviva 2008: 155). Given the fact that this group cannot form a new gender, not even a controller gender (like instead for Romanian and Tocharian), one could say that Italian has two genders and three agreement classes (masculine, feminine and the type *braccio : braccia*). However, this claim does not bring us any further, because, as we have already said, the agreement is the tool for establishing gender values, and, therefore, it should still have three genders.

¹⁷ I do not mention the gender system of Central-Southern Italo-Romance dialects, where the alternating gender is to be analysed differently. See Loporcaro & Paciaroni (2011: 41off.) and the relevant sections in Loporcaro (2018).

¹⁸ A similar agreement environment can also be found in Modern French, although it is just limited to three substantives, *amour* ‘love’, *délice* ‘delight’, and *orgue* ‘organ’, which, like the Italian type *braccio : braccia*, show masculine agreement in the singular and feminine in the plural.

¹⁹ In fact, other inflectional classes that show the same agreement environment as the type *braccio : braccia* can be found, for example, in *il carcere, le carceri* ‘prison(s)’ and *il gregge, le greggi* ‘flock(s)’. However, this inflectional class is extremely marginal and more closed than the type *braccio : braccia*. See Loporcaro (2016: 950 fn. 16).

This problem brings us to the notion of INQUORATE GENDER. The term has been coined by Corbett (1991: 170-2) in referring to those agreement classes with insufficient members, which should be lexically marked as exceptions. This peculiar type of agreement class is “inquorate” because it has a few members and constitutes a closed category (cf. Igartua 2006: 59: “[I]nquorate genders are a kind of peripheral phenomena affecting a minimal part of the lexicon”). Although Corbett in his book does not deal with the Italian type under discussion, following Igartua (2006: 69) and Loporcaro (2016: 930 fn.16), it can be considered an inquorate gender precisely because it fulfils all the properties that an inquorate gender should have typologically.

Returning to Tocharian, I think there is now sufficient evidence for claiming that it has a three-gender system, including the *genus alternans*. First, the third Tocharian agreement class fulfils the claim by Hockett (1958: 231) and Corbett (1991: 105) that genders are classes of nouns reflected in the behaviour of associated words. Second, from the point of view of the noun inventory, we can find a wide range of substantives in the *genus alternans*, which is also productive, since the most recent loanwords not referring to human entities usually are placed in this category. Third, as Hartmann (2013) further demonstrated, the *genus alternans* is a quite coherent class also from a semantic point of view, since substantives pertaining to this gender never refer to animate entities. The situation of Tocharian is therefore parallel to the one of Romanian.

On several occasions, Corbett (e.g. 1991: 150-154, 2013: 93f.) exemplifies the distinction between target and controller gender using Romanian, a modern Romance language for which three genders are assumed by the vast majority of the scholars, although the sets of distinct agreeing forms available to mark gender values on the modifiers are just two:²⁰

Table 11.3. Target and controller gender in Romanian

	SINGULAR	PLURAL
(1) MASCULINE	<i>băiat bun</i> '(a) good boy'	<i>băieți bun-i</i> 'good boys'
(2) NEUTER	<i>scaun bun</i> '(a) good chair'	<i>scaune bun-e</i> 'good chairs'
(3) FEMININE	<i>fată bun-ă</i> '(a) good girl'	<i>fete bun-e</i> 'good girls'

As is clear, although the adjective *bun* ‘good’ displays only two distinct sets of forms, one for the masculine and one for the feminine, we have three substantives (*băiat* m. ‘boy’,

²⁰ Actually, the analysis of the Romanian gender system has become a disputed argument among the specialists of Romance languages. A three-gender analysis is today maintained by several scholars, e.g. Matasović (2004: 51f.), Igartua (2006: 60f.), Acquaviva (2008: 135ff.), Loporcaro & Paciaroni (2011), Loporcaro (2016, 2018). In contrast, a two-gender analysis is argued by e.g. Maiden (2016), Bateman & Polinsky (2010). For a discussion on the term “neuter” for the third Romanian controller gender, see Maiden (2016: 40-41).

scaun nt. ‘chair’, *fatã* f. ‘girl’) in agreement with the same modifier, which shows three different agreement environments according to the gender of the substantive with which it agrees. In a manner similar to Tocharian, the so-called neuter nouns select agreement targets formally identical to the masculine in the singular and to the feminine in the plural. But the entire paradigm of a neuter noun and its gender agreement show a combination of agreement forms that differ from those used for the masculine and the feminine.

Still, there is another piece of evidence that clearly demonstrates that the Tocharian alternating gender must be regarded as a gender value in its own right. Again, this evidence comes from a cross-linguistic comparison between Tocharian and Standard Italian in nominal agreements where two alternating nouns are syntactically coordinated (non-canonical agreement). Look at the following example:

<i>Il</i>	<i>bracci-o</i>	<i>e</i>	<i>il</i>	<i>dit-o</i>	<i>sono</i>	<i>rott-i</i>
DEF:SG.M	arm:SG.M	and	DEF.SG.M	finger:SG.M	be:3PL.PRS	broken:PTP.PL.M

<i>Quest-i</i>	<i>sembrano</i>	<i>davvero</i>	<i>brutt-i</i>
this:PL.M	look:3PL.PRS	really	horrible:PL.M

“The arm and the finger are broken. These are so horrible”.

In the sentence above, the coordination of two alternating nouns, i.e. *braccio* ‘arm’ and *dito* ‘finger’, inflected as singular crucially results in a masculine plural agreement in the modifiers (*rott-i* ‘broken’, *quest-i* ‘these’, *brutt-i* ‘horrible’). This agreement seems to be ungrammatical, because we would expect the targets inflected as feminine plural. However, Italian speakers usually feel that this type of agreement is perfectly grammatical. In turn, the expected agreement is found only when the agreement controllers are inflected in the plural, as in the example below:

<i>Le</i>	<i>bracci-a</i>	<i>e</i>	<i>le</i>	<i>dit-a</i>	<i>sono</i>	<i>rott-e</i>
DEF:PL.F	arm:PL.F	and	DEF.PL.F	finger:PL.F	be:PRS.3PL	broken:PTP.PL.F

<i>Quest-e</i>	<i>sembrano</i>	<i>davvero</i>	<i>brutt-e</i>
this:PL.F	look:PRS.3PL	really	horrible:PL.F

“The arms and the fingers are broken. These are so horrible”.

Although this is not a decisive argument for gender resolution in itself, since even same-gender conjuncts may require the application of specific gender resolution rules (Corbett 2006: 238-9), it shows that the Italian incoordinate gender *braccio* : *braccia* has been losing consistency in its syntactic manifestations, particularly if compared with the situation of Old Italian and Central-Southern Italo-Romance dialects (Paciaroni, Nolè & Loporcario 2013: 114f.).²¹

²¹ Corbett (2006: 238-9) has shown that in Slovene two gender resolution rules operate in coordinated agreement: (1) if all conjuncts are feminine, then agreement is feminine; (2) otherwise

I therefore have tried to find examples of similar nominal agreement in Tocharian. The examples proposed below are in my opinion probative to draw up a strong distinction with respect to Standard Italian:²²

A17 b5-6

<i>knānmune</i>	<i>pñintwäṣ</i>	<i>pkä(nt)</i>	<i>mā</i>	<i>pälkäṣ</i>	<i>ṣyakk</i>
wisdom:NOM.SG.A	virtue:ABL.PL.A	separately	NEG	shine:PRS.3SG	together

<i>a(ts)</i>	<i>(pa)t</i>	<i>nu</i>	<i>ṣokyo</i>	<i>pälketsāñ</i> ²³	<i>māskamtrā</i>
PART	or	but	very	shine:PL.F	be:3PL.PRS

<i>tämyo</i>	<i>tom</i>	<i>pkänt</i>	<i>pkänt</i>	<i>sambhārtu</i>	<i>wewñunt</i>
therefore	this:NOM.PL.F	separately	separately	Sambhāra:NOM.PL.A	call:3PL.PRT

“Wisdom without virtue(s) does not shine, but rather together are especially brilliant. Therefore, these are called Sambhāras”. (cf. Sieg 1944: 21)

B5 a6

<i>tary=</i>	<i>akṣā-ne</i>	<i>pudñäkte</i>	<i>teki</i>	<i>ktsaitsñe</i>	<i>srukaliñe</i>
three	announce:3SG.PRT	Buddha	disease:SG.A	old age:SG.A	death:SG.A

<i>toṃ</i>	<i>mā</i>	<i>takoṃ</i>	<i>śaiṣene</i>	<i>mā</i>	<i>ñke</i>	<i>tsaṅko(y)</i>	<i>pudñäkte</i>
this:NOM.PL.F	NEG	be:3PL.OPT	world:LOC.SG	NEG	PART	rise:3SG.OPT	Buddha

“The Buddha announced to him the three: «Disease, old age, death. If these things were not there in the world, then the Buddha would not arise»”. (cf. Sieg & Siegling 1949: 10)

B4 a2

<i>//teki</i>	<i>ktsaitsñe</i>	<i>kes</i> ²⁴	<i>yoko</i>	<i>toṃ</i>	<i>ñya(tsentā)</i>
disease:SG.A	old age:SG.A	hunger:SG.A	thirst:SG.A	this:PL.F	plague:PL.A

“Disease, old age, hunger, thirst: these (are) the plagues”. (cf. Sieg & Siegling 1949: 8)²⁵

agreement is masculine (I thank Tijmen Pronk for bringing my attention to this point). This seems to suggest that agreement in these cases is not a very good indicator of gender. However, Corbett (2006: 261) argued that the difference in languages like Slovene is that they have also semantic resolution rules: (1) if all conjuncts refer to female humans, agreement is feminine; (2) if all conjuncts refer to humans, whether all male or of mixed sexes, agreement is masculine; (3) in all other cases, agreement is masculine. In this respect the situation of Romance languages and Tocharian is very different. For this reason, I think that the coordinated agreement test can be used.

²² See also Hartmann (2013: 106).

²³ The nom.pl.m. of TchA *pälkets* ‘shining’ is not attested, but it may be reconstructed as *pälketse* * (cf. TchA *wākm̄tse* ‘distinguished, superior’ from *wākm̄ts*). The nom.pl.f. *pälketsāñ* is also attested in A148 a2-3, where it regularly agrees with an alternating noun inflected as a plural, i.e. *lyiyā-āpsā* ‘limbs, limbs and joins’ (Carling 2009: 37; see also SSS §174).

²⁴ For *kest* ‘hunger’ (DTB: 213).

²⁵ The example in B4 a2 seems less strong than the others, since an alternative translation “Disease, old age, hunger, thirst: these plagues...” cannot be excluded.

Both Tocharian languages have a wide range of demonstrative pronouns, which always agree in gender and number with their antecedent (in both attributive and pronominal uses). In the fragments above, we have two feminine inflected forms, i.e. TchA *tom* and TchB *tom*, which are in anaphoric reference with coordinated alternating nouns (namely *knānmune* ‘wisdom’ and *pñintu* (pl.) ‘virtue’ in A17 b5-6; *teki* ‘disease’, *ktsaitsñe* ‘old age’, and *srupalñe* ‘death’ in B5 a6; and *teki* ‘id.’, *ktsaitsñe* ‘id.’, *kest* ‘hunger’, and *yoko* ‘thirst’ in B4 a2). This means that the feminine plural forms in the pronouns actually represent the plural of the coordinated alternating singular in the nouns. Another important example in this sense is the following from Tocharian A:

A73 b5
āly(a)knaṃ *mā* ^T*yāmlaṃ* ^C*tuñk* ^C*ynāñmune*
 other:LOC.PL NEG to do:GER.NOM.PL.F love:NOM.SG.A. reverence:NOM.SG.A
 “Love and reverence could not have been made to anyone else”. (cf. Thomas 1952: 34)

There is no demonstrative pronoun attested here, but, as in the case of the previous examples, coordinated alternating nouns inflected as singular (TchA *tuñk* and *ynāñmune*) agree with the subjunctive gerundive *yāmlaṃ*, which is in turn inflected as a feminine plural.²⁶ The situation of Tocharian is, again, parallel to that of Romanian (Corbett 1991: 289; Paciaroni, Nolè & Loporcaro 2013: 119-20):

<i>Frigider-ul</i>	<i>și</i>	<i>televizor-ul</i>	<i>sunt</i>	<i>stricate.</i>
fridge:NT.SG	and	television:NT.SG	are	broken:FEM.PL
<i>Acestea</i>	<i>trebuie să fie</i>	<i>reparate</i>		
this:PL.F	must be	repaired:PL.F		

“The fridge and the television are broken. These must be repaired”.

To sum up, on the basis of this meagre but very clear evidence, the following agreement rules can be posited:

²⁶ For a comprehensive account of other types of gender agreements in coordinating environments, see Hartmann (2013: 104-9). Selected examples are: B375 b1 *ista(k pañä)kt(e) käṣṣi cau wāntare śarsa* ^T*aṣanikem* (pl.m.?) ^C*śāriputreṃ* (sg.m.) ^C*maudgalyāyanem* (sg.m.) “The Buddha, the teacher, immediately understood this fact [and] **the venerable Śāriputra** [and] **Maudgalyāyana**...” (cf. Thomas 1957: 120); B107 a9-10 ^C*nānda* (sg.f.) ^C*nandābala* (sg.f.) *weñāre se cisa śpālmeṃ tākaṃ cwi aiskem* [...] ^{T-C}*toy* (pl.f.) ^T*kakkāccuwa* (pl.f.) *bramñükteṃś maitare* “**Nandā** [and] **Nandabalā** said: «Who is better than you, to him we give it». [...] **Having rejoiced, they** set out to God Brahman” (cf. Pinault 2008: 158); A395 a4 *tām kaklyuṣuräṣ* ^T*cem* (pl.m.) *priyadattes* ^C*pācar* (sg.m.) ^C*mācar* (sg.f.) *cam klopyo ine crakär* “Having heard that, Priyadattas **father** [and] **mother**, through this suffering, lost consciousness” (cf. Krause 1971: 40; Zimmer 1976: 49-50).

Table II.4. Alternating agreement in coordinated singular NP

	Italian	Tocharian
Controller	["alt." sg.] _{subst.} + ["alt." sg.] _{subst.}	[alt. sg.] _{subst.} + [alt. sg.] _{subst.}
Target	[masc. pl.] _{adj.}	[fem. pl.] _{adj.}
Anaphoric	[masc. pl.] _{pron.}	[fem. pl.] _{pron.}
	Italian	Tocharian
Controller	["alt." pl.] _{subst.} + ["alt." pl.] _{subst.}	[alt. pl.] _{subst.} + [alt. pl.] _{subst.}
Target	[fem. pl.] _{adj.}	[fem. pl.] _{adj.}
Anaphoric	[fem. pl.] _{pron.}	[fem. pl.] _{pron.}

This comparison of Standard Italian and Tocharian has highlighted that in the former the group of substantives that show alternating agreement is a closed category, with a peculiar agreement in coordinated environment and in anaphoric reference; in the latter, alternating nouns represent a cohesive group, with different plural markers and, as far as can be seen from the fragmentary corpus, coherent agreement in all the possible environments.

In my opinion, all these crucial elements allow us to conclude that the *genus alternans* should be considered a real gender in Tocharian. Although it is a grammatical strategy that pertains to the domain of the controller gender, it is fully embedded in the grammar of the language. In this way, I think it fulfils all features that a gender must have, since it also represents a systematic property that belongs to the core of the category of gender.

2.3.2. ON THE TERMINOLOGY OF THE THIRD GENDER AND THE STATUS OF THE TOCHARIAN “NEUTER”

In the current literature, the name of the third Tocharian gender is not consistent. So far, I did not mention this problem, thereby labelling it as “alternating gender”. However, even in recent works on Tocharian, the terms “alternating” and “neuter” are frequently used interchangeably.²⁷ This terminological mismatch can be found also in the two modern dictionaries of Tocharian, the *Dictionary of Tocharian B* by Adams (2013) and the *Dictionary and Thesaurus of Tocharian A* (vol. 1) by Carling (2009). The first uses the term neuter, but the second “alternans”. Other specialists of Tocharian also diverge with regard to this nomenclature: on the one hand, Krause & Thomas (1960, TEB), Pinault (e.g. 1989, 2008), and Hartmann (2013) use “alternans”, while Sieg, Siegling, & Schulze (1931, SSS), Malzahn (e.g. 2011), Kim (2009, 2014), and Fellner (e.g. 2014) use neuter.

²⁷ The third Tocharian gender cannot be labelled as “ambigeneric” (from Lat. *ambo* ‘both’). Etymologically, this term implies that the *genus alternans* must belong in part to the class of masculines and in part to the class of feminines, and consequently that the alternating nouns must be considered as masculine in the singular and feminine in the plural. This hypothesis is improbable also in light of the analysis given in §2.3.1.

The reason why scholars use “neuter” when referring to the third gender is historically founded, since several nouns reconstructed as neuter for the proto-language synchronically belong to this category. However, the third Tocharian gender is something different from the PIE neuter. Indeed, it is the result of morpho-phonological mergers that led, on the one hand, to the functional loss of the neuter and, on the other hand, to the rise of an agreement class that in turn can be analysed as a new gender, namely the *genus alternans*.

Employing the label “alternating” has also some terminological advantages with respect to a residual class of crystallised forms for which the term “neuter” is more appropriately used. This relic class is constituted by remnants of the historical neuter gender and it is limited to:

- (1) demonstrative pronouns, like TchB *te*, A *ta-* < PIE **tód* (cf. Skt. *tát*, Gk. *τό*, etc.);
- (2) ordinal numerals, which derived from the corresponding cardinals by adding the suffix TchB *-te*, A *-t* < PIE **-to-* (cf. Gk. *τρίτος* ‘third’, Lat. *quartus* ‘fourth’, Av. *puxda-* ‘fifth’, etc.).

As demonstrated by Stumpf (1971: 5f. and 47f.), the neuter gender of the demonstratives must be regarded as an archaism. This is not surprising, given the fact that pronouns have a special typological role in the rise, the further development, and the possible decline of gender values. Indeed, if, on the one hand, the demonstratives play a key-role in the origin of gender markers, on the other hand, they are also the category where traces of a decayed gender might still be found.²⁸

In Tocharian, neuter demonstrative forms have to be distinguished from the masculine and the feminine ones because of three important facts: (1) they have only singular inflection; (2) they have a non-palatalised stem TchAB *t-*; (3) they have only pronominal function (cf. below). From a typological perspective, this situation is fully understandable. Indeed, also in other languages where a gender is lost, but it continues to be formally differentiated in the pronouns, it can only be used with pronominal value, and never attributively, i.e. with adjectival value. Pronouns generally retain gender distinction, also when attributive modifiers have lost gender agreement (Corbett 1991: 137ff.). Strictly speaking, it means that in a noun phrase the neuter demonstrative cannot be used as a nominal modifier. See the following examples, which clarify the function of the neuter demonstratives (TchB *te*, A *täm*):

²⁸According to Corbett (1991: 310-12) and Luraghi (2014: 451), the rise of gender systems is a grammaticalisation process that is expected to undergo the following development: generic nouns → classifiers → pronominal demonstratives → attributive demonstratives → determiners → agreement markers. On the contrary, when a gender value is lost, the opposite evolution is expected.

B85 b4-5

<i>te</i>	<i>keklyau«šo»rmeṃ</i>	<i>araṇemiñ</i>	<i>lānte</i>	<i>pīt</i>	<i>maiwāte-ne</i>
DEM:OBL.SG	hear:ABS	Araṇemi:GEN.SG	king:GEN.SG	bile:NOM.SG	tremble:3SG.PRT-3SG.SUFF

“Having heard this, the bile of king Araṇemi quivered (= king Araṇemi fainted)”. (cf. Schmidt 2011: 314-5)

A346 a1

<i>tām</i>	<i>pälkorāṣ</i>	<i>weyeṃ</i>	<i>nāṃtsu</i>	<i>nande</i>	<i>träṅkāṣ</i>
DEM:OBL.SG	see:ABS	surprised	be:PRT.PTC	Nanda:NOM.SG	speak:3SG.PRS

“Having seen this, Nanda, being surprised, speaks”.

Crystallised forms of the neuter demonstratives also occur with two other functions: (1) as temporal or modal adverbs; (2) as conjunctions. In Tocharian A, neuter demonstratives with adverbial value usually show the particle TchA *-ne* added directly to the basic form: from the pronoun of anaphoric deixis TchA *sām*, *sām*, *tām* ‘he, she, it’, we have *tāmne* ‘so’ or *tāmnek* with further addition of the emphatic particle *-k* (e.g. TchB *ykāk* ‘still’, TchB *šek* ‘always’, TchA *okāk* ‘until’). Formations with secondary cases are also attested, especially when the pronouns are used as conjunctions, as for the old instrumental TchA *tāmyo* ~ *tāmyok* ‘therefore (← *‘because of that’)’. As far as Tocharian B is concerned, Stumpf (1971: 58-59) claims that the ablative TchB *tumeṃ* and the perlativ TchB *tusa*, both from the pronoun of anaphoric deixis TchB *su*, *sāw tu* ‘he, she, it’, mostly mean ‘then, thereupon (← *‘from this’)’ and ‘therefore (← *‘through this’)’, respectively.

Out of the demonstratives, other old neuter forms can be found in the inflection of the ordinals for ‘second’ and ‘third’:²⁹ TchB *wate*, A *wät* < PTch **watæ* < PIE **d̥uítom* ‘second’; TchB *trite*, A *trit* < PTch **trəytæ* << PIE **tritom* ‘third’. Examples are:

AS16.7 a4

<i>ta-makte</i>	<i>wate</i>	<i>ñis</i>	<i>päst</i>	<i>lkāst</i>
in such a way	second time:ADV	me	away	look:2SG.PRS
<i>ostaṣṣai</i>	<i>wṣeñai</i>	<i>rerū</i>		
prrtg to house:OBL.SG	place:OBL.SG	leave:PRT.PTC.NOM.SG		

“In such a way, you, having left the home place, see me off for a second time”.

²⁹ Following the etymology of Winter (1983: 322), one is tempted to analyse TchB *epiñkte*, A *opänt* ‘in the middle, between’ as an old formation with the neuter numeral for ‘fifth’, TchB *piñkte*, A *pänt*. The original meaning would have been “at the fifth place” (with reference to the cardinal directions). From a phonological point of view, this explanation is perfectly coherent, but it is weak from the point of view of the meaning. It is accepted by Pinault (2008: 559) but rejected by Adams (DTB: 95). See also Van Windekens (1976: 180-1).

A432 a3

<i>wtaṣ</i>	<i>akmal</i>	<i>liktsi</i>	<i>ywārckim</i>
second time:ADV	face:OBL.SG	wash:INF	half:OBL.SG

“To wash a second time half of the face (?)”.

These old neuter forms have adverbial value. In Tocharian A, we only have secondary case forms, like the ablative *wtaṣ* (with archaic abl. *-aṣ* for expected *-äṣ*) and the instrumental *wtā ~ wtāk* ‘again’ (vs. the regular instr. *wcā* ‘by each other’). Secondary cases are also attested in Tocharian B, like the perlative *watesa* ‘again, for a second time’ alongside the genitive *wtentse ~ wteṃtse* ‘id.’ (Pinault 2008: 558).³⁰ With regard to the neuter form of the numeral for ‘third’, we have crystallised forms of a perlative TchB *tritesa* and an ablative TchA *tritaṣ*, both with the meaning ‘for the third time’.

In his dictionary, Adams labels these forms as “neuter” (like a regular alternating noun, in his notation), even though they cannot actually be employed either in agreement with a noun or with a substantival value. They do not correlate with the *genus alternans*, because they are used for non-gendered reference. In contrast, alternating nouns are in agreement with the regular masculine form of the adjective *wate* ‘second’, e.g. obl.sg.m. TchB *wace* in AS6A b5 *wce camelne* “in the second (re)birth”.

Furthermore, Winter (1992) underlines the fact that in Tocharian B the neuter stem of the two synchronic adverbs TchB *wate* and TchB *trite* forms the basis of the adjectives TchB *wteṣṣe*, TchB *triteṣṣe*, which do not mean ‘second’ and ‘third’, as one might expect, but ‘of the second/third degree’ instead. These new adjectival formations are attested only in B327, drafted in Late Tocharian B, and they are always in agreement with the word for ‘son’ or ‘daughter’, as in b1 *soy wte(ṣṣe) t(eṃ) yiknesa ṣuk tänktsi* “a son of the second degree (i.e. a stepson) in this way until seven” and in b4 *(tri)teṣṣa eṣk(e) ṣuk tän(kts)i* “a daughter of the third degree until seven” (cf. Ogihara 2009: 311-12).

With regard to the demonstrative pronouns, it is frequently said that the PIE neuter gender survives as a separate category in Tocharian (e.g. TEB §65; Schmidt 2018: 215-16). However, this statement is acceptable only from a historical point of view. Strictly speaking, we need to make a clear distinction between form and function: the Tocharian neuter demonstratives are *formally* an archaic layer of the PIE neuter, but they do not *functionally* represent a real neuter gender.

To sum up, when we refer to neuter forms in Tocharian demonstratives, we have to keep in mind that they are only remnants of the PIE state of affairs, and they do not constitute a separate gender from a synchronic point of view. They cannot be used attributively because there are no neuter nouns: the neuter gender no longer exists in Tocharian. Accordingly, I believe it is more correct to refer to the third Tocharian gender

³⁰ As pointed out by Winter (1992: 134), the genitive TchB *wtentse* has been reinterpreted as an oblique neuter, on the evidence of the strange hybrid instrumental TchB *wtentseṣa* (attested once in B512 a1), instead of the expected *wtesa*.

as “alternating”, because, from both a diachronic and a synchronic point of view, the neuter has disappeared.

2.4. GENDER ASSIGNMENT SYSTEM OF TOCHARIAN

In this section, I will offer a general overview of the problems related to the gender assignment in Tocharian. The reader who intends to examine in depth this synchronic aspect of the Tocharian gender system will find a more detailed account in Hartmann (2013), especially in the section on the mechanism of synchronic gender assignment (pp. 381-409).

Like other Indo-European languages, Tocharian shows a formal assignment system. This type of assignment is found with languages where semantic information is supplemented by formal patterns, which, in the case of Tocharian, are based on phonological and morphological forms. Indeed, purely formal systems are so far unattested and, according to Corbett (2000: 294), they are excluded typologically. This means that gender assignment can be handled by rules that depend mainly but not only on the form of the nouns: in order to detect their gender, it is necessary to know the inflectional classes to which they belong. However, the relation between gender and inflectional class is not always unambiguous: we can say that nouns with a given gender usually favour some inflectional classes, although several exceptions are to be expected. As a consequence, the best solution in order to detect the gender of a noun is, as we have already stated, the agreement with a modifier. However, given the hybrid agreement patterns of the alternating gender, we often need agreement environments both in the singular and in the plural in order to establish the gender of a noun. This is difficult because of the limits of the Tocharian documentation.

In the following, I will introduce some formal strategies in order to detect the gender of a Tocharian noun, from both an inflectional and a derivational point of view. Finally, some considerations on the semantic strategies will be put forward.

2.4.1. INFLECTIONAL PATTERNS

The subdivision of substantives in Tocharian nominal morphology is arranged according to various inflectional patterns. Considering both the singular and the plural endings of the primary cases, around thirty nominal inflectional classes could be identified, often with minor differences. These declensions cannot be predicted on the basis of the inflected form of the nominative singular (Pinault 2017: 1337). A classical and much used model is that of Krause & Thomas (TEB §§158-200), who identified seven main classes on the basis of the plural endings (see also §3.2). In turn, these seven classes can be grouped into two broader macro-classes. In the first one, the nominative plural is identical to the oblique plural (Classes I, II, and III):

Table II.5. Tocharian first macro-class

CLASS	SUB.	PLURAL		EXAMPLES	GENDER			PRODUCTIVITY
		NOM. = OBL.			MASC.	FEM.	ALT.	
I.	1.	B -a		B <i>pikwala</i> 'years'	once	none (?)	common	closed
		A -ā		A <i>puklā</i> 'id.'	none	none (?)	common	closed
	2.	B -wa		B <i>ārwa</i> 'woods'	rare	rare	common	regular
		A -wā, -u		A <i>kursārwa</i> 'leagues'	rare	rare	common	closed
II.	1.	B -na		B <i>ñemna</i> 'names'	none	common	common	regular
		A -āṃ		A <i>porāṃ</i> 'fires'	none	twice	common	closed
	2.	B -nma		B <i>tekanma</i> 'diseases'	none	none	common	productive
		A -mnā-		cf. A <i>arkāmnā-ṣi</i>	none	none	none	none
III.	1.	B -nta		B <i>yārkena</i> 'honours'	rare	none	common	productive
		A -nt		A <i>yārkaṃt</i> 'id.'	rare	none	common	productive
	2.	A -ntu		A <i>okontu</i> 'fruits'	rare	rare	common	productive

In the second, the nominative plural differs from the oblique plural (Classes IV, V, VI, VII):

Table II.6. Tocharian second macro-class

CLASS	PLURAL		EXAMPLES	GENDER			PRODUCTIVITY
	NOM.	OBL.		MASC.	FEM.	ALT.	
IV.	B -a/-ñ	B -a/-ṃ	B <i>pātārñ</i> / <i>pacera</i>	common	common	none	closed
	A -i	A -s	A <i>pācri</i> 'fathers'	common	common	none	closed
V.	B -i	B -ṃ	B <i>yakwi</i> 'horses'	common	very rare	none	productive
	A -i	A -s	A <i>mañi</i> 'months'	common	rare	none	regular
VI.	B -ñ	B -ṃ	B <i>oksañ</i> 'bulls'	common	common	none	regular
	A -ñ	A -s	A <i>riñ</i> 'cities'	common	common	very rare	productive
VII.	B -ñc	B -ntāṃ	B <i>lāñc</i> 'kings'	common	none	none	closed
	A -ṃś	A -ñcās	A <i>lāṃś</i> 'id.'	common	none	none	closed

Note that there are examples of mismatching gender in nouns with similar origin – be they inherited or borrowed – between Tocharian A and Tocharian B (e.g. TchA *āy* 'bone' is masculine, while TchB *āyo* 'id.' is alternating; TchA *oppal* 'lotus' is feminine, while TchB *uppāl* 'id.' is alternating, both from Skt. *utpala-* 'the blossom of the blue lotus').

Alternating nouns constitute the most coherent and homogeneous class as far as their inflection is concerned. One general rule common to both Tocharian A and B can be established, a rule that is usually sufficient enough to outline also their formal characteristics: alternating nouns do not distinguish nominative and oblique in either the singular or the plural, which means that they cannot be found out of the first macro-class. It follows that a relevant characteristic of alternating nouns is a paradigm with no formal distinction between nominative and oblique. The sole notable exceptions are two Tocharian B nouns that belong to Class I, i.e. TchB *āyo* 'bone' (obl.sg. *āya*) and TchB *luwo*

‘animal’ (obl.sg. *luwa*), both with a synchronic irregular plural, TchB *āsta* and TchB *lwāsa* (on which see §3.7.1.2).³¹ In Tocharian A, just a few alternating nouns belong to Class VI (TchA *tarp* ‘pond’, nom.pl. *tarpañ*; TchA *pikār* ‘gesture’, obl.pl. *pikārās*; TchA *asaṃkhe* ‘a mega-era’, obl.pl. *asaṃkhes*). This is unexpected, given the fact that alternating nouns are usually confined to the first macro-class.

On the other hand, masculine and feminine nouns can be randomly found in the first macro-class, even if they are not numerous. Examples include: Class I. TchB *wamer* ‘jewel’ m. (Pinault 2011), TchA *rape* ‘music’ f. (Hartmann 2013: 399); Class II. TchA *plāc* ‘word’ f., TchA *ytār* ‘road’ f., TchB *śaumo* ‘man, person’ m., and perhaps TchB *lāms* ‘work, service’ f. (on this last noun, see Hartmann 2013: 368; on Class II, see §3.6); Class III. TchA *āy* ‘bone’ m., TchA *paryāri* ‘miracle’ f., TchA *opšāly* ‘festivity’ f., TchA *tsānkār* ‘summit’ m., TchA *šāñ* ‘artistry’ f., TchA *prašt* ‘time’ f. (on this last noun, see §3.7.3.3). In all Tocharian dictionaries, grammars, and lexicons (e.g. DTB: 410; TEB §203; Thomas 1964: 117 and 210), TchB *pikul* ‘year’ and TchA *p_ukāl* ‘id.’ are usually interpreted as feminine, but I found clear examples of feminine agreement only in the plural. As far as Tocharian B is concerned, isolated examples of agreement in the singular can be found in PK DAM 507.37 and .36 at lines a55 and a59 *ce pikultsa* “in this year (per.sg.)”. On the basis of this evidence, TchB *pikul* ‘year’ is better interpreted as an alternating noun.

In both Tocharian languages, the most productive class of alternating nouns is Class III (pl. TchB *-nta*; TchA *-nt, -ntu*), alongside Class II.2 in Tocharian B only (pl. *-nma*). As a consequence, one could make the generalisation that if a noun has a plural of Class III or II.2 it is alternating. There are only a few exceptions. In particular, a closed inflectional class of masculine nouns denoting male referents is formed by only five members with plural in TchB *-nta*: TchB *aśari* ‘teacher’, TchB *amāc* ‘minister, king’s intimate’, TchB *kāṣṣi* ‘master’, TchB *poysi* ‘the all-knowing, Buddha’, and TchB *mcuške* ‘prince’.³² The corresponding Tocharian A nouns fall into another class, with nominative and oblique plural differentiated (e.g. Class VI, cf. TchA *āmās* ‘minister’, nom.pl. *āmāsāñ*; TchA *kāṣṣi*

³¹ In addition, it is possible to include also TchB *lyiyo** ‘limb’ in this class of alternating nouns (Pinault 1988: 140; Winter 2003: 117-8). However, it is only attested in the pl. *lyyāsa*. If parallel to TchB *luwo* ‘animal’, TchB *lyiyo** differentiated the nominative from the oblique in the singular. On TchB *pilta* ‘leaf, petal’ (pl. *piltāsa*), see §3.7.1.2.

³² The etymology of these nouns is not always clear. For some of them a foreign origin is unquestionable (e.g. TchB *amāc*, A *āmās* from Pkt. **amāca-* or from Khot. *āmāca-*, Tum. *amaca-*; TchB *aśari* from Gāndhāri *acariya* - with variant forms - or Khot. *āśiria-*, etc.), but for some others the origin is more problematic. TchB *kāṣṣi* ‘master, teacher’ is no longer to be considered a loanword from Khot. †*kṣiʾa-*, which is a ghost word (Skjærvø apud Emmerick-Skjærvø 1997: 44-45; DTB: 188-89; Pinault 2003a: 337-40). There is so far no agreement on the etymology of the Tocharian noun for ‘prince’. See recently Pinault (2015: 172-181) for a detailed analysis of the problems that the two Tocharian words raise and for an etymological proposal.

‘teacher’, nom.pl. *käṣṣiñ*). All these Tocharian B nouns have an obl.sg. *-ṃ* /-n/.³³ In the noun inflection, this ending is confined to substantives referring to sentient and human beings. Therefore, the presence or the absence of this ending has a purely semantic reason (cf. the classical example: TchB *eñkweṃ*, A *oñkam* ‘man’ [obl.] vs. TchB *yakwe*, A *yuk* ‘horse’ [obl.]). As far as the gender assignment is concerned, the obl.sg. *-ṃ* is characteristic of masculine words in Tocharian B, while it spreads also to feminine nouns in Tocharian A. If a noun has an obl. sg. in *-ṃ*, it is therefore of masculine gender in Tocharian B.

Another relevant case is constituted by the class with plural in TchB *-na* (Class II.1), which is productive for feminine nouns (TEB §163). Examples are: TchB *asıya* ‘nun’, pl. *asıyana*, *ṣerśka* ‘little sister’, pl. *ṣerśkana*, *šana* ‘wife, woman’, pl. *šnona*, *lāntsa* ‘queen’, pl. *lantsona*, etc. All these grammatically feminine nouns with plural in TchB *-na* denote female referents. From a formal point of view, they have a differentiated singular paradigm (*asıya*-type: nom.sg. *˘a*, obl.sg. *˘ai*; *šana*-type: nom.sg. *-a*, obl.sg. *-o*, see §3.5). It follows that if a given noun has a plural in *-na* and a differentiated singular paradigm, it is of feminine gender.³⁴ Formally speaking, the Tocharian A counterpart of this ending is TchA *-(ä)ṃ*, which is an unproductive marker limited to five nouns: TchA *por* alt. ‘fire’, pl. *poräm*, TchA *ysār* alt. ‘blood’, pl. *ysāräm*, TchA *wram* alt. ‘object’, pl. *wramäm*, TchA *plāc* f. ‘word, speech’, pl. *plācäm*, TchA *ytār* f. ‘road’, pl. *ytāräm* (on these nouns, see §3.6.2).

In the second macro-class, we find nouns of masculine and feminine gender. No alternating nouns are ranged here, apart from very rare exceptions in Tocharian A.

Class IV consists of kinship terms with *r*-stems. As in the ancient Indo-European languages, no formal patterns can distinguish a feminine from a masculine in this class, but only the sex of the referent. So, TchB *mācer*, A *mācar* ‘mother’ and TchB *tkācer*, A *ckācar* ‘daughter’ are feminine, while TchB *pācer*, A *pācar* ‘father’ and TchB *procar*, A *pracar* ‘brother’ are masculine, etc.

All other classes usually distinguish nominative and oblique also in the singular in Tocharian B. However, knowing the inflection of the singular is not sufficient to determine the gender of a noun. In Tocharian B, all nouns of Class V.1 with nom.obl.sg. *-e* are masculine. The only exception is the old thematic formation TchB *yente*, A *want* ‘wind’, which is unexpectedly feminine from both a synchronic and a diachronic point of view (cf. Skr. *vāta-*, Av. *vāta-*, Lat. *ventus*, Goth. *winds*, OHG *wint*, all of masculine gender). Feminine are also the members of Class VI, with nom. sg. *˘a*, obl. sg. *˘ai* (e.g. *emalya* ‘heat’, *newiya* ‘canal’, *wešeñña* ‘voice’ etc.). As we have seen, the same singular inflection is also characteristic of those feminine classes with a plural in *-na*, like *asıya* ‘nun’ or *näkteñña* ‘goddess’. As a consequence, one could say that if a noun has a nom. sg. *˘a*, obl. sg. *˘ai* it is of feminine gender in Tocharian B.

³³ The origin of this ending should be sought in remnants of original nasal stems. Cf. also the similar function that the preposition $\alpha\beta o$ ‘to’ has in Bactrian, since it marks direct objects which are animate and human (Pinault 2002: 243-4; Gholami 2009).

³⁴ Note that in Tocharian A the corresponding substantives are sorted in Class VI.

2.4.2. DERIVATIONAL PATTERNS

Derivation plays an important role in the formation of new lexical items in both Tocharian verbal and nominal morphology. The bulk of these derivational processes involves suffixation, since prefixation is rare. According to Adams (2017: 1365-6), prefixation usually adds semantic information to a given word, without changing its lexical category (but cf. TchB **en*-adverbs from nominal stems). Dealing with the morphological gender assignment criteria, some suffixes and derivational patterns are good predictors of nominal gender. Indeed, they specify one of the Tocharian genders, becoming gender determiners.

Masculine nouns

As far as the masculine is concerned, we can distinguish two types of derivatives, on the basis of the lexical category of the stem from which they derive.

The derivational processes thanks to which a new masculine noun is created from a verbal base involve many suffixes that are used to build *nomina agentis* (Pinault 2012; Peyrot 2013a: 236f.; Fellner 2014; Adams 2015: 140ff.). They are particularly productive in Tocharian B: (1) nominalised participle in TchB *-eñca*, from the present stem (e.g. TchB *aiššeñca* ‘giver’ from *ay-* ‘to give’; TchB *kauseñca* ‘killer’ from *kaw-* ‘to kill, destroy’; TchB *trikšeñca* ‘sinner’ from *trayk-* ‘to fail, stumble’, etc.); (2) TchB *-ntsa*, from the subjunctive stem (e.g. TchB *tarkāntsa* ‘carpenter’, from *tarka-* ‘let go’ (?);³⁵ TchB *wapāntsa* ‘weaver’, from *wapa-* ‘to weave’, etc.); (3) TchB *-nta*, A *-nt*, from the present stem (e.g. TchB *kašenta*, A *košant* ‘murder’ from TchB *kaw-*, A *ko-* ‘to kill’; TchB *weñenta* ‘speaker’, from *weñ-* ‘to speak’; TchA *pekant* ‘painter’ from *päyk-* ‘to write’; TchA *āšant* (written *āšand*, cf. obl.sg. *āšāntam*) ‘leader, charioteer’, from *āk-* ‘to lead’, etc.; (4) TchB *-uca*, from the subjunctive stem (e.g. TchB *pālskauca* ‘thinker’, from *pāska-* ‘to think’; TchB *kālpauca* ‘obtainer’ from *kālp-* ‘to obtain, to realize’, etc.); (5) TchB *-uki*, from the present stem (e.g. TchB *yamašsuki* ‘maker’, from *yam-* ‘to do’; TchB *wešsuki* ‘talker’ from *weñ-* ‘to speak’; TchB *akšašsuki* ‘instructor, announcer’ from *aks-* ‘to proclaim’; TchB *kālpāšsuki* ‘thief, from *kālp-* ‘to bring, steal’, etc., see Schaefer 1997 and Peyrot 2008: 96); (6) verbal governing compounds in TchB *-i*, A *-e* (e.g. TchB *°plānši* ‘seller, selling’ from *pānk-* ‘to sell’; TchB *°yāmi* ‘doer, doing’ from *yam-* ‘to do’; TchA *°pāše* ‘protecting’ from *pās-* ‘to protect’, see Fellner 2018). The fact that these agent formations are typically masculine is in line with a widespread Indo-European trend according to which agent nouns are masculine by default. However, they may also refer to feminine nouns, while, in other Indo-European languages, if feminine equivalents need to be made out of them, some other derivational strategies are employed (cf. Lat. *genitor* ‘parent, father’: *genitrīx* ‘female parent, mother’, Luraghi 2014; but cf. also TchB *yākwe-plānši* ‘horse seller’ vs. *kāryor-plānši-ñña* ‘female trader’).

³⁵ Cf. also Malzahn (2010: 656), who sets up an otherwise unattested verbal root *tark-* ‘do carpentry’ for this agent noun to account for its meaning.

In parallel, the suffix TchB *-tse*, A *-ts* also forms masculine agent nouns and names of professions, from both verbal (e.g. TchB *rīnātstse* ‘renouncer’ from *rāyn-* ‘to renounce’; TchB *yāmātstse* ‘doer’ from *yam-* ‘to do’; TchA *tspokäts* ‘taster’ from *tspok-* ‘±to taste, suck’, etc.) and nominal bases (e.g. TchB *werpiškätse* ‘gardener’ from *werpiške* ‘garden’; TchA *amokäts* ‘artist’ from *amok* ‘art’, etc.). The agentive meaning of this suffix is to be sought in the nominalisation of adjectives in TchB *-tstse*, A *-ts*, whose original connotation was ‘having-X’. They are productive in the historical phase of both languages (e.g. adj. TchB *ñuwe* ‘new’ → adj. *ñwetse* ‘having news’ → subst. *ñwetse* ‘novice’, cf. Fellner 2014c).

Another agentive suffix is TchB *-tau*, *-au*, which is employed to form agent nouns from nominal bases (e.g. TchB *käryorttau* ‘merchant’ from *karyor* ‘commerce’; TchB *olyitau* ‘boatman’ from *olyi* ‘boat’; TchB *pälkostau** ‘spy’ from an unattested noun itself deriving from *pälka-* ‘to see’; TchB *saṃtkinau* ‘doctor’ related to TchB *sāmtke* ‘medicine’ ← Skt. *sāntaka-* through a Prākṛit intermediary; TchB *yotkolau* ‘foreman, superintendent monk’ of unclear etymology; TchB *wetā_u* ‘warrior’ from *weta* ‘strife, battle’, etc.).³⁶ On these formations, see also §3.7.1.2.

Finally, TchB *-ške* is a diminutive suffix, attested only in Tocharian B. It forms masculine nouns from nominal bases, mostly referring to human beings and, less frequently, to animals and things (e.g. TchB *šarmirške* ‘young novice’ from *šarmire* ‘novice monk’; TchB *ylaṃške* ‘young gazelle’ from *yal* ‘gazelle’; TchB *kāntwāške* ‘little tongue’ from *kantwo* ‘tongue’; TchB *kuntiške* ‘little pot’ from *kunti* ‘pot’, etc.). It is also frequently found in proper names (e.g. TchB *Mitraške*, TchB *Cowaške*, etc.; cf. the similar use of the comparable suffix *-ṛṣka* in Bactrian, e.g. *βαζṛṣka* *Vasiška*).³⁷ Another suffix forming diminutives and hypocoristics was probably TchB *-kke*, although it is limited to three nouns: TchB *appakke* ‘daddy, dear dad’ from *āppo** ‘dad’; TchB *larekke* ‘dear one’ from *lāre* ‘dear’; TchB *naumikke* ‘little gem’, from *naumiye* ‘gem’ (Malzahn 2013: 112).

Feminine nouns

As far as the feminine is concerned, gender derivation usually implies that a new feminine substantive is created as the counterpart of a masculine one. Derivation of feminines from masculines is indeed one of the most common ways of forming new feminine words in Tocharian. This type of gender motion affects animate and mostly human nouns (linked to the referential gender). It follows that gender shift is common from masculine to

³⁶ Cf. Hartmann (2013: 95) and Adams (2015: 180). In Tocharian A, we sometimes find the equivalent of the Tocharian B forms. However, they are mismatching in the suffixes and sometimes in the phonology, e.g. TchA *kuryart* ‘merchant’ ≅ TchB *käryorttau*; TchA *sāmtkenu* ‘doctor’ ≅ TchB *saṃtkinau*; TchA *waco* ‘warrior’ ≅ TchB *wetā_u*.

³⁷ In parallel, the suffix TchB *-ške* forms adjectival derivatives, although sporadic secondary nominal formations are attested, e.g. *yākwaške* ‘young horse’ from *yakwe* ‘horse’. See Adams (2015: 182). An analysis of the suffixes TchB *-ške* and *-ške* has recently been proposed by Pinault (2015: 176-77). On their origins, see Sims-Williams (2002: 237ff.) and Ciancaglini (2001: 76ff.).

feminine, but not vice versa.³⁸ The suffixes used are the following (Malzahn 2013; Hartmann 2013: 392f.): (1) TchB *-āñca*, A *-āñc* of Iranian origin (e.g. TchB *upāsakāñca*, A *wāskāñc* ‘female lay-disciple’ from TchB *upāsake*, A *wāsak* ‘male lay-disciple’; TchB *parivrājakāñca* ‘female mendicant’ from an unattested masculine **parivrājake*, cf. TchA *parivrājak* ‘wandering religious mendicant’, borrowed from Skt. *parivrājaka-* ‘mendicant, renouncer’, etc.); (2) suffix TchB *-a*, through a derivational process thanks to which the final vowel of a masculine noun is substituted by *-a* (e.g. TchB *mañiya* ‘female maid-servant’, from *mañiye* ‘male servant’; TchB *rākṣatsa* ‘female demon’ from *rākṣatse* ‘demon’; TchB *onkolma* ‘she-elephant’ from *onkolmo* ‘elephant’; TchB *mewiya* ‘tigress’ from *mewiyo* ‘tiger’; TchB *ostañña* ‘female house-holder’ from *ostaññe* ‘male house-holder’); (3) suffix *-ñña*³⁹ (e.g. TchB *ñakteñña* ‘goddess’ from *nakte* ‘god’, TchB *plaktukāñña* ‘female house-keeper’). Although the resulting nouns are formed through different suffixes, in Tocharian B they are always inflected according to the same inflectional class: nom.sg. *ᶜa*, obl.sg. *ᶜai*, nom.obl.pl. *ᶜana*. In other words, the commonest way to build a feminine noun from a masculine is the shift of inflectional class.

In the list just discussed, I have not included the type TchB *lāntsa*, A *lānts* ‘queen’, which is the feminine counterpart of the noun of participial origin TchB *walo*, A *wäl* ‘king’, with obl.sg. TchAB *lānt* (see §3.5.1.2). This type of feminine formation is not synchronically productive and is limited to this noun (Malzahn 2013: 110). Hartmann (2013: 96) analyses TchA *-i* as a *Motionssuffix*, although he gives only two examples: TchA *nāsi* ‘mistress’ and TchA *āklāšyi* ‘female pupil’ (p. 181). The first is the feminine counterpart of TchA *nātāk* ‘sir’, on which see §3.5.2. TchA *āklāšyi* is the feminine form of the substantivised gerundive TchA *ākālsäl* (TchB *akalšalle*) ‘one who has to learn’ → ‘pupil, disciple’.

Two similar and functionally equivalent suffixes, TchB *-eñña*, A *-eṃ* and TchB *-auña*, *-oñña*, form deverbal and denominal feminine abstract and action nouns (e.g. TchB *katkauña* ‘joy, delight’ from *katk-* ‘to rejoice, be glad’; TchB *läk_itsauña* ‘brilliance’ from *lak_itse* ‘shining, brilliant’; TchB *wešeñña*, A *wašeṃ* ‘voice’ from TchB *wek*, A *wak* ‘voice, noise’, etc.).

The feminine counterparts of the masculine suffixes TchB *-ške* and TchB *-kke* are TchB *-ška* and TchB *-kka* (e.g. TchB *šerška* ‘little sister’ from *šer* ‘sister’, *šamñāṃška* ‘girl’ probably

³⁸ The only attestation of a masculine derivative from a feminine noun may be TchB *mokomške* ‘male monkey’, but it is uncertain. The problem is that the feminine noun is attested with variants (TchB *mokauška* ~ *mokomška* ~ *mokoška* ‘(female) monkey’), and their distribution cannot allow to decide which the older form is (cf. also Peyrot 2008: 91f.). Although the feminine word is much more productive than the masculine, an original feminine derivative from *mokomške* → *mokomška*, which in turn became *mokauška*, cannot be excluded.

³⁹ See §4.3.3.1. As Winter (1961) pointed out, TchA *ñakteññā* ‘goddess’ is borrowed from Tocharian B. In Tocharian A, we also find two other nouns which seem to display a similar feminine suffix *-ñā*. They are *kinnarñā** ‘±female Kinnara’ (attested once as an oblique singular (*ki*)*nnarñāṃ* in A180 a6) and *vidyādharñā** ‘±female Vidyādhara’ (attested only as a nominative plural *vidyādharñāñ*, see sss §50 and 149). However, it is very probable that these nouns are also loanwords from Tocharian B (cf. TchB *kinnarña* in B109 b5, serving as an adjective). See Fellner (2013: 58 fn. 70).

from *sāmñā* *; see §3.5.2); the vocative form TchB *ammakki* ‘oh dear mum’ from an unattested *amma* *‘mum’, parallel to *āppo* *‘dad’ and similar to Gk. ἀμμή, Lat. *amma*, OHG *amma* ‘mother, nurse’; TchB *pälkaucäkka* ‘female fortune-teller [= Skt. *ikṣāṇikā*]’ and a few others.⁴⁰

Alternating nouns

There are several suffixes forming alternating nouns. The most productive are TchB *-ññe*, *-auñe*, *-uññe* which correspond to TchA *-une*, *-one* (Kim 2007: 23-5; Pinault 2011a). These suffixes occur in abstract nouns derived from nominal bases (e.g. TchB *aiśamñe* ‘wisdom’ from *aiśamo* ‘wise’; TchA *kāswone* ‘virtue’ from *kāsu* ‘good’; TchA *knānmune* ‘knowledge’ from **knānām* ‘knowing’; TchA *wsokone* ‘joy, serenity’ from *wsok* ‘joyfully’, etc.). Furthermore, they are commonly added to the gerundive stem of a verb, forming verbal abstracts, e.g. TchB *nesalñe* ‘being’ from *nes-* ‘to be’, corresponding to TchA *nashlune* ‘id.’ from *nas-* ‘id.’. These derivatives are inflected as nouns of Class II.2 and III in Tocharian B, and III.2 in Tocharian A.⁴¹

There are also some instances of fully nominalised infinitives in TchAB *-tsi*. These new verbal nouns are of alternating gender (e.g. TchB *wastsi* ‘clothing’ from *wās-* ‘to dress, wear’; TchB *raktsi* ‘mat’ from *rək-* ‘to extend, spread out’; TchAB *śwātsi* ‘food’ from TchB *śaw(a)-*, A *śwā-* ‘to eat’; TchAB *yoktsi* ‘drink’ from TchAB *yok-* ‘to drink’; TchAB *śwātsi-yoktsi* ‘food and drink’ etc.).

In Tocharian B, we also find derivatives in *-or* and more rarely in *-wer*, both built on the stem of the past participle (e.g. TchB *karyor* ‘commerce’ from *kārya-* ‘to buy’; TchB *kārsor* ‘understanding’ from *kārsa-* ‘to know’; TchB *yāmor* ‘act, deed, accomplishment’ from *yam-* ‘to do’; TchB *āyor* ‘gift’ from *ay-* ‘to give’, etc.; e.g. *śeśuwer* ‘food, mealtime’ from TchB *śaw(a)-*, A *śwā-* ‘to eat, consume’, etc.).

Another old and fairly productive suffix is TchA *-ām*, forming abstract nouns (Hartmann 2013: 60). These Tocharian A formations correspond to the Tocharian B action nouns in *-i*: TchA *nākām* : TchB *nāki* ‘injury’, TchA *wākām* : TchB *wāki* ‘disease’, etc.. From a diachronic point of view, they are old neuters in *-*men-*, as the plural formations in TchA *-mant* (e.g. *nākmant*, *wakmant*), TchB *-nma* < *-*mna* (e.g. *nakanma*, *wakanma*) clearly show (Pinault 2008: 495-6).

⁴⁰ See Malzahn (2013: 112-4) for an in-depth discussion on the other feminine forms with the suffix *-kka*. She also points to a vocative form parallel to *ammakki*, TchB *şerikki* ‘oh dear sister’, derived from *şer*, but I was not able to find any attestation of this noun.

⁴¹ In parallel, Tocharian A shows some instances of a palatalised suffix *-(r)ñe*: *ykorñe* ‘negligence’ (cf. TchB *ykorñe* ‘id.’), *ekrorñe* ‘poverty’ from *ekro* ‘poor’, *pruccamñe* ‘advantage’ (cf. TchB *pruccamñe* ‘id.’) from *pruccamo* ‘useful’. However, this suffix seems to be borrowed from Tocharian B.

2.4.3. SEMANTIC PATTERNS

All gender systems include some kind of semantic residue, because phonological and/or morphological rules operate alongside semantic rules also in those languages where the assignment system is typically formal (Corbett 1991: 34).

Since Tocharian has masculine and feminine genders, one of the semantic principles is obviously the sex. Accordingly, when, on the referential plane, there is an opposition of sex and, on the linguistic plane, there is an opposition of gender, grammatical gender follows the sex. Nouns denoting males are therefore masculine and those denoting females are feminine. Another intuitive semantic principle is that Tocharian words referring to human beings are solely masculine or feminine. As we have partially seen, these semantic patterns are sometimes formally reflected in the inflectional class of nouns. For example, in Tocharian B the great majority of feminine nouns denoting female referents attests a plural in *-na*, and a singular paradigm of two types: (1) nom.sg. *-a*, obl.sg. *-ai*; (2) nom.sg. *-o*, obl.sg. *-a*. Furthermore, a new animate-based opposition has also been developed in both Tocharian languages: the new ending obl. sg. *-m̄* has been used to mark the oblique singular of nouns denoting animate entities. In Tocharian B, it is limited to masculine nouns, so it is predictable for the gender resolution.

Floristic terms are sorted in all three genders, depending mostly on their inflectional class and etymology. Many technical and medical plant words are borrowed from Sanskrit or Middle Indian languages. As a general trend of Tocharian loanwords, these nouns are typically alternating. However, if we do not consider these loanwords, the situation is still patchy: inherited words for plants, fruits, and cereals can be masculine (e.g. TchB *taiwe* ‘ripe fruit’), more frequently feminine (e.g. TchB *pyäpyo*, A *pyäpi* ‘flower’; on TchB *tāno* ‘grain’, see §3.7.1.2), but also alternating (TchAB *oko* ‘fruit’).

Inanimacy is a general condition for the members of the alternating gender. The fact that the term for ‘animal’ TchB *luwo*, A *lu* is alternating does not represent a real contradiction, because this is a generic term referring to the entire class of animals (Hartmann 2013: 388). Abstract nouns are typically alternating. However, inanimate and abstract nouns are distributed across feminine and masculine genders too, though more rarely.

Body parts are usually masculine and feminine, and only rarely alternating. This division may mirror a general Indo-European trend according to which the moving parts of the body are animate (masculine and feminine) while the unmoving ones are inanimate. For example, TchB *āšce* ‘head’, TchB *pokai* (obl.), A *poke* ‘arm’ are feminine, TchB *paiyye*, A *pe* ‘foot’, TchB *šar*, A *tsar* ‘hand’, TchB *kantwo*, A *käntu* ‘tongue’ are masculine, while TchB *āyo* ‘bone’ is alternating (but TchA *āy* ‘id.’ is masculine).

In faunal terms, the subdivision between masculine and feminine can also be found. As discussed above, while the generic term for ‘animal’ is alternating, animals are always masculine or feminine, depending on the sex of the referent. Apart from those feminine nouns derived from the corresponding masculine (e.g. *mewiyo* ‘tiger’ → *mewiya* ‘tigress’), the distinction between male and female animals is frequently made by different words

that are also etymologically unrelated. Some examples are: TchB *āl* ‘he-goat’ vs. TchAB *ās* ‘she-goat’, TchB *ā_u* ‘sheep’ vs. TchB *ariwe* ‘ram’, TchB *ke_u*, A *ko* ‘cow’ vs. TchB *ka_urše*, A *kayurš* ‘bull’ (Adams 2017: 1367f.). As pointed out by Malzahn (2013: 117) and Adams (2015: 1376), the specification of animal’s sex can also be made with a noun phrase consisting of the word for ‘male’ or ‘female’ and the animal’s noun, like in the case of TchB *klaiyna šroñ* ‘female goat-kids’ (Ching 2010: 332), TchB *āl yriye* ‘male lamb’ (vs. *klaiyna yrim*, Kizil, Wood 5; cf. Ching 2010: 297) or in the compounds TchB *alam-šrotaiñne* ‘pertaining to a male kind’, TchB *alam-yritaiñne* ‘pertaining to a male lamb’, TchB *klaiñ-šrotaiñne* ‘pertaining to a female kind’, TchB *klai-yritaiñne* ‘pertaining to a female lamb’. This strategy of gender disambiguation can be found in secular documents (Ching 2015). Some other animal nouns seem to refer to both masculine and feminine entities, although they have a fixed grammatical gender. For example, TchB *okso* is a generic masculine term, which can mean both the ox and the cow (DTB: 117), and it is used to translate both Skt. *go-* ‘ox, cow’ (or Chinese *niú* in B549) and Skt. *anaḍuh-* ‘ox, taurus’ (in B550.a).

Curiously, Tocharian does not attest any generic word for ‘bird’, but instead uses the following periphrasis with the word for ‘animal’: TchB *šyamñana lwāsa* ‘flying animals’, TchA *salat lu* ‘flying animal’. In Tocharian B, this noun phrase is opposed to TchB *ynamñana lwāsa* ‘walking animals’, as in B29 b8 ||| *kowän lwāsa šyamñana ynamñana nau* “If he kills flying and walking animals ...”.⁴² As pointed out by Adams (DTB: 560), the adjective *ynamo** ‘walking’, derived from *y-* ‘to go’, is only for those entities that are “opposed to flying”. This statement is of particular interest from a comparative perspective. As pointed out by Lazzeroni (1998), in the Ṛg Veda, humans and animals are called *dvipād-* ‘two-footed’ and *cātuṣpad-* ‘four-footed’, as representing the inhabitants of the earth, in opposition to the inhabitants of the air, which are usually defined *pakṣin-* or *patatrín-* ‘winged’. In Tocharian B, the exact match of the Vedic terms is attested: TchB *wi-pew** ‘two-footed’ and *štwer-pew* ‘four-footed’.⁴³ The first can be interpreted as a fundamental attribute of human beings, as the following example from the Aggañña-Sutta shows: AS16.2 a1 *wi-ppewänne kṣattariyi śpālme* “Among the two-footed, the kṣatriyas (are) superior” (cf. Pinault 1989a: 195). On the other hand, the nom.sg. *šwer-pew* is attested in two fragmentary documents: once in B512 a3 (||| *(šwer-pe)wä wat waipecce kwri taiñ* “...or the four-footed ... wealth. If you (will have)...”) and twice in B513 at lines a3 (*kwri tākañ šwer-pewä wat* “or if there is a four-footed ...”) and b3 (||| *wärñai šwer-pewä kwri taiñ tākañ-ñ* “beginning with ... the four-footed. If you will have...”). Together with B511, these two documents are part of a short literary composition in prose on a dream oracle. However, the fragments are damaged, so that the correct interpretation of the four-footed entities mentioned is impracticable. Both *wi-pew** and *štwer-pew* are attested in a passage

⁴² Perhaps similar locutions are also attested in the archaic document B343 a3 ||| *šle ynämñanā šlye šlyämñana(na) |||*. Also in Tocharian A there seems to exist an opposition between terrestrial and flying animals, on which see Carling (2009: 156) and Malzahn (2014: 87 fn. 2).

⁴³ These Tocharian words are used for translating Sanskrit terms, but they seem to match Proto-Indo-European words at a deeper level (see the main text above).

of the Vinayavibhaṅga, Pārājika 2, where the conditions of the expulsion of a monk are explained: *lyakāṃ kr(au)pträ · snai-pewaṃ · wi-pewaṃ · śtwer-pewaṃ · makā-pewaṃ* “one gathers thieves for himself, those without foot, the two-footed, four-footed, and many-footed” (IT127 b2-3, cf. Michaël Peyrot apud CETOM). Given the high cultural prestige that Sanskrit and Middle Indian languages have had on Tocharian, one could of course think that these terms are loanwords. However, as first pointed out by Winter (1962a: 29f.), the element *-pew* is best understood as an inherited word, which in turn is important evidence that Tocharian continued the athematic word **ped-/pod-* ‘foot’ (cf. TchB *paiyye*, A *pe* ‘foot’): PIE **pod-uyt-* > PTch **pæwə* > TchB *pew* (Ringe 1996: 28; cf. Adams DTB: 429, who reconstructs a suffix **-uent-* here). The outcome of the PIE possessive suffix **-uent-* is well attested in Tocharian, like in TchB *pernew* ‘glorious’, *tallāw* ‘miserable’, etc. (Pinault 2008: 524-6). The fact that TchB *-pew* did not follow the same inflection of the regular outcome of the adjectives in **-uent-* is plausibly explained by Winter (1962a) by analogy with the inflectional type of the bahuvrīhi-compounds. Now, since TchB *-pew* is an inherited word (to be formally connected with Skt. *padvat-* ‘having feet, running’), the pair TchB *wi-pew** : *śtwer-pew* matches Skt. *dvipād-* : *cātuṣpad-* and Umb. *dupursus* : *petupursus* (Iguvine Table VIb 10-11).⁴⁴

Furthermore, both Tocharian languages show two terms referring to ‘water’, i.e. TchAB *āp* and TchB *war*, A *wär*. The fact that the former is feminine while the latter is alternating matches the Vedic pair *āp-* (f.) : *udan-* (nt.), also from an etymological point of view.⁴⁵ In

⁴⁴ On the meaning of Gk. ἀνδράποδα ‘slave’ as opposed to Gk. δούλος and τετράποδα, see Lazzeroni (1998: 26-31).

⁴⁵ Several PIE words for ‘water’ can be reconstructed, but the heteroclitic PIE **uód-r/n-* is surely the most broadly attested. It is well-known that Vedic had many words referring to water. Two of them are Ved. *udán-* and *vár*, both of neuter gender. Lubotsky (2013) has recently argued that these nouns may belong to one and the same supplementary paradigm, so that the nominative and the accusative case of *udán-* are supplied in the singular by *vár*. He argues that these two nouns come from the same paradigm on the diachronic level, and that PIE **ueh,r* (or **uoHr*), from which Ved. *vár* derives, developed from an original **uod̥r*. I agree with Lubotsky in arguing that *vár* and *udán-* are both synchronically and diachronically connected. To be more precise, since Ved. *vár* occurs only in the nominative and accusative singular, and the *udán-* forms in all other cases, they would perfectly mirror the outcome of a heteroclitic **r/n-* stem. However, I am not completely convinced by the evolution **-dr* > **-h,r*. One could simply say that the cluster **-dr#* has been simplified in *-r*, and that the loss of the dental stop caused compensatory lengthening of the root vowel in some Indo-European languages. A parallel situation is perhaps attested in two different Latin words. According to de Vaan (2008: 641 and 644), Lat. *unda* ‘wave’ (< **udna*; cf. also Lat. *fundus* ‘bottom’ < **b^hud^hno-* < **b^hud^hmno-*) is etymologically connected to the *n-* stem of **uod̥r/n-*, which in turn became a noun of first declension (the *a-* stem is to be probably interpreted as an old neuter plural); on the other hand, Lat. *ūrīna* is built on the root *ūr* plus the suffix *-īno-*. This *ūr^o*, attested only indirectly, can be the outcome of a zero grade **udr-*, with loss of **-d-* and compensatory lengthening of the initial vowel. If Tocharian inherited this paradigm, TchB *war*, A *wär* may be the result of a merger between the *r-* stem and the *n-* stem. See recently Kim (2019a). The continuant of PIE **h₂ep-* is only attested in the Indo-Iranian branch (e.g. Av. *āp-/ap-*, OP. *ap-* ‘water’), in Tocharian, in Oscan

the Ṛgveda, the feminine noun clearly refers to water as an active and living being, a personified natural force, while the second one as a material and inactive entity, i.e. as the thing itself (Meillet 1931: 216-7). In Tocharian A, the first term is attested only twice in the locative singular *āpaṃ* ‘in the water’ (A226 a3 *tāmāk āpaṃ ālyek nuṃ wrasañ tāloṣ klopasuṣ* “in this very water again other unhappy and miserable living beings...” and A396.a a1 *āpaṃ* “in the water”). In Tocharian B, the term is not frequent either. I found the following certain attestations (twice as a nominative singular, once as an oblique singular, and once as an oblique plural): (1) IT179 a4 *ot śoliṣṣa āp wrāṃtsaimem māske(tār)* “then, the water of the hearth is from the opposite direction” (cf. Broomhead 1962: I, 240-1; DTB: 47); (2) IT179 b4: *sā_u āp* “the water”; (3) B140 b4: *āp saṃsā(rṣṣai no) sū kā swāsaṃ* “why does he rain the water of saṃsāra?” (cf. DTB: 46-7); (4) IT23 a5 *orotstsana āpāṃ* “great waters/river”.⁴⁶ As is clear, TchAB *āp* does not mean simply ‘water’, but more specifically ‘river, rain’ or, more generally, ‘flowing water’. As far as the origin of this word is concerned, two different hypotheses can be formulated: either it goes back directly to PIE **h₂ép-* or it has been borrowed from Sanskrit or Middle Indian. Hartmann (2013: 445ff.) claims that both explanations are possible and that one cannot take sides in favour of one of them. On the contrary, I believe that some observations are in favour of the first analysis. In Tocharian B, the term is surely feminine and has an oblique plural in *-āṃ*. It belongs to Class V, which does not include loanwords of Indian origin not referring to human beings. Indeed, if a loanword, a plural ending in TchB *-nma* or TchB *-nta* would be expected. As we have seen, the plural form of this word is attested only once in Tocharian B at the end of a fragmented line. As a consequence, one could say that *āpāṃ* has to be restored as *āpām(ta)* /*ápənta*/ or *āpāṃ(ma)* /*ápənma*/ (cf. for instance TchB *cakaṃma*, plural of *cāk* ‘picul’). Of the two restorations, the latter would be preferable because monosyllabic loanwords usually take the plural *-nma* in Tocharian B. However, a peculiarity of nouns of Class II.2 is that they attract the accent in the plural (e.g. *kālp* /*kálp*/ ‘meaning, sense’ : *kalpanma* /*kalpánma*/), while in the hypothetical form ***āpānma* the accent would be fixed on the first syllable. For these reasons and also because the word is of feminine gender, TchAB *āp* is more likely to be an inherited word (Van Windekens 1976: 166; DTB: 47).

Turning now to the second term, the situation is completely different, both with regard to the productivity and the gender. Indeed, TchB *war* and TchA *wār* are very productive, and they are of alternating gender, representing old neuter forms. From a semantic point of view, TchB *war* and TchA *wār* mean both material and flowing water. A semantic polar distribution with TchAB *āp* is therefore opaque. As a matter of fact, the chronological

(acc.sg. *aapam* ‘basin’), and perhaps in Baltic (e.g. OPr. *ape*, Lith. *ùpė* ‘river, brook’, see NIL: 311ff.). Apart from Indo-Iranian and Tocharian, in the other Indo-European languages this term has developed the specific meaning of ‘river, basin’, with further resuffixations.

⁴⁶ According to Adams (DTB: 47) another possible attestation is in IT74 b1, a bilingual Sanskrit-Tocharian B fragment, where he reads (*śt*)*w(āra) a(pām)*. However, the reading is doubtful, given the fact that the document is very fragmentary.

distance between the culture attested in the Veda and the one attested in the Tocharian texts is huge. We can therefore hypothesise that the Tocharian words had the same semantic distribution of the Vedic pair, and that this distribution is still represented in the gender polarisation of the terms, even though it has become opaque in the historical attestations of the Tocharian languages.

2.5. SUMMARY AND CONCLUSION

The goal of this chapter was twofold: on the one hand, it aimed at introducing the category of gender from the point of view of general linguistics; on the other hand, it was intended to investigate the gender system of Tocharian from a synchronic perspective.

After having discussed some terms and concepts revolving around the linguistic notion of gender, we have dealt with the reconstruction of the Proto-Indo-European gender system from a comparative perspective, underlining that the feminine was latest created. Afterwards, we have moved on to the core of the chapter, discussing the synchronic problems of the Tocharian gender system. The linguistic analysis of the so-called *genus alternans* has come to light. Nouns pertaining to this category show a peculiar agreement, since they combine agreement traits of the masculine and the feminine. In particular, they take masculine agreement in the singular and feminine agreement in the plural, so that the targets show only two distinct sets of forms, even though they stand in agreement with the same controller. I have made a typological and cross-linguistic comparison with Romanian and Standard Italian in order to illustrate that the *genus alternans* must be regarded as a real category value. Furthermore, this investigation has shown some methodological points of interest in the domain of general and typological linguistic analysis on the notions of gender value, agreement class, and inquirate gender. Then, I have discussed some terminological difficulties in labelling the third Tocharian gender, examining the difference between the alternating gender and the “neuter” in Tocharian. Finally, the last section of the chapter has been devoted to how the gender assignment system of Tocharian worked, by commenting on inflectional, derivational, and semantic patterns that allow us to infer the gender of Tocharian nouns.