

6. Paradigmatisation of the perfect and resultative in Tocharian

Ilja A. Seržant
Leipzig University

Abstract

The periphrastic construction at issue is based on the resultative participle and the auxiliary. The semantics are those typical of a perfect grammaticalized from a resultative construction. The combination with time adverbials as well as contextual information show that the reference time coincides with the moment of speech and is not prior to it. In addition to the inherited meaning of the resultative perfect, other meanings typical of a perfect are also found, e.g., the experiential perfect. Finally, there are no selectional input restrictions: all Vendler classes are found in this construction – a situation that may not be found with early resultatives. Even though, these properties suggest an advanced grammaticalization degree of the construction, there are also indications for its recent development. For example, there is no evidence for a non-compositional interpretation of the auxiliary such as, for example, remote past – a meaning facet typical of pluperfects.

Keywords

Tocharian, perfect, resultative, orientation

1. Introduction

Tocharian – Tocharian A (henceforth TA) and Tocharian B (TB) – are the most eastern Indo-European languages originally spoken in the northern part of the Tarim Basin (Xinjiang region, China). Tocharian B has a number of diachronically and diatopically grounded varieties (cf. Malzahn 2007; Peyrot 2008), traditionally referred to in the literature by the place of provenience such as Ming-Öy-Qizil, Šorcuq, etc. The texts attested in this language are from the period from 5th to 8th AD. The decipherment of Tocharian by the two German indologists Emil Sieg and Wilhelm Siegling dates back to 1908 (see Sieg & Siegling 1916[1908]).

The Tocharian past tense system functionally consists of three main categories: the *preterit*, *imperfect* and the *periphrastic construction*. The latter is based on a set of auxiliaries all stemming from verbs with the original (and still attested) meaning ‘to be’ and the lexical verb being nominalized in the form of the past participle (PP, traditionally *preterite participle*), henceforth the *PP construction*. The relevant morphological patterns for the preterit – but also some imperfects in Tocharian A and the PPs – are highly complex and there is a considerable degree of allomorphy and, especially in the preterit, of suppletion.¹ The function of the preterit – the most frequent past tense form in the texts – is that of an aorist (perfective past) and, rarer, of a perfect (Thomas 1957). The exact range of its actional and aspectual properties still awaits a comprehensive investigation. Historically, the Tocharian preterit is the result of an earlier merger of the morphological aorist and perfect patterns of Proto-Indo-European (see *inter alia*, Adams 1978: 282, 1988: 82; Ringe 1990; Winter 1994; Hackstein 2005; cf. the overview in Malzahn 2010: 208-214). Thus, many Tocharian preterit forms go back to Proto-Indo-European aorists of the respective verbs (cf. various entries in LIV²). The very morphological pattern of the Tocharian preterit III rests on the morphological pattern of the *s*-aorist of Proto-Indo-European: it employs the vowel gradation typical of Proto-Indo-European *s*-aorists (cf. Narten 1964) as well as the suffix/ending *-s* (Ringe 1990). Thus, functionally, Tocharian is very

¹ The reader is referred to Malzahn (2010) which is the most extensive morphological treatment of Tocharian verb forms in both synchronic and diachronic perspective.

similar to Latin in its development of the Proto-Indo-European aorists and perfects which merged into a perfective past (traditionally referred to as *perfect* in Latin grammars) while the imperfect is a new category not inherited from Proto-Indo-European in either.

The present study sets out to describe the function and syntactic properties of the PP construction and crucially relies on Thomas (1957: 244–306) and Seržant (2016), while the morphological peculiarities of the PP formation, along with the different forms of the auxiliaries, are not in the scope of this paper. Yet, it is not an easy task to describe the function and syntax of a category in a dead language. Therefore, methodologically, I will provide two types of evidence that may be used in argumentation: (i) *formal or “objective” evidence* such as combinability with time adverbials, selectional input restrictions, tense/aspect markers of the neighbouring verbs, etc., and (ii) *“subjective” evidence* based on philological and contextual interpretation. Needless to say, that (i) is generally given more weight than (ii).

The paper is structured as follows. In the next section (§2), I lay out the general framework, providing definitions for the category of perfect, the category of resultative and the properties that distinguish between these two. Sections §§3-5 describe the properties of the relevant Tocharian forms: section §3 is devoted to some morphological remnants of the old, Proto-Indo-European perfect in Tocharian A. Section §4 discusses the morphosyntactic properties of the PPs such as the presence vs. absence of auxiliaries (§4.1), their orientation and the alignment of arguments (§4.2). Section §5, in turn, is devoted to the function of the PP construction: semantic properties typical for resultatives (§5.1) and the semantic properties typical for perfect but not for resultatives (§5.2) which the PP construction acquired in the course of time. Subsection §5.3 discusses the meaning of the PP construction headed by the auxiliary in the past tense (“pluperfect”) and the distinction between the imperfect auxiliary (§5.3.1) and preterit auxiliary (§5.3.2). §5.4 briefly mentions the use of the preterit as a perfect. Finally, section §6 summarizes the discussion and provides more general conclusions.

2. Perfect as a cross-linguistic category

Before I turn to the description of the relevant categories in Tocharian I lay out here my notional framework. The relevant categories – the *resultative*, *perfect*, *aorist*, *past* – cross-linguistically often represent different historical stages of one and the same development. These stages are ordered chronologically on the following cline (as per Breu 1988, 1998: 90f.; Kuryłowicz 1964: 141ff.; Serebrennikov 1974: 234-236):

- (1) (a) *resultatives* > (b) *perfects* > (c) *aorists* > (d) *past tense*

According to Nedjalkov & Jaxontov (1988: 6) “[t]he term resultative is applied to those verb forms that express a state implying a previous event”, cf. English *to hang* vs. *to be hung*: while both denote states, the latter, but not the former, entails a preceding event. Accordingly, not all verbs may form resultatives. Only if the lexical meaning of the verb entails some inherent endpoint – that is, if the verb is telic – may it form a resultative. Furthermore, in order for the resultant state (as opposed to the default state of the referent) to be meaningful, one of its arguments has to be able to be affected by the action, for example, in terms of a change of state (Haspelmath 1994: 160f.). However, some telic non-change-of-state verbs such as *to find* may also form resultatives, cf. English *paradise found*. Moreover, resultatives may have other lexical input restrictions as well alongside the requirement on telicity. I define *resultative* as follows:

- (2) Resultatives denote a state that entails a preceding event and this state lexically inherent and context-independent.

A *resultative* is a verbal category that denotes the meanings adhering to this definition. If, however, a category expresses the meaning in (2) alongside some other meanings then one may speak about the *resultative meaning* of that category but not about the category of *resultative*. For example, I argue below that the Tocharian PP construction is a perfect which may also have resultative meaning.

Resultatives are semantically complex and encode two meaning components: the state is the foreground information while the preceding event is a background entailment. Since the immediately preceding event is only vaguely denoted, resultatives typically do not carry entailments as to the exact make-up of the preceding event. For example, whether or not the event was controlled by an agent or not. Furthermore, more specific information on the preceding event is often incompatible with resultatives. For example, quantifying or manner adverbials that scope over the preceding event (cf. (?) *the window is quickly broken*) or references to other participants of the preceding event, e.g. agent phrases (cf. (?) *the window is broken by this man*) are generally avoided. In turn, additional information on the state itself – i.e. the foreground information of a resultative – is very natural (cf. *the window is still broken*). Moreover, adverbs typically have scope over the state and not over the preceding event as in the English sentence *usually, the window is broken*.

Here, *usually* is more likely to refer to the state of a broken window, not referring to the preceding event itself. That is, the window is found broken again and again by the observer regardless whether because the window is never repaired by someone once it is broken or because someone breaks the window again and again. The resultative is typically used as a predicative modifier of an NP.

In the course of development, a resultative may start admitting an increasing number of verbs to which it may be formed. When this happens, its overall meaning may shift from the specific meaning of featuring the lexically pre-determined result into a more general meaning of some kind of result that is distinct from what may be derived from the lexical meaning of the verb alone. This development is a development from a very specific category of resultative into a more general category of perfect. Lindstedt (2000: 368) describes this semantic change as “the generalization of meaning from ‘current result’ to ‘current relevance’”. However, it is mostly not a generalization but rather an extension of the meaning because perfects often retain the ability to code the original, resultative meaning alongside the new, more abstract meanings. The overall meaning thus emerged is notoriously difficult to describe in terms of a *Gesamtbedeutung*. Most commonly, this new meaning is referred to as the meaning of *current relevance* in the literature (first introduced in MacCoard 1978; *inter alia*, Lindstedt 2000: 366; Dahl & Hedin 2000: 392) but it may be split into different subtypes such as experiential perfect, resultative perfect, evidential perfect, etc.

Having said this, the notion of *current relevance* is too broad to be objectively applied and is easily misinterpretable since any situation described in a discourse will have some current relevance for the narration. Dahl & Hedin (2000: 393), relying on Inoue (1979), are more specific and argue that, for example, the English perfect tends to be used in clauses which provide “a causal explanation of a state-of-affairs referred to in another clause” and “a sentence in the Present Perfect conveys an explanatory sense” (Dahl & Hedin 2000: 393). Causal explanation of a state-of-affairs is a more specific criterion than current relevance and is therefore better operationalizable. This explains the inability of perfects to code subsequent past events in a narration (cf. Lindstedt 2000: 366). This property is important as it may be objectively confirmed on the basis of texts (the *objective evidence*).

3. The old perfect

Proto-Indo-European had a verbal category which fulfilled the functions typical for a perfect (such as the resultative meaning of a perfect) (Meier-Brügger 2010: 390; LIV²: 20). Morphologically, this category was formed by means of the reduplication of the root-initial consonant with the invariable vowel *-e- of the reduplication syllable, dedicated person/number endings, and graded root vowel (*o in the singular vs. zero in the plural). As has been mentioned above, the most frequent Tocharian past tense form, namely, the *preterit*, continues not only the morphological patterns of the old Proto-Indo-European aorists (most notably, the morphological type of preterit III) but also of the aforementioned perfect pattern (principally in the person/number endings, cf. Ringe 1990) while functionally being an aorist (i.e. a perfective past). Crucially, there are a few clear remnants of the old Proto-Indo-European perfect in terms of both, the morphological pattern involved and the meaning Tocharian A (Seržant 2014: 93-97):

- *sa-srukā-t* ‘killed himself’ (REDUPL-kill-3SG.MID),
- *ka-käm* ‘became’² (REDUPL-be.3SG.ACT),
- *ka-käl* ‘bore’ (REDUPL-bear.3SG.ACT),
- *pa-pyütäk* ‘arose’ (REDUPL-emerge.3SG.ACT), etc.

These verb forms were traditionally incorrectly categorized as causatives due to morphological similarity with the latter (cf. Krause & Thomas 1960): the strong causative preterit of Tocharian A is also formed with the reduplication of the initial consonant and (an analogical) *o-grade of the root vowel (synchronically *-æ- under A-umlaut turned into -a-). Moreover, at least some of these forms also attest the typical function of a perfect such as current relevance, cf. the hot-news perfect (McCawley 1971) in (4) below. Thus, the Tocharian A *sa-srukā-t* (REDUPL-kill-3SG.MID) ‘[he] has killed himself’ and *sruk-sā-t* (kill-PRET-3SG.MID) ‘[he] killed himself’ from the root *sruk-* ‘to die/to kill’³ are not distinct in terms of diathesis, i.e. causative vs. basic, as has traditionally been assumed, but differ in that the former still preserves the perfect meaning of current relevance while the latter – historically an aorist – still functions as an aorist. The contrast between examples (3) and (4) illustrates this. The former aorist form (= preterit III) occurs in a narrative, surrounded by past tenses such as imperfect and preterit. Both examples are from the story about the mechanical maiden constructed so perfectly by the mechanic that the painter, when visiting him, falls in love with her. Once the maiden falls apart, the painter finds out that the maiden is mechanical and, in retaliation, paints a picture of his suicide so perfectly that now the mechanic takes it as real:

(3) About the painter:

‘... he came’ (impf.)	‘... she did the service’ (impf.)	‘... he touched’ (pret.)	‘.. she fell apart’ (pret.)
... <i>kipyo</i>	<i>sruk-sā-t</i>	<i>āñcām sām</i>	
shame.INS.SG	kill-AOR-3SG.MID ⁴	REFL.OBL 3SG	

² I rely on the meaning given in the translation of YQ 1.29 1/1 b3 in Ji et al. (1998: 29).

³ It is quite difficult to determine the basic meaning of this verb: in the dedicated *Inagentive* (middle-like paradigm) (present III, subjunctive V, preterit I) it has the meaning ‘to die’ while in the paradigm of preterit III it has the meaning ‘to kill’. I have argued in detail that the paradigm of present VIII, subjunctive I/II and preterit III is used for the basic verb (Seržant 2014: 1-16) while the *Inagentive* paradigm is a derivation from it. Hence, the meaning ‘to kill’ is likely to be basic here, while the meaning ‘to die’ is a derived meaning due to the inagentivizing morphology of the paradigm of present III, subjunctive V, preterit I.

⁴ Although both forms *sruk-sā-t* and *sasrukāt* are traditionally referred to as *preterit*, I gloss them according to their functions in these two examples (while elsewhere I leave the traditional term *preterit* as the gloss): the simple, non-reduplicated form *sruk-sā-t* is functionally an aorist (historically corresponding to the PIE aorist formed by means of the suffix -s- with some Tocharian innovations) while the reduplicated form *sa-sruk-ā-t* is functionally

... [then] he killed himself out of shame.’ (Sieg 1944: 12, [TA; 9a1])

The situation in the following example is different both contextually and, crucially, as regards the tense reference in the neighbouring clauses:

- (4) Now, the mechanic – completely distraught by the painter’s suicide – goes to the king and reports him what happened:

... *ñi waštā kākārpu* *şeş*
 1SG.GEN house.PERL.SG descend.PP.NOM.M AUX.IMPF.3SG
 ‘he has come to my house’.

säm tāpärk kip şurmaşi şñi āñcäm sasrukāt
 3SG.NOM.M now shame.OBL.SG because REFL.POSS self.OBL.SG kill.PERF.3SG.MID
 ‘He now has committed suicide because of shame.’ (adapted from Sieg 1952: 12, [TA; 9a5])

In this example, there is a present time adverbial *tāpärk* ‘now’ which is unexpected with an aorist but, at the same time, is typical for a perfect.

While *sa-sruk-ā-t* ‘has killed himself’ indeed refers to the current situation (to the moment of speech) and not to the time of the preceding event of the suicide, the form *ka-käm* (‘REDUPL-become.3SG.ACT’) ‘became’ refers to the time prior to the moment of speech:

- (5) (*ajite tränkäş äntāne säş klyom metrak oktapuklyi ka-käm* :
 Ajita say.3SG.ACT when DEM.3SG noble Metrak.NOM eight_year REDUPL-
 become.3SG.ACT
 ‘Ajita says: When this noble Metrak **became** an eight-year old.’
 (Ji et al. 1998: 29, [TA; YQ 1.29 b3-4])

The same meaning of becoming such and such many years old is found in the perfect form of this verb (**ǵenh₁-*) in other Indo-European languages such as Ancient Greek (cf. Hdt. *Hist.* 1.119.5-7, Hdt. *Hist.* 3.50.3; Seržant 2014: 93-4). Otherwise one finds a similar situation in Old Church Slavic which – similarly to Tocharian A – attests only remnants of the old perfect that do not only continue the perfect morphology but also retain its original, cf. the perfect *vědě* ‘I knew’ originally from ‘I have seen’.

4. The new perfect. Morphosyntactic properties.

I turn now to the new construction of the resultative / perfect. It is formed by means of an auxiliary and the past participle – that is the complex resultative form strategy according to the classification in Nedjalkov & Jaxontov (1988: 19) – to encode the resultative and perfect.

4.1. The auxiliaries

The auxiliary in the present indicative is often dropped (see below). Where it is present it comes from the verbs that elsewhere have the lexical meaning ‘to be, to exist’ such as *nes-* (TB) / *nas-*

a perfect (historically corresponding to the PIE perfect formed by means of the reduplication of the first consonant with some Tocharian innovations such as the quality of the reduplication vowel, stem gradation and some other morphological properties).

(TA) ‘to be’, *māsk-* (TB/TA) ‘to be’ (cf. Batke 1999: 42ff discussing semantic differences between them):⁵

Table 1: Overview over the third person singular auxiliary (Krause & Thomas 1960: 196; Thomas 1957: 251f.; Seržant 2016: 239)

	Present	Imperfect	Preterit	Subjunctive	Optative
TA	<i>∅, naṣ, māskatār</i>	<i>ṣeṣ</i>	<i>tāk</i>	<i>tāṣ</i>	<i>tākiṣ</i>
TB	<i>∅, (nesām) ste/star-/stāre⁶, māsketār</i>	<i>ṣai</i>	<i>tāka</i>	<i>tākam</i>	<i>tākoy</i>

The PP predominantly (50%) occurs in subordinate clauses – both with a finite auxiliary and patterning as a converb denoting anteriority. Much less frequently it is found in main clauses (23%) and as an NP modifier (24%) (Seržant 2016: 243). The PP may be substantivized and assume secondary cases in the way only head nouns do elsewhere.⁷

Bybee et al. (1994: 67f.) claim that constructions of this type are compositional in that the auxiliary provides (i) the tense reference – typically present – and (ii) the stative actionality whereas the participle refers to (iii) a dynamic situation in the past. In contrast, I claim for Tocharian that the participle fulfils the last two of these functions (ii-iii) whereas the auxiliary is used for other purposes including function (i) (see below). The stative actionality of the PP may be observed independently from the predicative position, namely, in the attributive position when modifying the head noun with which it agrees:

- (6) *pissañkis* *el* *wawu*
 community.GEN.SG gift.NOM.SG give.PP.NOM.SG
pissañk-am ***kälko*** *el* *träñkträ*
 community.SG-LOC go.PP.NOM.SG gift.NOM.SG say.PRS.3SG.MID
 ‘a gift that is given to the Community is called “gift gone to the Community” (i.e. Sanskrit *saṃghālambana* or Pāli *saṃghāgata*-).’ (cf. Ji et al. 1998: 177, 180.10-12, [TA; YQ 1.41 b3])

In this case, the *kälko* ‘gone’ modifies the noun *el* ‘gift’ and has – as also most adjectives do – a clearly stative actionality.

When it comes to the auxiliary, it is absent in most cases: 62% of all PP constructions in Maitreyasamiti-Nāṭaka (TA). If it is present it typically follows and rarely precedes the PP; the auxiliary and the PP need not be adjacent and may be separated by some other words. In those instances where the auxiliary is present it conveys some additional information not found in the respective counterpart without the auxiliary. The function of the auxiliary is manifold. First, except for the present indicative, the auxiliary encodes additional semantic information on the mood and/or tense. For example, the subjunctive auxiliary *tākam* marks the resultant state as potentially possible:

- (7) *empelona ra* *yāmwa* *tākam* *yāmornta*

⁵ Itkin (p.c.) claims that the third person singular form in Tocharian B *nesām* ‘be.PRS.3SG.ACT’ does not occur in this construction. I am inclined to think that this is rather due to the mere fact that the third person present singular is generally the morphologically unmarked form. Precisely this form tends to lack an overt exponent in many languages (Bickel et al. 2015), for example, in many Turkic languages. The reason for this is that the third person singular present form is the semantic and frequential default and therefore need not any dedicated marking.

⁶ Cf. MSL 19, 160 (Thomas 1957: 251).

⁷ The Tocharian case system consists of three core cases: the nominative (unmarked), the oblique and the genitive. All other cases, such as the allative or the instrumental (*secondary cases*) are formed by adding the case affix mostly only once and onto the head noun which must be in its oblique form (*Gruppenflexion*). Thus, if the PP bears the secondary-case affix it should be considered nominalized head of that NP.

horrible also do.PP.NOM.PL be.SUBJ.3PL deed.NOM.PL
 ‘Even [if] horrible deeds have been done, (by self reproach they become entirely annihilated).’ (TB; PK AS 7C b2)^{8,9}

(8) *seṃ te-yäknesa yāmor yāmu ket tākaṃ*
 DEM.NOM.SG this-way.PERL deed.NOM.SG do.PP.NOM.SG INDEF.GEN.SG be.SUBJ.3SG
 ‘By whom a deed of this kind may have been done, (even [if] he is reborn in hell, quickly he will be redeemed completely).’ (TB; PK AS 7C b3)⁹

(9) *toṃ tary= aiśamñenta eru ka tākaṃ*
 DEM.PL three=knowledge.PL evoke.PP.SG only AUX.SUBJ.3SG
 ‘only if he has evoked such threefold knowledges, (he is the pupil of the Omniscient)’ (TB; THT 31 b1)

Observe that both the subjunctive auxiliary and the PP form only one predication semantically: the auxiliary does not bear any lexical information. This suggests that the whole construction is grammaticalized in Tocharian.

At the same time, the auxiliary does not just serve tense-aspect-mood inflection for the lexical verb but does bear its own function. In the indicative present, the auxiliary does not convey any additional meaning in terms of truth conditions with one exception: the presence of the present indicative auxiliary seems to correlate with independent assertions. Contrast questions in (10) or (11) without an auxiliary with the assertion in (12) with the present indicative auxiliary:

(10) *k_use no sū yāmor kakraupau mā no yāmu*
 REL.NOM but 3SG.NOM deed.NOM collect.PP.NOM NEG but do.PP.NOM
 ‘But which deed is accumulated but not done?’ (TB; PK AS 7C b5-6)⁹

(11) *intsu no yāmor yāmu mā no kakraupau*
 REL.NOM but deed.NOM do.PP.NOM NEG but collect.PP.NOM
 ‘But which deed is done but not accumulated? (This also I will tell.)’ (TB; PK AS 7C b4)⁹

(12) *se yāmor yāmu mā kakraupau mäsketrä*
 DEM.NOM deed.NOM do.PP.NOM NEG collect.PP.NOM be.PRS.3SG
 ‘this deed is done but not accumulated, (like a seed that is sown, but not cared for afterwards.)’ (TB; PK AS 7C b5)¹⁰

Both (10) and (11) differ only minimally from (12), except for the illocutionary acts they express.

⁸ If not otherwise indicated, all manuscripts quoted were taken from CEToM (<https://www.univie.ac.at/tocharian/?manuscripts>) in May-August 2017.

⁹ Georges-Jean Pinault (in collaboration with Melanie Malzahn and Michaël Peyrot) translates (10) “But what is the deed accumulated but not done?”. I refrained from this translation because it assumes that the PP is used attributively to the subject NP *yāmor* ‘deed’. The clear attributive uses of the PP as well as adjectives typically precede the noun and do not follow it. I therefore analyze this clause as having a dropped present indicative auxiliary (after the PP). The same applies to ex. (11). I have no explanation for *sū*.

¹⁰ As has been mentioned in fn. 9 the attributive translation is not supported by the word order. The PP is rather used predicatively here. Moreover, the verb *mäsketrä* does not mean ‘remains’ but rather ‘is’ in all its other utterances, cf. a very similar context in PK AS 7I b2 *kakraupau spä mäsketrä yāmor* “and the deed is accumulated”.

Having said this, it seems that the primary function of the auxiliary is that of structuring discourse. First, it is used as a referential device indexing the person, especially non-third persons and particularly in the contexts with a topic shift such as the following (Seržant 2016: 239):

- (13) *mā kāswone* *kaklyuṣu* *naṣt*
 NEG virtue.OBL.SG hear.PP.NOM.SG be.PRS.2SG
mā tuñk *naś=śi* *metrakn-aṃ*
 NEG love.NOM.SG be.PRS.3SG=2SG.OBL Metrak.OBL-LOC
tämyo *tṣaṃ mā kakmu* *ṣet*
 therefore here NEG come.PP.NOM.SG be.IMPF.2SG
 ‘You have not heard of his virtue. You have no love for Metrak. Therefore, you did not come here...’ (Ji et al. 1998: 40, [TA; YQ 1.17 1/1 b1])

The subject and topic of the first clause is the second person while the subject of the second clause is *tuñk* ‘love’. Since the person is not marked on the PP itself, there is no other way to encode the second person but to add the auxiliary inflected for the second person or the second-person pronoun. Moreover, there is a more general tendency for the PPs referring to a non-third person to have an overt auxiliary even in the present indicative in main clauses (cf. YQ 1.17 1/1 b1, YQ 1.8 1/2 a7, A 76+83 b1, PK AS 6A a2, A 296 a4; exceptions: PK AS 6A a5); this is not true of converbial use of the PP in which the non-third person is indexed on the main verb, cf. *yāmoṣ ... rīntsāṃte* (do.PP.NOM.PL abandon.PRET.1PL.MID) ‘having made ... we abandoned’ in THT 273 a5 (TB).

Secondly, the auxiliary is found in the context of introducing a new discourse topic. For example, the focus ‘this view’ in (14):

- (14) ‘The Buddha, the master, was in Rājagṛha at that time. The venerable Ānanda entered the town to collect alms. He went to the house of a pupil of these Ājīvikas. This one spoke to Ānanda:’
ñi *se* *pilko* *ste* *prākr=eñku*
 1SG.GEN DEM.NOM.M view.NOM.SG.M AUX.PRS.3SG fixed.ADV=take.PP.NOM.SG.M
 ‘By me this view is held firmly: (there is no gift, nor sacrifice either, good deed [and] evil deed, both do not exist. But you, the followers of Śākya, deceive beings without number.) (TB; THT 23 b4)

4.2. PP orientation

I turn now to the alignment of arguments of a two-place predicate in the PP construction. Thomas, in his seminal investigation of the Tocharian PP construction, preterit (functionally an aorist) and imperfect, claims that the periphrastic PP construction was predominantly used to encode the passive perfect (1957: 209). While Thomas (1957) is a very rigorous work in other respects, this view must be revised.

The Tocharian PP – in contrast to past participles in many other languages – is not part of the voice system of Tocharian. It is neutrally oriented, i.e. it may refer to, or agree with, any of the three generalized roles without any statistical inclination towards A, S or P (cf. Table 2).¹¹ This property of the PP sets Tocharian apart from all other archaic Indo-European languages which all employ this PP – etymologically *-wos-/us- participles derived from the

¹¹ I use the terms A, S and P for the three generalized roles: A corresponds to the agent of a totypical transitive verb (say, ‘to break’) and P corresponds to the patient while S is the sole argument of an intransitive verb such as ‘to sleep’ (cf. Comrie 1989: 111).

perfect stem in Proto-Indo-European – for A/S-orientation (Greek, Baltic, Slavic, Vedic).¹² At the same time, the Tocharian PP does bear the morphological markers of the perfect system of Proto-Indo-European such as the reduplication and thus does not deviate otherwise from the Proto-Indo-European perfect participle. Note, however, that the Proto-Indo-European perfect equally did not take part in the voice system in that it had an inflectional subject person/number set that was distinct from both the active and the middle sets. In fact, a true resultative is not even expected to alternate for voice. Semantically, resultatives are genuinely middle-like expressions in that they can highlight only one participant of a two-place predicate at a time. This is because states typically concern one participant and not an interaction between two or more participants (Seržant 2012: 359). Even if the preceding event involved two participants the resultative state will only be meaningful with the participant that was considerably affected by the preceding event. This is confirmed by Tocharian PPs.

The morphology of the PP is not at all sensitive to the type of the preceding event (Seržant 2016: 240f.). The PP orientation as such is contextual (cf. Haspelmath 1994: 154) which means that one and the same PP may be either A- or P-oriented (Krause & Thomas 1960: 185), depending on discourse structuring factors, e.g. TB *yāmu* from the verb *yām-* ‘to do’ may mean both ‘having done’ and ‘having been done’ (examples below). The following table illustrates the orientation proportions of PPs in Maitreyasamiti-Nāṭaka fragments (TA) as edited in Ji et al. (1998):

Table 2: Orientation distribution of PPs
in Maitreyasamiti-Nāṭaka (Seržant 2016: 242)

	hits	in percentages
S	53	55 %
A	20	23 %
P	24	25 %

The orientation is contextually defined although certain verbs show particular preferences (see below). Alongside the lexical factor the orientation is crucially conditioned by the discourse topic in the Givónian (1976, 1983) sense. It is the topical NP that triggers the orientation. Consider the following example. Here, the following discourse is about the experiencer referent of the verb *klyuṣ-* ‘to hear’ and not about the stimulus ‘the virtue’, cf. ex. (13) repeated here for convenience:

- (15) *mā kāswone kaklyuṣu naṣt*
 NEG virtue.OBL.SG hear.PP.NOM.SG be.PRS.2SG
mā tuṅk naś=śi metrakn-aṃ
 NEG love.NOM.SG be.PRS.3SG=2SG.OBL Metrak.OBL-LOC
 ‘**You** have not heard of [his] virtue. **You** have no love for Metrak. (Therefore **you** did not come here.)’ (Ji et al. 1998: 40, [TA; YQ 1.17 1/1 b1])

In turn, the following example illustrates P-orientation with the stimulus being under discussion and not the experiencer of the same verb ‘to hear’:

- (16) ‘Mogharāja says: Oh teacher, is it to be believed that (in such a Kaliyuga era, in a short lifetime a Buddha) will appear in the world?’
bādhari trāṅkāṣ perāk ñi se

¹² Note, however, that this applies to the meaning of the verb in other forms. If the verb shows P-lability (with A vs. S<P) then the perfect participle may also show this lability.

Bādhari.NOM.SG say.PRS.3SG credible 1SG.POSS son
k_ayalte kaklyuṣu ñi
 because hear.PP.NOM.SG 1SG.POSS
neṣinās knānmānāñcäs kāsṣis-äs mäskatār
 early.OBL.PL know.PRS.PTCP.OBL.PL teacher.OBL.PL-ABL be.PRS.3SG.MID
 ‘Bādhari says: My son, **it** is to be believed, because I [have] heard **it** from the clever wise men of the past.’ (adapted from Ji et al. 1998: 69, [TA; YQ 1.2 1/2 b2-3 + A 214 a7])

Analogically, the indefinite NP ‘few’ is not likely to orient the PP whereas the discourse topic NP is:

- (17) ‘If there should be here **a monk** having the threefold knowledge, [therefore] keeping away, separated from veneration, destroying death [and] free from [evil] influences since they know that’
totkānts aiku
 few.GEN.PL know.PP.NOM.SG
 ‘**he** is known by few’ (TB; THT 31 a6)⁹

Analogically, the PP *eñku* ‘seized’ is A-oriented, cf. (18), when the A argument is the discourse topic and it is P-oriented if the P argument is the discourse topic, cf. (19):

- (18) ‘**this householder** of sorts **who** (possesses) the jewels is superior. ... **This one** will always stand against me,’
ārwer eñku naumyenta
 ready seize.PP.NOM.SG jewel.OBL.PL
 ‘holding the jewels ready’ (TB; PK AS 17D b1)

- (19) ‘**He** [= the old/ill person] does seeing without brilliance, [the eye sight] becomes blurred, it blurs [all] forms. The throat [is full of] mud, the body [is] grey/pale; ... ‘
srukalñeṣṣana yentents eñku
 death.ADJ.OBL.PL wind.GEN.PL seize.PP.NOM.SG
 ‘**he** [= the old/ill person] is seized by the winds of death’ (TB; PK AS 7M b2)

Observe that the P-oriented PP may also have an NP referring to the A participant explicitly. In this case, the A-referring NP is coded by the genitive case in most cases, and the construction is ergatively aligned. The genitive-marked NP need not be adjacent to the nominative NP and, hence, the purely possessive meaning of the genitive must be excluded here.

When it comes to the lexical inclinations of particular verbs towards P- or A-orientation I have the following picture for some selected PPs (obtained on the basis of all their occurrences in the CEToM corpus). First, both reception verbs *kālp-* ‘obtain’ and *eñk/ents-* ‘seize’ are much more frequently A-oriented:

Table 3: Reception verbs more frequently A-oriented¹³

	A-oriented	P-oriented	unclear
<i>kālpō</i> ‘obtained’	7	2	8
<i>kālpau</i> ‘obtained’	5	1	5
	80% (12)	20% (3)	

¹³ I have checked all instances of these PPs in CEToM and excluded all unclear and fragmentary attestations under *Unclear*.

<i>emtsu</i> 'seized'	3	-	6
<i>eñku</i> 'seized'	10	5	12
	72% (13)	28% (5)	

The tendency of these verbs to be used in an A-oriented fashion, i.e. with the regular “finite” transitive alignment of both A and P, may be explained semantically and implicationally by frequency of use. This verb class is one of the few classes of transitive verbs (along with verbs of (un)dressing) which entail not only a change at the P participant (moving from one possessor to another one) but also a change in the A participant (Nedjalkov & Jaxontov 1988). The A-participant – after having obtained something (knowledge, release but also goods) – may be conceptualized as having undergone a change. These verbs – in contrast to many other transitive verbs – thus fulfil the necessary precondition for a resultative to be formed from both arguments, from A and P.

The predominant A-orientation of experiencer verbs such as the below (Table 4) may be accounted for along the same lines: the experiencer undergoes a mental change-of-state here, e.g. by acquiring new knowledge. This change makes these verbs semantically compatible with the A-orientation. By way of example, consider the German verb *erfahren* ‘to learn, to get to know’ which is morphosyntactically a transitive verb assigning the nominative case to the experiencer and the accusative case to the stimulus. However, the respective resultative *erfahren* ‘knowledgeable’ (and not ‘known’) – homonymous with the infinitive – is A-oriented.

Table 4: Other more frequently A-oriented verbs¹³

	A-oriented	P-oriented	unclear
<i>kärso</i> ‘known’	5	-	3
<i>kärsau</i> ‘known’	1	1	3
	86% (6)	14% (1)	
<i>pälko</i> ‘seen’	3	1	13
<i>pälkau</i> ‘seen’ ¹⁴	1	-	
	80% (4)	20% (1)	
<i>aru</i> ‘evoked’	-	2	
<i>eru</i> ‘evoked’	5	-	8

In turn, the action of adorning something or someone does not really bring about any change in the A participant but only in the P participant. Consequently, the P orientation unequivocally prevails with this verb:

Table 5: *yät-* ‘adorn’ (caus. only), P-oriented¹³

	A-oriented	P-oriented	unclear
<i>yetu</i> ‘adorned’	-	6	7
<i>yaitu</i> ‘adorned’	1 (?)	8	10
	7% (1) (?)	93% (14)	

The following verbs predominantly attest P orientation:

Table 6: Other more frequently A-oriented verbs¹³

	A-oriented	P-oriented	unclear
<i>aiku</i> ‘known’ ¹⁵		3	

¹⁴ I have not considered TB *lyelyaku* ‘see.PP’ here.

<i>aipu</i> ‘covered’ ¹⁵		4	4
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Finally, the following verbs do not show any statistically clear tendencies towards a particular orientation. This is most clear with the verb *yām-* ‘to do’ while the lack of a clear orientation tendency with other verbs may be due to the rarity of occurrence. While the P participant is always highly affected if this verb is used in its non-metaphorical sense, the A argument is mostly affected when this verb is used as a light verb with an adverb that actually provides for the lexical meaning of an experience such as *ynes yām-* ‘to make clear, to realize’:

Table 7: Verbs with no statistically clear orientation tendency¹³

	A-oriented	P-oriented	unclear
<i>yāmu</i> ‘made’ (TA)	1		4
<i>yāmu</i> ‘made’ (TB)	19	19	29
<i>āklu</i> ‘taught, brought up’ ¹⁵	1		1
<i>kaklyuṣu</i> ‘heard’	1	1	4
<i>keklyauṣu</i> ‘heard’		1	2
<i>lyelyku</i> ‘seen’		1	

5. Functions of the PP construction

In general terms the reference time of the PP construction coincides with the speech time or the topic time but not with the event time which is prior to the reference time. For example, time adverbials that are preferentially used here are TA *tāpärk* ‘now’ in contrast to, e.g., *tmäṣ* ‘then’ (this.ABL.SG) which is employed to link subsequent events. Thus, among the 97 examples in the sample, I found 2 examples with the adverbial *tāpärk* ‘now’ and no examples with any other time adverbial. This is true except for converbial use of PPs where they often code anteriority to the event of the main clause.

5.1. Resultative meaning

The resultative meaning is found when the PP construction denotes a state that entails a preceding event and this state is the lexically integrated and context-independent consequence of the preceding event (Nedjalkov & Jaxontov 1988: 6; cf. Seržant 2016: 251). This meaning is most frequently found in the attributive use of the PP. It is also widely attested with the PP construction, cf. (20), and is most probably also the oldest meaning of this construction.

- (20) *ciñcrone* *puk* *kälymentw-aṃ* *sätko* *tñi*
 charm.NOM.SG all direction.PL-LOC expand.PP.NOM.SG 2SG.POSS
 ‘Your [scil. Bhadrā’s] charm is expanded in all directions.’ (Thomas 1957: 257, [TA; 66 a2])

The fact that the resultative meaning of the PP construction is very frequent can be shown in the case of essive vs. lative case selection with movement verbs. Seržant (2016: 272-274) examines the verb *i-/kälk-* ‘to go’. The finite forms of this verb are almost always used with the allative case with animate NPs, and mostly with inanimate NPs (cf. (21)), thus indicating a dynamic meaning:

¹⁵ No TA counterpart is attested.

- (21) *orkmac* *kālkāc*
 darkness.SG.ALL go.SUBJ.2SG
 ‘You will go to the dark.’ (Ji et al. 1998: 103, [TA; YQ 1.5 1/1 b3])

In turn, the respective PP *kālko* (TA) / *yku* (TB) ‘gone’ takes primarily the locative case-marked NP, indicating thus a state, cf.:

- (22) *pissānk-aṃ* *kālko* *el*
 community.SG-LOC go.PP.NOM.SG gift.NOM.SG
 ‘gift gone into the Community’¹⁶ (Ji et al. 1998: 180.9, [TA; YQ 1.41 1/1 b1])

- (23) *om no ce_u kalāl-ne ykuweṣ kau-tsi-śco speltke yam-aṣ-ām*
 there then 3SG.OBL womb-LOC go.PP.OBL.SG kill-INF-ALL effort.OBL do-PRS-3SG
 ‘There it [scil. the lie] makes efforts to kill him who entered the womb (lit. ‘gone in the womb’).’ (cf. Thomas 1954: 755, [TB; 333 a4])

Many PPs in Tocharian have lexicalized their resultative meaning. There are two main types here: (i) although the resultant state is inherent and thus independent of the context, it is no longer straightforwardly derivable from the preceding action; (ii) the entailment of the preceding action has been lost. Lexicalized resultatives of type (i) are still resultatives because they adhere to the definition in (2) above, in that their results are context-independent and they still entail some preceding action. In turn, the lexicalization of type (ii) derives a simple Vendlerian state, with no preceding-action-entailment, from the complex resultative meaning and is, therefore, no longer a resultative (Vendler 1957). Common to both lexicalization types is that they abandon the transparent relationship between the resultative and the lexical verb in terms of compositionality.

Under *lexicalization* (i), the preceding action of a resultative is not the same as the meaning of the underlying verb. This happens either when the resultative PP develops a somewhat different meaning or – as in the case of PP *nāṃtsu* (TA) ‘having become’ – when the finite forms of the respective verb undergo a semantic change which is not shared by the resultative PP. The PP *nāṃtsu* ‘having become’ relies for its meaning on the preceding event of change-of-state (‘became’) while the respective verb *nas-* no longer has this change-of-state meaning and denotes only ‘to be, exist’, although it presumably had it earlier given the meaning of its resultative and its etymology. Here, the meaning entailed by the PP seems to be older than the one of the finite forms of the lexical verb.¹⁷ The change-of-state-entailing resultative meaning of *nāṃtsu* is found, for example, with the indeclinable predicatives such as *weyem* ‘surprising, surprised’, *kātkmām* ‘joyful’, *lyutār* ‘more, over’, *pākār* ‘evident’, *wsok* ‘happy’.

In turn, under lexicalization (ii), the preceding-action-entailment is lost. Nedjalkov & Jaxontov (1988: 14) call this type of expression *quasi-resultative* which is misleading because they do not adhere to any definition of resultatives. These are just Vendlerian states, historically derived from resultatives. This type of lexicalization is found with resultatives that denote conventional states such as *to be* (e.g. TA PP *ṣtmo* ‘having positioned oneself > be’; TA *nāṃtsu* ‘having become > be’), *to lie*, *to stand*, *to hang*, *to be ripe*, *to be called* (cf. TB PP *weweñu* ‘be called > have a name’ and *we-s-tār* (call-PRS-3SG.MID) ‘is called’), experiential predicates such as *to be anxious* (cf. TA *yutko* ‘having become anxious > be anxious’), *to trust* (cf. TA PP *spānto* ‘trusting’), but not states such as *to be destroyed* (Seržant 2016: 254-259). Resultatives

¹⁶ An idiomatic expression rendering Pali *saṃghagata* ‘supporting the Community’ (Ji et al. 1998: 180 fn. 9).

¹⁷ Cf. the analogical development from ‘to become’ to ‘to be’ in Sanskrit *bhū-* ‘to be’, Baltic and Slavic **bū-* ‘to be’ which originally stem from Proto-Indo-European verb **b^hueh₂-* ‘to grow, to become’, cf. Ancient Greek *p^h̄yō-mai* ‘grow.PRS.1SG.MID’).

denoting conventional states are easier/more prone to lexicalize by abandoning the preceding-action-entailment while it is harder to lose the preceding-action entailment with less typical states such as *to be destroyed*.

Note that I do not consider PPs derived from verbs with the lexically predetermined ambiguity between the inchoative and the stative reading such as *kärs-* (i) ‘to know’ (stative) and (ii) ‘to understand’ (inchoative) as instances of lexicalization. The PP resides here in the inchoative reading (ii) of the verb, cf. *kärso* (TA, e.g. in A 20 b5) ‘knowing’ possibly from originally ‘having got to know, understood’. In turn, the fact that the meaning of the resultative *kärso* ‘knowing, known’ partially coincides with the first reading (i) ‘to know’ of this verb is not relevant in this context.

Once the resultative meaning is simplified into a state, the PP morphology can no longer be interpreted as meaningful. This allows these new states to undergo further changes. A number of PPs in Tocharian develop into prepositions, cf.: TA *kaknu* (from *kän-* ‘arise’) with instrumental case ‘endowed with’ (TB with the perlocative case); *rittau* (TB) / *ritu* (TA) (from TA *ritw-*/TB *ritt-* ‘to connect’) with the comitative case ‘related to’. I summarize:

(24) Lexicalization (ii)

resultatives > *states* > *prepositions*

5.2. Perfect meaning

Since Thomas (1957: 245) it has been well known that the function of the PP construction was to highlight the after-effects (“Nachwirkungen”) emerging from the preceding action. As has been mentioned above (§1), resultatives often undergo semantic extension from denoting the resultative proper to denoting the more general meaning of any kind of new situation that may follow from the preceding action in the given context. Consequently, the selectional input restrictions become loosened because the new (resultant) situation does not need to be crucially dependent on the achievement of the inherent endpoint and, consequently, on the existence of any inherent endpoint in the lexical meaning of the verb. Indeed, this is what one finds in Tocharian: Table 8 illustrates the frequency of verbs in the PP construction depending on their actionality class determined on the basis of its English translation in Maitreyasamiti-Nāṭaka (TA):

Table 8: The distribution of the PPs across the actional classes in Maitreyasamiti-Nāṭaka (Seržant 2016: 263)

accomplishment	gradual accomplishment ¹⁸	achievement	activity	state
15 (16%)	19 (19%)	47 (49%)	10 (10%)	6 (6%)

I suggest that the transition from resultative to perfect and the concomitant loosening of the selectional input restrictions proceeded as follows:

(25) From Resultative to Perfect: loosening of the selectional input restrictions

¹⁸ I distinguish here between accomplishments proper (e.g. ‘to open’) and gradual accomplishments (e.g. ‘to warm (a room)’). The distinction is in the design of the entailed telos or endpoint: with the former it is a discrete cut-off point after which the action cannot continue in the same sense (e.g. once the window is opened) while, with the latter, the cut-off point is vague and one can theoretically still continue with the same action (e.g. once the room is warmed up one can always warm it a bit more). Gradual accomplishments are semantically closer to activities, a point that will be important below.

telic verbs only > *telic + gradual accomplishments* > *telic + gradual accomplishments + activity verbs* > *telic + gradual accomplishments + activity + stative verbs*

As has been discussed above, a resultative needs a telic verb with an inherent endpoint whose achievement initiates the state of the resultative. For example, the telic verb *to die* has the inherent endpoint of death after which the resultant state of *being dead* holds. While *die* entails a clear-cut inherent endpoint there are verbs which have a vague inherent endpoint like *to warm* or *to weaken*. This type of accomplishment verbs is referred to in the literature as *gradual accomplishments*, cf. the resultative PP *kurosām* in the following example formed from the gradual-accomplishment verb *kur-* ‘to age, weaken’:

(26) *kurosām* *kapśiñño*
 weaken/age.PP.OBL.SG body.INS.SG
 ‘with weakened / aged body’ (TA; A 288 b7)

The reason is that the endpoints of these verbs are to some extent cumulative: e.g., one can always warm something a little bit more. As illustrated in the cline in (25), I assume that the extension from clear telic verbs, namely, achievements and accomplishments to gradual accomplishments represents the first step in loosening of the input restrictions. Gradual accomplishments represent a stage in between (non-cumulative) accomplishments, on the one hand, and activities, on the other.

Since gradual accomplishments entail an activity with a vague inherent endpoint and are therefore cumulative, they come very close to activity verbs which do not entail any kind of endpoint at all. Yet, many activity verbs may acquire a telic interpretation especially if they take an object. For example, such activity verbs as *speaking* or *saying* may be interpreted as telic if the object of communication provides for an inherent boundary. For example, a sentence may be said and there will be no possible continuation of saying that sentence once it has been uttered. Consider the causative of the verb *kārs-* ‘to know’ with the meaning ‘to instruct’. The meaning ‘to instruct’ is as such, of course, an activity. However, if one thinks of a particular set of instructions that have to be given in a certain context, and there are no further instructions in that context available (i.e. the object is not cumulative), the whole predication may be reinterpreted as an accomplishment with the inherent endpoint after which all the available instructions are given. The following example illustrates the resultative *śasārsu* ‘instructed’:

(27) *Haimavati* *trāṅkāṣ* *tāpārk śakkats klyom* *metrak*
 Haimavati.NOM say.PRS.3SG now surely noble.NOM.SG Metrak.NOM
śuddhavā=ṣi-nās *ñāktas-ā* *śasārsu*
 Śuddhāvāsa=ADJ-OBL.PL god.OBL.PL-PERL know.CAUS.PP.NOM.SG
 ‘Haimavati says: Now surely the noble Metrak has been/is instructed by the Śuddhāvāsa gods.’ (cf. Ji et al. 1998: 23, [TA; YQ 1.30 1/2 a3])

I suggest that examples like this one, formed as it is with an added endpoint, must have been a transitional means by which the input restrictions from true accomplishments to activities were loosened.

Moreover, there is also interpretational evidence for the new, perfect meaning of the PP construction. The following example demonstrates that the PP construction may also have the perfect meaning of current relevance:

(28) ‘Then spoke Ānanda, confused by suffering, with folded hands, lamenting, these words to the omniscient: Oh shelter and refuge, oh Lord, do not leave us. In the directions’

tetrīku *po trikau* *nesau* *laklesa*
 confuse.PP.NOM.SG all go_astroy.PP.NOM.SG AUX.PRS.1SG suffering.PERL.SG
 ‘having confused everything, I have gone astray through the suffering.’ (‘The laws heard
 I had grasped, but all I have forgotten, by myself alone the burden will not be borne’). (TB;
 THT 17 a2)

In this example, Ānanda describes the new situation that has emerged through sufferings. Crucially, his intention here seems to be not to communicate the mere fact of being confused and having gone astray, but to appeal to Buddha asking for help. Thus, the context suggests the interpretation of the PP construction in terms of contextually induced after-effects of ‘being heavily in need of help because of being confused’. Consider the following example in which the king speaks to his ministers:

(29) *wäl* *tränkäṣ* *hai ṣokyo nu* *oklopac* *kakmu* *nasam*
 king.NOM say.PRS.3SG alas very PRT fear.ALL come.PP.NOM AUX.PRS.1SG
 ‘the king speaks: “Alas, I have truly run into danger.”’ (TA; A 342 b4)¹⁹

(30) *sanune* *kekamu* *nesau*
 danger.LOC come.PP.NOM AUX.PRS.1SG
 ‘I have truly run into danger.’ (TB; THT 79 b6)

In this utterance, the focus is on the current relevance of the preceding action of running into a danger and on the new situation of being frightened by this danger. Analogically, the following example highlights the perfect rather than the pure resultative meaning:

(31) Some wild animals speak to Metrak and ask him for a permission to follow him in order to understand the Saṃsāra and to be freed from all woes. Metrak approves this and tells them to avoid evil deeds and explains:

omäskenäṃ lyalypur-ā *yas* *caṃ*
 evil.OBL.SG deed.OBL.SG-PERL 2PL.NOM.PL this.OBL.SG
śon-aṃ *tatmu-ṣ* *naś*
 bad.form.of.existence.OBL.SG-LOC give.birth.PP-NOM.PL be.PRS.2PL
 ‘Because of your bad actions you have been born in this reincarnation class.’ (Ji et al. 1998: 103, [TA; YQ 1.5 1/1 b2])

What matters here is that the animals are currently suffering the repercussions of being born in a particular reincarnation class but not the very resultative state of being born, i.e. of existing (in a particular reincarnation class).

However, it has to be noted that the new, perfect, meaning of the PP construction must still be somewhat incipient, since a number of typical semantic extensions found with perfects cross-linguistically (cf. McCawley 1971; Comrie 1976) are not found in Tocharian. This means that they either did not exist at all, or were extremely rare. For example, the experiential perfect is found only rarely. An experiential perfect denotes a situation in which the subject of the clause is construed as an experiencer who has, or has never, experienced a particular event denoted by the verb, for example: *I have seen a typhoon on two occasions*. Very often the lexical verb is an experiencer verb itself. For this reason, I have checked all occurrences of the TA PP *pälko* ‘seen’ in CEToM. The result was that I have not come across any good evidence for an experiential-perfect meaning. By the same token, I have no evidence for what is often

¹⁹ Translation of *oklopac* is according to Carling et al. (2009: 104).

called in the literature *the universal perfect*, i.e. a perfect that refers to a preceding event that reaches into the moment of speech, e.g., *I have lived in London since 1925*.

Furthermore, there is certainly no evidential-perfect meaning in Tocharian at all. The evidential perfect is found not infrequently across languages such as the Scandinavian *have*-perfects or the Georgian perfect (Harris 1981) and denotes a situation in which the preceding event is guessed on the basis of the observed, resultant state (cf. Aikhenvald 2004: 112-114).

5.3 "Pluperfects"

In this section, I discuss the PP construction headed by the auxiliary in the past tense – a construction that typically functions as a pluperfect (cf. Thomas 1957: 296). I argue that this is not the case in Tocharian. As will be shown, Tocharian does not attest typical pluperfect meanings such as remote past or anteriority to a past-tense verb in a joined clause.

The auxiliary occurs in the preterit or in the imperfect tense, yielding two distinct interpretations of the PP construction. I show below (§5.3.1) that the imperfect auxiliary denotes background states or after-effects in the past often temporally undelimited. The preterit auxiliary, in turn, provides for foreground information, it denotes after-effects that are crucial for the respective discourse chunk (§5.3.2).

5.3.1. Headed by the imperfect auxiliary

The imperfect auxiliary projects the resultant state into the past, as measured relative to the topic time. Consider the following example:

- (32) *jñātim seyi granthi pilko prākre eñku šai*
 Jñāti.OBL.SG son.GEN.SG Grantha.GEN.SG view.NOM firmly take.PP.NOM AUX.IMPF.3SG
 ‘By Jñāti’s son, the (Nir)grantha, the view was firmly taken. (Who should ask him, [to him] he would reply: I am the omniscient)’ (TB; THT 28 b5)

It follows from the context that there is no temporal delimitation of the resultant state of holding the view. Analogically, the following examples equally provide the meaning of a resultant state holding in the past as a background for something that happens on the scene:

- (33) ‘He for sure killed (pret.) his father, the great righteous king, and’
empele rano yāmu šey=ne yāmor su
 horrible PRT do.PP.NOM.SG be.IMPF.3SG=OBJ.3SG deed.NOM.SG DEM.NOM.SG
 ‘although such a horrible deed **had been done** by him, (nevertheless he felt remorse (pret.) afterwards and felt revulsion (pret.)) (TB; PK AS 7C a6)

- (34) *keklyaušwa eñku pelaiknenta šaim po mārsāwa*
 hear.PP.OBL.PL grasp.PP.NOM.SG law.OBL.PL AUX.IMPF.1SG all forget.PRET.1SG
 ‘**I had grasped** the laws [which were] heard [but then] I forgot them all’ (TB; THT 15 a2)

In both these examples, along with some other in Seržant (2016: 275-277), the PP with the imperfect auxiliary set the stage for the following events. In the examples cited in Seržant (2016: 275-277) this background state holds true throughout the reference time. In contrast, observe that the preterit *mārsāwa* ‘I forgot’ (34) cancels the resultant state of ‘having grasped the laws’. Thus, the event denoted by the imperfect auxiliary with the PP may also be bounded and precede the main event. Contexts such as (34) may give rise to the taxis function of anteriority to the construction (cf. Bybee et al. 1994: 69).

The imperfect auxiliary projects the reference time into the past. The reference time is either anterior to the topic time (other past-tense events) or coincides with it.

(35) *tämyo yutkos lmos šeş*
 therefore be.anxious.PP.NOM.SG.F sit.PP.NOM.SG.F be.IMPF.3SG
 ‘Therefore she was sitting there anxious.’ (Thomas 1957: 302, [TA; 111 a1])

(36) *tämyo tšäm mā kakmu şet*
 therefore here NEG come.PP.NOM.SG be.IMPF.2SG
 [Lit.] ‘Therefore, you were not here.’ (Ji et al. 1998: 41, [YQ 1.17 1/1 b1])

(37) ‘Then the pearl of mankind, the king Araṇemi tarried there in the town of Aruṇāvātī.’
yaitu şai sū krentaunaşsem tsaiññentsa
 adorn.PP.NOM AUX.IMPF.3SG 3SG virtue.ADJ.PL.OBL ornament.PL.PERL
 ‘Adorned he was with the ornaments of the virtues.’ (TB; THT 77 a6)

As long as the taxis function has not been conventionalized the whole construction may be considered as compositional in meaning, i.e. the imperfect auxiliary provides the tense while the PP the resultant state. Thus, the meaning of the overall construction is derived in the same way as the meaning of the imperfect of the verb ‘to be’ with a predicative adjective. It is only once typically pluperfect meanings (such as remote past, the taxis function of *consecutio temporum*, etc.), which are not derived by adding the meaning of the auxiliary to the meaning of the PP, are found, that the construction may be referred to as a pluperfect.

5.3.2. Headed by the preterit auxiliary

I have argued that the imperfect auxiliary typically provides information about the background that often holds true for the whole time frame of the foreground event, but it may also be temporally delimited by the beginning of the foreground event. The meaning of the whole construction is the resultative (or perfect) in the past. By contrast, the preterit auxiliary is very different from this.

The preterit auxiliary provides foreground information that is central in the respective discourse chunk (Seržant 2016: 279-283). Consider the following example:

(38) (*kuse*) ... *āraṇyakāmñe dhutaḡūm ... eñku tāka*
 REL.NOM.SG dwelling.in.forest dhūtaguṇa seize.PP.NOM.SG AUX.PRET.3SG
 ‘(The one who) has taken the Dhūtaguṇa (consisting of dwelling in the forest)... (this one now finally ...)’ (TB; PK NS 55 a1)

In this example, the relative clause headed by the preterit auxiliary describes one of the crucial properties, namely, having taken the Dhūtaguṇa, an ascetic catharsis exercise. This is not incidental information, but is instead necessary for understanding of what follows. A very similar construction is found in PK AS 7C a2. Here, analogically, the indefinite relative pronoun is found with the preterit auxiliary and PP: ‘By whom deeds have been done and accumulated [PP + AUX.PRET], ... his rebirth will take place among the gods with form’. Similar to the preceding example, the main clause is in the present or future but not in the past.

5.4. Preterit functioning as a perfect

Before I turn to conclusions, I discuss the claim made by Thomas (1957: 209) that the Tocharian preterit may also code the resultative or perfect meaning (“Bezeichnung eines Zustandes” ‘denotation of a state’). For example, Thomas (1957: 209) writes that the verb *ār-*

‘to stop, vanish’ has the perfect meaning “ist zu Ende” (here ‘has come to an end’) in the preterit, and adds the following example:

- (39) *maitreyasamitināṭkaṃ gurudarśaṃ ñomā śākṣapint nipānt ār*
 Maitreyasamiti-nāṭaka.LOC Gurudarśana name.PERL eleventh act.NOM end.PRET.3SG
 ‘In Maitreyasamiti-nāṭaka, the eleventh act, by name Gurudarśana, **has come to an end.**’
 (A 253 a5-6; Thomas 1957: 209)

This use of *ār* is by no means special; very similar utterances are attested in A 287 a3, A 288 b5, A 347 b3, A 391 b6, A 156 a4, YQ 1.30 1/2 a7; YQ 1.1 1/2 b6; YQ 1.43 1/1 b7, etc. Moreover, there are no PP forms attested for the Inagentive (middle-like) paradigm of this verb ‘to end’ either in TA or in TB (Malzahn 2010: 527f.). This suggests that preterit forms were indeed also used in contexts typical for a perfect. However, this does not mean that the function of the preterit (with this verb) also included the encoding of a perfect. For example, standard Russian does not have a perfect and, hence, employs the perfective simple-past forms in the contexts in which languages with a perfect would have used the perfect. Notably, the immediately preceding clause about the characters in the eleventh act equally contains a preterit form:

- (40) *lcār poñś*
 go.PRET.3PL all.NOM.PL
 ‘All have left.’ (A 253 a3)

Yet, this form cannot be claimed to be functionally a perfect, since it may be found elsewhere in narrative contexts with a sequence of past-tense forms (pace Thomas 1957: 214) such as the following:

- (41) ‘having fallen down scattered far away on the mountain Lokāloka among the rocks,’
kupārāṣ penu lcār sālmāṃn oki
 deep.ABL even go.PRET.3PL fly.PTCP.PRES as
 ‘even from the deep they **came out**, as if flying, (they **came** together, ... they all **joined** ...)’ (TA; A 12 a5)

What is more, the form *ār* itself does occur in a context typical for an aorist and not for a perfect. The following fragment is from a story about Daśagrīva. In the preceding discourse, the imprudent actions performed by Daśagrīva are listed; the whole text portion is a narrative:

- (42) ‘Then Rāma, the hero, having anointed Vibhīṣana, **gave** him the throne with the name of Lankeśvara even at first in Raṅkā-city.’
tām ṣurmaṣ daśagrīve śla āmāśās pukyo lo ār
 DEM reason.ABL Daśagrīva with minister.OBL.PL all.INS away end.PRET.3SG
 ‘Owing to this Daśagrīva **came** to an end with ministers altogether.’ (TA; A 11 a2-3; Tamai 2012: 176)

The reference time here is the same as in the whole story about Daśagrīva, i.e. prior to speech time – something that is not found with true perfects or resultatives.

Analogically, other examples from Thomas (1957) with the preterit being used in a context where a perfect may have been used are surrounded by clauses headed by verbs in the past tense and the overall time reference of the respective discourse chunk is typically prior to speech time, i.e. lies in the past. For example, the preterit TB *śem* ‘came’ has also been claimed by Thomas (1957: 213) to attest the perfect, indeed even the resultative meaning ‘to be present’

(i.e. after having come). This has been criticized already by Malzahn (2010: 526). Indeed, this form is, from a historical perspective, unequivocally an aorist and has never been a perfect. Crucially, the reference time of the whole discourse chunk with *šem* discussed by Thomas (1957: 213) is prior to the moment of speech. This is evident from the verb forms used in the surrounding clauses here (TB; THT 246 a1-5): ‘saw’ (opt.)...flew (impf.)...entered (opt.) ... bowed (impf.) ... **came (pret.)** ... destroy (pret.) ... destroy (pret.)’.

I conclude here that the preterit is not used in those contexts in which a situation holding at the speech time is discussed. The primary reference time of the preterit is prior to speech time.

6. Conclusions

In this paper I took a semasiological approach departing from the form and not from a particular meaning. Drawing on Thomas (1957) and Seržant (2016) I claim that the PP construction codes the meaning of perfect, and very frequently the resultative perfect, in Tocharian. The reference time of the PP construction is the same as the moment of speech and not prior to it. The latter is coded by the preterit (and imperfect).

This perfect of Tocharian is not a young category. This conclusion follows from a number of aspects pertaining to both its meaning and morphosyntax. First, the resultative meaning is certainly not the only one, although it is most probably the original one. In many instances, the PP construction denotes meanings typical of a perfect, such as the explanatory meaning, and rarely the experiential meaning (§5.2). It thus shows signs of progress along the developmental cline in (1) above. Moreover, the PP often functions as an anteriority converb which is unlikely if the PP had only had the resultative meaning elsewhere. This is because anteriority presupposes that the dynamic meaning component, namely, the preceding-action entailment must have become more foregrounded. Secondly, the combinability of the PP construction with cross-cutting categories, for example, by means of co-occurrence with the past tense or subjunctive auxiliary is an indication of advanced grammaticalization.²⁰ Thirdly, there are no selectional input restrictions onto which lexical verbs may occur in the PP construction: all Vendler classes are found in this construction – a situation that may not be found with early resultatives.

At the same time, the perfect meaning of the PP construction cannot be too old since semantic extensions typically found with perfects in other languages are not found in Tocharian. For example, the evidential meaning is not found in Tocharian while the experiential meaning may be suggested only for some rare examples. I have not come across the universal-perfect meaning. Moreover, I have argued above that the imperfect auxiliary does not yield a distinct category (pluperfect), i.e. one that could not be analysable in terms of the composition of the resultative/perfect meaning with the meaning of the auxiliary.

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Abbreviations

²⁰ Languages that have resultatives proper – i.e. with no on-going development into perfects – sometimes restrict them to the present tense only (Nedjalkov & Jaxontov 1988: 36f.). The compatibility with all tenses and moods in Tocharian, in contrast, suggests that the PP construction here has become into one predication.

Examples are glossed according to Leipzig Glossing Rules (<https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf>). Additionally, the following glosses have been used:

ACT – active, AOR – aorist, IMPF – imperfect, MID – middle, OPT – optative, PRF – perfect, PERL – perlativ, PIE – Proto-Indo-European, PRET – preterit, PRT – particle, REDUPL – reduplication, SUBJ – subjunctive, TA – Tocharian A, TB – Tocharian B.

References

- Adams, Douglas Q. 1978: “On the development of the Tocharian verbal system”. *Journal of the American Oriental Society* 98.277-288.
- Adams, Douglas Q. 1988. *Tocharian Historical Phonology and Morphology*. (= *American Oriental Series*, 71.) New Haven, Conn.: American Oriental Society.
- Aikhenvald, Alexandra Y. 2004. *Evidentiality*. Oxford: OUP.
- Batke, Christiane. 1999. “Das Präsens und Imperfekt der Verben für "Sein" im Tocharischen”. *Tocharian and Indo-European Studies* 8.1-74.
- Bickel, Balthasar, Alena Witzlack-Makarevich, Taras Zakharko & Giorgio Iemmolo. 2015. “Exploring diachronic universals of agreement: alignment patterns and zero marking across person categories”. *Agreement from a diachronic perspective* ed. by Jürg Fleischer, Elisabeth Rieken & Paul Widmer (= *Trends in Linguistics, Studies and Monographs*, 287), 29-51. Berlin & Boston, Mass.: De Gruyter Mouton.
- Breu, Walter. 1988. “Resultativität, Perfekt und die Gliederung der Aspektdimension”. *Slavistische Linguistik 1987: Referate des XIII. Konstanzer Arbeitstreffens Tübingen, 22.-25.9.1987* ed. by Jochen Raecke (= *Slavistische Beiträge*, 230), 42-74. Munich: Sagner.
- Breu, Walter 1998. “Sopostavlenie slavjanskogo glagol'nogo vida i vida romanskogo tipa (aorist: imperfekt: perfekt) na osnovu vzaimodještvoja s leksikoj”. *Tipologija vida. Problemy, poiski, rešenija* ed. by Marina Ju. Čertkova, 88-98. Moscow: Jazyki Russkoj Kultury.
- Bybee, Joan, Revere Perkins & William Pagliuca. 1994. *The Evolution of Grammar: Tense, Aspect and Modality in the languages of the World*. Chicago & London: University of Chicago Press.
- Carling, Gerd, Georges-Jean Pinault & Werner Winter. 2009: *Dictionary and Thesaurus of Tocharian A. Volume 1: A-J*. Wiesbaden: Harrassowitz.
- CEToM: *A Comprehensive Edition of Tocharian Manuscripts* ed. by Melanie Malzahn, Michaël Peyrot, Hannes A. Fellner et al. URL: <https://www.univie.ac.at/tocharian/?manuscripts>.
- Comrie, Bernard. 1976. *Aspect: An Introduction to the Study of Verbal Aspect and Related Problems*. (= *Cambridge Textbooks in Linguistics*, 2.) Cambridge: Cambridge University Press.
- Comrie, Bernard. 1989. *Language universals and linguistic typology*. Chicago: University of Chicago Press.
- Dahl, Östen. ed. 2000. *Tense and aspect in the languages of Europe*. (= *Eurotyp*, 6.) Berlin & New York: Mouton de Gruyter.
- Dahl, Östen & Eva Hedin. 2000. “Current relevance and event reference”. Dahl, ed. 2000, 385-401.
- Givón, Talmy. 1976. “Topic, Pronoun and Grammatical Agreement”. *Subject and Topic* ed. by Charles Li, 149-188. New York: Academic Press.
- Givón, Talmy. 1983. “Topic Continuity in Discourse: An Introduction”. *Topic Continuity in Discourse: A quantitative cross-language study* ed. by Talmy Givón (= *Typological Studies in Language*, 3), 1-42. Amsterdam & Philadelphia: Benjamins.

- Hackstein, Olav. 2005. “Archaismus oder historischer Sprachkontakt. Zur Frage westindogermanisch-tocharischer Konvergenzen”. *Sprachkontakt und Sprachwandel. Akten der XI. Fachtagung der Indogermanischen Gesellschaft, 17.–23. September 2000, Halle an der Saale* ed. by Gerhard Meiser & Olav Hackstein, 169-184. Wiesbaden: Reichert.
- Harris, Alice. 1981. *Georgian Syntax: A Study in Relational Grammar*. (= *Cambridge Studies in Linguistics*, 33.) Cambridge: Cambridge University Press.
- Haspelmath, Martin. 1994. “Passive participles across languages”. *Voice: Form and Function* ed. by Barbara A. Fox & Paul J. Hopper (= *Typological Studies in Language*, 27), 151-177. Amsterdam: Benjamins.
- Inoue, Kyoko. 1979. “An analysis of the English present perfect”. *Linguistics* 17.561-590.
- Ji, Xianlin, Werner Winter & George-Jean Pinault. 1998. *Fragments of the Tocharian A Maitreyasamiti-Nāṭaka of the Xinjiang Museum, China*. Transliterated, translated and annotated by Ji Xianlin in collaboration with Werner Winter, Georges-Jean Pinault. (= *Trends in Linguistics. Studies and Monographs*, 113.) Berlin & New York: De Gruyter.
- Krause, Wolfgang & Werner Thomas. 1960. *Tocharisches Elementarbuch, Band I. Grammatik*. Heidelberg: Winter.
- Kuryłowicz, Jerzy 1964. *The inflectional categories of Indo-European*. Heidelberg: Winter.
- Lindstedt, Jouko. 2000. “The Perfect: aspectual, temporal and evidential”. Dahl, ed. 2000, 365-383.
- LIV² = Rix, Helmut. 2001. *Lexikon der indogermanischen Verben*. Wiesbaden: Reichert.
- Malzahn, Melanie. 2007. “The Most Archaic Manuscripts of Tocharian B and the Varieties of the Tocharian B Language”. *Instrumenta Tocharica* ed. by Melanie Malzahn, 255-297. Heidelberg: Winter.
- Malzahn, Melanie. 2010. *The Tocharian Verbal System*. (= *Brill's Studies in Indo-European Languages & Linguistics*, 3.) Leiden & Boston: Brill.
- McCawley, James. 1971. “Tense and time reference in English”. *Studies in Linguistic Semantics* ed. by Charles J. Fillmore & D. Terence Langendoen, 96-113. Irvington: Holt, Rinehart & Winston.
- MacCoard, Robert W. 1978. *The English Perfect: tense-choice and pragmatic inferences*. (= *North Holland Linguistic Series*, 38.) Amsterdam: North-Holland.
- Meier-Brügger, Michael. 2010: *Indogermanische Sprachwissenschaft*. 9th revised and expanded edition. Berlin & New York: de Gruyter.
- Narten, Johanna. 1964. *Die sigmatischen Aoriste im Veda*. Wiesbaden: Harrassowitz.
- Nedjalkov, Vladimir P. & Sergej Je. Jaxontov. 1988. “The Typology of Resultative Constructions”. *Typology of Resultative Constructions* ed. by Vladimir P. Nedjalkov (= *Typological Studies in Language*, 12.), 3-62. Amsterdam & Philadelphia: Benjamins.
- Peyrot, Michaël. 2008. *Variation and change in Tocharian B*. (= *Leiden Studies in Indo-European*, 15.) Amsterdam & New York: Rodopi.
- Ringe, Donald A. 1990. “The Tocharian active s-preterite: a classical sigmatic aorist”. *Münchener Studien zur Sprachwissenschaft*, 51.183-242.
- Serebrennikov, Boris A. 1974. *Veroyatnostnye obosnovaniya v komparativistike [Probability explanations in linguistics]*. Moscow: Nauka.
- Seržant, Ilja A. 2012. “The so-called possessive perfect in North Russian and the Circum-Baltic area. A diachronic and areal account”. *Lingua* 122.356-385.
- Seržant, Ilja A. 2014: *Das Kausativ im Tocharischen*. (= *LINCOM Studies in Indo-European Linguistics*, 44.) München: LINCOM Europa.
- Seržant, Ilja A. 2016. “Periphrastic Perfect / Resultative in Tocharian”. *Issledovaniya po teorii grammatiki, 7: Tipologiya perfekta [Investigations into the Theory of Grammar: The Typology of the Perfect]* ed. by Timur A. Maysak, Vladimir A. Plungyan, & Ksenia P. Semenova (= *Acta Linguistica Petropolitana*, 12.2), 237-288. Saint Petersburg: Nauka.

- Sieg, Emil. 1944. *Übersetzungen aus dem Tocharischen I.* (= *Abhandlungen der preussischen Akademie der Wissenschaften, Philosophisch-historische Klasse*, Jg. 1943, Nr. 16.) Berlin: Verlag der Akademie der Wissenschaften.
- Sieg, Emil. 1952. *Übersetzungen aus dem Tocharischen II.* Aus dem Nachlass herausgegeben von Werner Thomas. (= *Abhandlungen der deutschen Akademie der Wissenschaften zu Berlin, Klasse für Sprachen, Literatur und Kunst*, Jg. 1951, Nr. 1.) Berlin: Akademie-Verlag.
- Sieg, Emil & Wilhelm Siegling. 1916[1908]. *Tocharisch, die Sprache der Indoskythen.* (= *Sitzungsberichte der Preussischen Akademie der Wissenschaften zu Berlin*, 1908, Nr. 39.) Berlin: Reimer. [Offprint of 1908, in: *Sitzungsberichte der Berliner Akademie der Wissenschaften 1908, Mitteilung v. 16. Juli*, 915-934.]
- Tamai, Tatsushi. 2012. "Tocharian Punyavantajātaka". *Annual Report of the International Research Institute for Advanced Buddhism at Soka University* 15.161-187.
- Thomas, Werner. 1954. "Die Infinitive im Tocharischen". *Asiatica. Festschrift Friedrich Weller, zum 65. Geburtstag gewidmet von seinen Freunden, Kollegen und Schülern* ed. by Johannes Schubert & Ulrich Schneider, 701-764. Leipzig: Harrassowitz.
- Thomas, Werner. 1957: *Der Gebrauch der Vergangenheitstempora im Tocharischen.* Wiesbaden: Harrassowitz.
- Vendler, Zenon. 1957. "Verbs and times". *Philosophical Review* 66. 143–160.
- Winter, Werner. 1994. "Zum tocharischen Verb". *Tocharisch. Akten der Fachtagung der Indogermanischen Gesellschaft, Berlin, September 1990* ed. by Bernfried Schlerath (= *Tocharian and Indo-European Studies, Supplementary Series*, 4), 284-308. Reykjavík: Málvísindastofnun Háskóla Íslands.