Tocharian and Samoyed: on the question of Uralic substrate influence in Tocharian

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6 Agglutinative case systems[68]

Tocharian has developed an agglutinating case system that has been at the centre of theories on substrate influence for a long time (e.g., Krause 1951), because of its innovative, non-Indo-European character. Influence from the Samoyed case system may provide an adequate explanation for certain important aspects of the Tocharian case system, and thus support the prehistoric contact hypothesis. Both the Tocharian and Samoyed case systems must be discussed in detail from a historical perspective to make a comparison possible, and to decide if early Samoyed provides an adequate candidate as the source of this substrate influence in Tocharian.

6.1 Introduction

Tocharian case inflection is quite elaborate, but there are only four cases that can be considered the descendants of the cases reconstructed for Proto-Indo-European: the nominative, the accusative (called oblique in Tocharian), the genitive, and the vocative. The dative disappeared as a separate case, but it provided the genitive form of some nouns (e.g., Pinault 2008: 510–511, cf. 6.2.2.3). The Tocharian genitive combines both genitive and dative functions (e.g., Krause & Thomas 1960: 82). The non-grammatical cases such as the locative and the ablative were lost at some point during the prehistory of Tocharian. After this reduction of the case system, Tocharian innovated new cases in the period leading up to Proto-Tocharian and continuing in the individual histories of Tocharian A and B (e.g., Carling 2000: 381–383).

However, the newly formed Proto-Tocharian cases were not merely functional replacements of those that were lost in pre-Proto-Tocharian. In particular, the perlative and comitative are entirely new and do not functionally correspond to cases that can be reconstructed for Proto-Indo-European. With the addition of these two cases, the Tocharian system conforms well to Anderson's characterization of the case systems found in languages of Central Siberia, where the presence of a perlative (=prolative) case and a separation of instrumental and comitative functions are common, at least in the present day (Anderson 2006: 278–292).[69] The case systems of Proto-Indo-European, Tocharian and various other Indo-European languages are illustrated in Table 6.1.

[68] This chapter is an adaptation of my (unpublished) MA thesis from 2019, titled "Uralic influence on the Tocharian agglutinative case system?".

[69] Anderson (ibid.) also mentions an opposition between allative and dative cases as a third characteristic of Siberian case systems, but Pakendorf has pointed out that this seems to be mostly restricted to Tungusic, and is thus rather a specific feature of that language family (Pakendorf 2010: 715, 718).

Table 6.1: An overview of the nominal cases in various Indo-European languages; a "+" indicates that the language at the top of the column has that particular case and that it is inherited from PIE in at least some instances; "≠" indicates that the languge has such a case, but that it is not a continuation of the corresponding PIE case; "–" indicates that the case is absent.

	PIE	Hittite	Sanskrit	Greek	Latin	Lithuanian (Old)	Tocharian A	Tocharian B
nominative	+	+	+	+	+	+	+	+
vocative	+	+	+	+	+	+	–	+
accusative	+	+	+	+	+	+	+	+
genitive	+	+	+	+	+	+	+	+
dative	+		+	+	+	+	–	–
locative	+	+	+	–	–	+	≠	≠
ablative	+	+	+	–	+	–	≠	≠
instrumental	+	+	+	–	–	+	≠	–
allative	+(a)	+	–	–	–	(≠)	≠	≠
adessive	–	–	–	–	–	(≠)	–	–
illative	–	–	–	–	–	(≠)	–	–
perlative	–	–	–	–	–	–	≠	≠
comitative	–	–	–	–	–	–	≠	≠
causal	–	–	–	–	–	–	–	≠

(a) If this is to be reconstructed as a proper case based on the Hittite allative; only in adpositions and adverbs in the other Indo-European languages.

The endings of the Tocharian secondary cases differ from the older Indo-European norm in that they are agglutinating elements that are added to the oblique case form. For example, the same Tocharian A allative case ending *-ac* is added to both the singular *käṣṣiṃ* 'teacher' → all.sg. *käṣṣin-ac* 'to the teacher' and to the plural *käṣṣis* → all.pl. *käṣṣis-ac* 'to the teachers'. The oblique forms on which these allatives are based, by contrast, show fusional inflection, with the *-ṃ* (/-n/) in obl.sg. *käṣṣi-ṃ* signifying both oblique case and singular number and the *-s* in obl.pl. *käṣṣi-s* signifying both oblique case and plural number. Furthermore, not all obliques are formed using the same suffixal elements, so that it is not an agglutinative formation. The same goes for the other primary cases, while the secondary cases all have a single, unchanging ending each.

Another characteristic of Tocharian nominal inflection is a phenomenon known as *Gruppenflexion* or "group inflection". This refers to the use of only a single secondary case ending at the end of a phrase of multiple nouns. All elements before the final noun can be rendered in the oblique; cf. example (1 below, where the single use of the instrumental ending *-yo* applies to *kuklas* 'cart:OBL.PL', *yukas* 'horse:OBL.PL' and *oṅkälmās*

'elephant:OBL.PL' (after Krause 1951: 185–186; similar descriptions in, e.g., Krause & Thomas 1960; Pinault 2008: 466–467).

1. Tocharian A (A 253 b2)

kuklas	*yukass*	*oṅkälmās-yo*
cart:OBL.PL	horse:OBL.PL	elephant:OBL.PL-INS

'... with carts, horses, and elephants.'

Schmidt lists the three features of Tocharian nominal inflection mentioned above as "the main features caused by substrate influence", namely (1) agglutinating inflection, (2) the enlargement of the local case system to include a (new) locative, ablative, allative and perlative, and (3) Gruppenflexion (Schmidt 1990: 195). To explain these innovative features of the Tocharian case system, some scholars have invoked influence from non-Indo-European languages (see already Krause 1951, who considered influence from Tibetan, Altaic, Dravidian, Caucasian and Finno-Ugric; see also Thomas 1994).

However, not all scholars agree that these constitute significant innovations particular to Tocharian, or that it is warranted to consider them to be the result of language contact. Kim, for instance, is very much opposed to the idea that the secondary cases of Tocharian would be the result of substrate influence. He points to cases such as Vedic *pat-táḥ* 'from the foot' and Greek οὐρανό-θεν 'from heaven', which "demonstrate that the expansion of adverbial morphemes to other nominal bases and reinterpretation as case-like markers with an adverbial (usually locational) sense was far from uncommon in older Indo-European languages, and hardly requires the assumption of contact with Uralic, Turkic, or any other non-Indo-European languages of an agglutinating type" (Kim 2013: 124–126).

It is certainly important to keep in mind that agglutinating elements or tendencies are not alien to early Indo-European languages, and it seems prudent to caution against interpreting any and all agglutinating features as the result of substrate influence. However, if we consider the specifics of the Tocharian agglutinating case system as a whole, we may be justified in investigating potential contact effects, cf. Peyrot (2019a: 94). There are also other Indo-European languages that, like Tocharian, formed more extensive and innovative case systems with agglutinating elements, and this type of innovation can often be plausibly ascribed to language contact. In Ossetic, an Iranian language with nine cases, it has been argued that Georgian influence played an important role in the formation of the case system (Belyaev 2010: 311). Similarly, presence of agglutinative cases in some New Indo-Aryan languages like Sinhala and Hindustani can be attributed to the influence of agglutinating Dravidian languages spoken in the same area (Krause 1951: 189; Kulikov 2012: 300), and the Old Lithianian extended case system with the added allative, adessive, illative and inessive cases has been plausibly

attributed to influence from Finnic languages with their extensive local case systems (Kulikov 2012: 298–299). The same type of development has taken place in Anatolian Greek, which has made its case system more agglutinating in contact with Turkic (Thomason & Kaufmann 1988: 219–220). There thus seems to be a correlation between Indo-European languages with more extensive agglutinative case systems and their contact with non-Indo-European languages with agglutinative nominal morphology.

Since the rise of agglutinative case systems in Ossetic, New Indo-Aryan languages, Old Lithuanian and Anatolian Greek can be understood by considering the agglutinating languages spoken in the vicinity, it seems reasonable to investigate whether the Tocharian agglutinating cases can be explained in terms of language contact as well. Uralic was considered as a potential source in the literature early on already (e.g., Krause 1951; Bednarczuk 2015; Peyrot 2019a), but Turkic has also been suggested (Kulikov 2012; Akao 2020). This chapter will mainly concern itself with the question whether Uralic is an appropriate source, but the arguments in favour of alternative Turkic influence will also be considered in the final discussion as well.

6.2 The Tocharian case system

The Tocharian case system is divided into two types of cases: primary cases and secondary cases. The primary cases—nominative, oblique (accusative), genitive and (TB only) vocative—are the grammatical cases, and they exhibit the fusional marking of number and case typical of Indo-European languages. Most of the secondary cases have local semantics, and they are all formed by agglutination of their respective invariant case endings to the oblique singular or plural (see, e.g., Krause & Thomas 1960: 78ff.; Van Windekens 1979: 165–168; Carling 2000: 1–2). This system is illustrated for both Tocharian A and B in Table 6.2, with the vocative left aside.

Table 6.2: Example nominal paradigms in Tocharian A and B, using the word TA *yuk*, TB *yakwe* 'horse' (partly constructed where attested forms are lacking but predictable).

	Tocharian A		Tocharian B	
	singular	plural	singular	plural
nominative	*yuk*	*yukañ*	*yakwe*	*yakwi*
oblique	*yuk*	*yukas*	*yakwe*	*yakweṃ*
genitive	*yukes*	*yukaśśi*	*yäkwentse*	*yäkweṃts*
allative	*yuk-ac*	*yukas-ac*	*yakwe-ś(c)*	*yakweṃ-ś(c)*
locative	*yuk-aṃ*	*yukas-aṃ*	*yakwe-ne*	*yakweṃ-ne*
ablative	*yuk-äṣ*	*yukas-äṣ*	*yakwe-meṃ*	*yakweṃ-meṃ*
perlative	*yuk-ā*	*yukas-ā*	*yakwe-sa*	*yakweṃ-tsa*[(a)]

	Tocharian A		Tocharian B	
	singular	plural	singular	plural
comitative	*yuk-aśśäl*	*yukas-aśśäl*	*yakwe-mpa*	*yakweṃ-mpa*
instrumental	*yuk-yo*	*yukas-yo*	= perlative	

(a) The *-t-* is epenthetic between the final *-ṃ* /-n/ of the oblique and the *-s-* of the ending.

The reconstructions of the Tocharian cases to Proto-Tocharian are especially difficult in those instances where Tocharian A and B show different suffixes, such as in the ablative and the comitative. Furthermore, the precise functions of the individual cases are a cause for confusion, with the locative expressing both location and movement. The original, (pre-)Proto-Tocharian situation must be recovered for a comparison with the Samoyed case system (treated in 6.3), and this will be the objective of the following subsections.

6.2.1 The functions of the Tocharian secondary cases

In this subsection, the functions of the Tocharian secondary cases will be briefly discussed and illustrated. Tocharian A and B largely agree, but there are some discrepancies that may be of interest for the reconstruction of the Proto-Tocharian case functions and thus affect the comparison with Samoyed. The Tocharian B causal case *-ñ* is rather marginal and derived from a genitive form (Krause & Thomas 1960: 90; Van Windekens 1979: 258–259), so it will not be considered here.

6.2.1.1 Allative

The allative TA *-ac*, TB *-śc* describes movement towards a goal describes movement towards a goal, especially when the goal is a living being, or when the goal is not necessarily reached or entered (Kölver 1965: 78; Carling 2000: 53–54). . It is often used to translate a Sanskrit dative in bilingual texts (e.g., Kölver 1965: 77). Normally, the Tocharian genitive is used for this function instead (cf. Krause & Thomas 1960: 82), and the dative use of the allative is consequently not proper to native Tocharian.

2. Tocharian B (THT 500.1 a3; verse; trsl. CEToM)

klyomñai	*ytāri*	*oktatsai*	*yamim*	*pākri*
noble:F.OBL.SG	path:OBL.SG	eightfold:F.OBL.SG	do:OPT.ACT.1SG	manifest

rī-ś	*ynūcai*	*nervāṇäṣṣai*
town:OBL.SG-ALL	go:ACT.PTC.F.OBL.SG	Nirvana:ADJ.F.OBL.SG

'May I make manifest the noble eightfold path that goes **to the city** of Nirvāṇa!'

3. Tocharian A (A 9 b1; prose; trsl. after CEToM)

po(*ṃ*)*ś*	***lānt-ac***	*kakmuṣ*	*lānt*	*pälkoräṣ*
all:M.NOM.PL	king:OBL.SG-ALL	come:PRT.PTC.M.NOM.PL	king:OBL.SG	see:ABS

'(Thereupon) all came **to the king**, and having seen the king, ...'

Tocharian A and B share the same use of the allative, so that the same function can be reconstructed for Proto-Tocharian (Carling 2000: 384).

6.2.1.2 Locative

The locative TA *-aṃ*, TB *-ne* is used primarily to denote a location inside or movement into some object (Carling 2000: 51–52). The latter use is unusual when compared to locatives in other Indo-European languages. Kölver remarks that the common distinction in Indo-European languages between location and direction is remarkably absent in the Tocharian locative, which can express both (Kölver 1965: 97).

According to Carling, a noun marked in the locative is typically a bounded space like a 'house', which sets the locative apart from the perlative (see 6.2.1.4), which is used primarily with unbounded spaces like a 'field'.[70] Melchert suggests that the locative is rather used for spatial objects without significant surface extension, as this better explains the use of the locative with abstract nouns (which have no literal spatial delimitation) and words meaning 'place' (Carling 2000: 186, 264; Melchert 2002: 107). The object of emotions like 'love, desire, hate, compassion', etc., is also mostly rendered in the locative case in both Tocharian languages (Kölver 1965: 123), but since Sanskrit uses the locative in the same way in such situations (cf. Macdonell 1927: 198), this could also be due to secondary Sanskrit influence.

4. Tocharian B (IOL Toch 246 b3; prose; trsl. CEToM)

se	*ṣamāne*	*yaka*	*yaṣi-sa*	*lānte*
DEM.M.NOM.SG	monk:NOM.SG	still	night:OBL.SG-PER	king:GEN.SG

kercyen-ne	*yaṃ*
palace:OBL.SG-LOC	go:SBJ.ACT.3SG

'If a monk, still during the night, goes **into the palace** of the king ...'

[70] Tocharian A and B mostly agree on which combinations of verbs and nouns are construed with the locative or the perlative. An exception is the word for 'mountain', TA *ṣul* ~ TB *ṣale*: position on a mountain is expressed with the locative in Tocharian A, while Tocharian B uses the perlative (Caring 2000: 258–259).

5. Tocharian A (A 5 a6; prose; trsl. based on CEToM)

pkäntäk	***waṣt-aṃ***	*lake*	*raksā-ṃ*
separate(ly)	house:OBL.SG-LOC	bed:OBL.SG	spread:PRT.ACT.3SG-3SG

'He spread out a bed for him in a separate place **in the house**.'

Since the uses of the locative in Tocharian A and B are very similar, the Proto-Tocharian function would likely have been the same: the locative primarily denotes (internal) location and arrival inside a location (Carling 2000: 384–387).

6.2.1.3 Ablative

The ablative case TA *-äṣ*, TB *-meṃ* is primarily used to indicate the starting point of some movement or an action, without differentiating between a point of origin 'inside' or 'by' the object in the ablative case (Carling 2000: 23). In Tocharian A, the ablative is also used to mark the standard of comparison (Kölver 1965: 145–146). Here the two languages are in disagreement, as Tocharian B normally uses the perlative for this purpose instead (cf. 6.2.1.4).

6. Tocharian B (THT 93 a5; prose; trsl. CEToM)

te	*keklyauṣormeṃ*	*candramukhe*	*walo*	*ṣecakecce*
DEM.N.OBL.SG	hear:ABS	PN	king:NOM.SG	lion:ADJ.M.OBL.SG

asāṃ-meṃ	*ñor*	*klāya*
throne:OBL.SG-ABL	down	fall:PRT.ACT.3SG

'When he had heard this, king Candramukha fell down from [his] lion-throne.'

7. Tocharian A (A 30 a1; prose/verse?; trsl. CEToM)

vipul	***ṣul-äṣ***	*lyutār*	*tpär*	*top*
PN	mountain:OBL.SG-ABL	more	high:M.NOM.SG	heap:NOM.SG

na(*ṣ*)
be:PRS.ACT.3SG

'There is a heap higher **than mount** Vipula

The ablative endings of Tocharian A and B cannot be easily reconciled. For this reason, Carling does not reconstruct an ablative for Proto-Tocharian (Carling 2000: 379). She does remark that it is unexpected for the ablative to be absent from the local case system and wonders if the genitive might have been used for this purpose instead, even though the genitive has no discernible ablative use in either Tocharian A or B (Carling 2000.: 280). The fact that Tocharian A and B have different suffixes for the ablative does not necessarily mean that both are post-Proto-Tocharian innovations: it is possible that one

of the two replaced the original ending while the other kept it, or even that both replaced an earlier ablative ending. It will appear in subsection 6.2.2.2 that the ablative ending in Tocharian A may be derived from a Proto-Indo-European element, which would imply that it goes back to Proto-Tocharian as well.

The full range of functions of the Proto-Tocharian ablative can still not be established with certainty. Aside from the canonical ablative semantics, it could be that the Tocharian A use of this case to mark the standard of comparison is old. The use of the perlative as the standard of comparison in Tocharian B (see 6.2.1.4) could conceivably have resulted from the replacement of the original ablative ending. Perhaps the use of the ablative in some exceptional cases in Tocharian B was due to Sanskrit influence, since Sanskrit also uses the ablative to mark the standard of comparison (Macdonell 1927: 191–192), like Tocharian A. All in all, an ablative with the standard ablative meaning 'from' can be reconstructed for a Proto-Tocharian; potentially this case was used to mark the standard of comparison as in Tocharian A.

6.2.1.4 Perlative

The meaning of the perlative case TA *-ā*, TB *-sa* is complex, and in some functions, it is rather close to the locative. The canonical use of the perlative can be translated with 'along, by, across, through' (Carling 2000: 45–46, 49–50; Krause & Thomas 1960: 84–86). Similar to the locative, the perlative can be used to indicate either movement or a static location. As mentioned in 6.2.1.2, Carling characterizes the difference between the two cases as a matter of unbounded space (perlative) vs. bounded space (locative) (Carling 2000: 258–259), whereas Melchert considers the notion of significant surface extension to be the primary factor (Melchert 2002: 107).

Another function of the perlative is to mark the agent in a passive sentence (Kölver 1965: 52; Krause & Thomas 1960: 85), although the genitive is used for this more frequently (Kölver 1965: 19). The perlative can also express a cause or reason in both Tocharian A and B (ibid.: 53–58; Krause & Thomas 1960: 84). In Tocharian B, the perlative is also used as an instrumental, and to mark the standard of comparison (Kölver 1965: 43–53, 64–66; Krause & Thomas 1960: 86).

8. Tocharian A (A 1 b2; prose; trsl. CEToM)

päñ	*kursärwā*	*ār(ṣ)lās-yo*	*rarkusāṃ*	***tkan-ā***
five	mile:OBL.PL	snake:OBL.PL-INS	cover:F.OBL.SG	ground:OBL.SG-PER

kälk
go:PRT.ACT.3SG

'For five miles he went **over the ground** covered with snakes.'

9. Tocharian B (THT 107 b5; prose; trsl. after CEToM)

ckentse	***manarkai-sa***	*nyagrot stām*	*ñor*	***atiyai-sa***
river:GEN.SG	bank:OBL.SG-PER	Nyagrodha-tree	under	grass:OBL.SG-PER

lyama
sit:PRT.ACT.3SG

'**On the bank** of the river he sat down under the Nyagrodha-tree **on the grass**.'

10. Tocharian B (THT 88 a1; prose; trsl. after Huard 2022: 382)

tumeṃ	*durmukhe*	*brāhmaṇe*	*uttare(-ṃ)*[71]	*śamaśke-ṃ*
thereupon	PN	brahmin	PN(:OBL)	boy:OBL

kärwāṣṣai	***witsakai-sa***	*räskare*	*tsopaṃ-ne*
reed:ADJ.F.OBL.SG	root:OBL.SG-PER	sharply	hit:PRS.ACT.3SG-3SG

'Thereupon the brahmin Durmukha hits the boy Uttara harshly **with a reed root**.'

11. Tocharian B (THT 107 a9; prose; trsl. after CEToM)

nānda	*nandābala*	*weñāre*	*se*	***ci-sa***
PN	PN	say:PRT.ACT.3PL	REL.NOM	2SG.OBL.SG-PER

śpālmeṃ	*tākaṃ*	*cwi*	*aiskem*
excellent	be:SBJ.ACT.3SG	3SG.M.GEN.SG	give:PRS.ACT.1PL

'Nandā and Nandabalā said: he who is more excellent **than you**, to him we [will] give [it].'

The functions of the perlative in Proto-Tocharian must have included the core locational meanings as attested in both Tocharian A and B (Carling 2000: 384–384), as these are shared between both Tocharian languages. What additional functions it would have had is difficult to establish due to the disagreement between Tocharian A and B. The expression of a cause or reason might have been in use early on, and given the innovative nature of the Tocharian A instrumental, it is possible that earlier instrumental use of the perlative was displaced by the new instrumental case in Tocharian A (on which see 6.2.1.6). The use of the perlative as the standard of comparison in Tocharian B could have been promoted by the loss or replacement of the original ablative case form (cf. 6.2.1.3), so that it may not have been a part of the function of the perlative in Proto-Tocharian. Aside from the locational meaning, the use of the perlative to mark a cause or reason can be reconstructed, and perhaps its instrumental meaning was derived from this at an early stage already, as it is found in Tocharian B.

[71] The final *-ṃ* is absent in the manuscript, but grammatically expected.

6.2.1.5 Comitative

The comitative TA *-aśśäl*, TB *-mpa* marks accompaniment. Although the forms of the suffixes are different in Tocharian A and B, the comitative functions in both languages correspond closely (Kölver 1965: 69–74). If either suffix goes back to Proto-Tocharian (see 6.2.2.2), its function is likely to have been the same as attested.

12. Tocharian B (THT 78 b3–4; prose; trsl. CEToM)

kā	*twe*	*brāhmaṇeṃ-mpa*	*t=*	*epiṅte*
why	2SG.NOM.SG	brahmin:OBL.SG-COM	DEM.N.NOM.SG	between

sak	*wī(na)*	*w(ä)rpāt(ai)*
happiness:OBL.SG	pleasure:OBL.SG	enjoy:PRT.MID.2SG

'Why have you enjoyed happiness and pleasure **with the brahmin** in the meantime.'

13. Tocharian A (A 66 a3; verse; trsl. CEToM)

śmeñc	*śtwar*	*wäkn-ā*	***ratk-aśśäl***
come:SBJ.ACT.3PL	four	way:OBL.SG-PER	army:OBL.SG-COM

'They will come **with** [their] fourfold **army** …'

6.2.1.6 Instrumental

Only Tocharian A has a separate instrumental case, ending in *-yo*. The instrumental is used to mark an instrument or a cause, the latter function being shared with the perlative (Kölver 1965: 11–27). The instrumental is commonly agreed to be a specific Tocharian A derivation from the conjunction *yo* 'and' (see, e.g., Koller 2018: 180–181 with references), and thus cannot be reconstructed as a part of the Proto-Tocharian case system.

14. Tocharian A (A 91 a3; prose; trsl. after CEToM)

wsā-yokās	***poken-yo***	*añcäl*	*pañwä(ṣ)*
gold-coloured:F.OBL.PL	arm:OBL.DU-INS	bow:OBL.SG	stretch:PRS.ACT.3SG

'**With** gold-coloured **arms** he draws the bow.'

6.2.2 The forms of the Tocharian cases

At first blush, the formal correspondences between the secondary case suffixes in Tocharian A and B seem to be limited to the locative, which is very transparently the same: TA *-aṃ*, TB *-ne* from PT **-ne*. However, with a reinterpretation of the original final **-s* of the oblique plural ending **-ns* in Tocharian B, both perlatives TA *-ā* and TB *-sa* can be derived from PT **-a*. With the same development, the allative TB *-śc* can be connected

with TA *-ac*, with a generalized vowel *-a-* in the latter, and reconstructed as PT **-cə* (Gippert 1987: 25–28). These three cases will be discussed together in 6.2.2.1.

The ablative TA *-äṣ*, TB *-meṃ* and the comitative TA *-aśśäl*, TB *-mpa* cannot be reconciled, and their reconstruction for Proto-Tocharian is thus more problematic. These will be discussed in 6.2.2.2. It has furthermore been proposed that early Tocharian preserved a separate dative-locative case that was later lost, see 6.2.2.3. Finally, the status of the secondary cases will be given further specification in 6.2.2.4, before a final overview in 6.2.2.5.

6.2.2.1 Where Tocharian A and B agree

The locative suffix is the only secondary case suffix with a generally agreed-upon etymology. It can be connected with the element found in Lith. *nuõ* 'from', OLith. illative *-n(a)*, OCS *na* 'on, at'; (on)to' from PBSl. **-nō* from **$h_2$noh$_1$* (Kim 2013: 132 with references). However, it is impossible to directly equate the reconstruction of this Balto-Slavic element to the Tocharian suffix PT **-ne*, since PT **e* normally reflects PIE **o* rather than **oH*. As a Proto-Indo-European reconstruction, also an accusative case form **$h_2$no-m* has been adduced (Kim 2013: 133), and a form **$h_2$no* without an additional ending (Van Windekens 1979: 257).

As a cognate of the Proto-Tocharian allative **-cə*, Greek δε as in οἶκόν=δε 'home(wards)' has been proposed (Van Windekens 1979: 254), and this works well semantically. However, PIE **de* should have given PT **śə* instead of **cə*, as in TA *śäk*, TB *śak* 'ten (10)' from PIE **deḱṃ*. Gippert accounts for this by proposing a progressive devoicing rule after the accusative plural ending **-ns*, i.e., **-ns-de* > **-ns-te* > PT **-nst^{y}ə*. From such a position, **-cə* could have been re-analysed and spread as the new allative ending (Gippert 1987: 31). Similar re-analyses and extensions did take place within the Tocharian A and B case endings after the Proto-Tocharian period, so that Gippert's suggestion is not unthinkable.

Kim instead proposes that the allative **-cə* is to be derived from PIE **=d^{h}e* as found in Lat. *un-de* 'whence' and (with an additional *-n*) Greek ablatival forms in -θεν (Kim 2013: 134). Vedic *kúha* 'where', OCS *kъde* from **k$^{(w)}$u-d^{h}e* (Mayrhofer 1992: 383; Derksen 2008: 259-260) reflect a static meaning from this element, which may represent an intermediary between the ablative meaning found in Latin and Greek and the allative meaning of Tocharian. Perhaps Ru. *kudá* 'where, whither' contains the same element **d^{h}e*, although its exact reconstruction in the second-syllable vowel is not clear (Derksen 2008: 242-243).

The perlative PT **-a* has been connected to Lat. *ad* 'to, at', OEng. *æt* 'at, to', from PIE **$h_2$ed* (Pedersen 1941: 92; Van Windekens 1979: 251–252). An interpretation as **-a* from a generalized instrumental singular **-oh$_1$* of the thematic stems has also been proposed (Klingenschmitt 1994: 342–344), but PIE **-oh$_1$* is not normally known to become *-a* in

word-final position (cf. subsections 2.3.1 and 2.4.5.1). Kim (2012: 135) considers the allative, reconstructed by him as *-*eh*$_2$, as an option, but this reconstruction is not agreed upon: the Hittite allative in -*a* (unaccented) or -*ā* (accented) is argued by Kloekhorst to go back to *-*o* instead, based on the correspondence Hitt. *parā* /prá/ 'forward' to Gr. πρό, Skt. *prá-*, Lat. *pro*, Goth. *fra-*, all from PIE **pro* (Kloekhorst 2008: 161). Furthermore, the sequence PIE *-*eh*$_2$ normally became PT *-*o* rather than *-*a* (cf. subsection 2.3.1). The most straightforward reconstruction for the perlative is thus the adposition **h*$_2$*ed*, as this is the only one that does not involve extra phonological difficulties.

6.2.2.2 Where Tocharian A and B differ

The endings of the ablative (TA -*äṣ*, TB *meṃ*) and the comitative (TA -*aśśäl*, TB -*mpa*) do not match, which makes it difficult to reconstruct these cases for Proto-Tocharian. Several suggestions have been made for the origins of these case suffixes, but an adequate explanation for the majority of them is still lacking.

Ablative

The Tocharian A ablative in -*äṣ* has been explained by Jasanoff as a reflex of PIE *-*ti*, or the corresponding adverb **h*$_1$*eti* 'from this' if this was suffixed early enough, similar to the ablative ending as found in Hittite *antuḫšaz* (-*z* < *-*ti*) 'from a man' and in Armenian *i getoy* (*-*o-ti*) 'from a river', *i banē* (*-*e-ti*) 'from speech' (Jasanoff 1987: 109–112). The phonological development necessary is based on two verbal endings, and on the Tocharian A ablative itself (see subsection 2.3.4.2 for more details).

The Tocharian B allative in -*meṃ* is very much obscure. Pinault proposed a connection with the adverb *mante* /mə́nte/ 'upward' (Pinault 2008: 471–472). The vowel of -*meṃ* does not match this adverb, so that a related word with a different ablaut grade would have to be assumed (Kim 2013: 132). According to Pinault (2008: 471–472) and Kim (2013: 132–133), this was added to the original ablative ending as found in Tocharian A[72] to explain the optional accent movement in found with TB -*meṃ*.

The exact origins of the Tocharian B ablative -*meṃ* thus remain uncertain, but with a possible derivation from PIE *(*h*$_1$*e*)-*ti*, the Tocharian A ablative -*äṣ* can be cautiously reconstructed for Proto-Tocharian.

[72] Kim's scenario, whereby pre-PT *-*ti* yield both TA -*äṣ* and TB -∅ (Kim 2013: 132-133), is chronologically quite difficult, since the variants *-*ti* and *-*t* should have remained side by side as ablative markers in Proto-Tocharian, even as *-*ti* had become *-*ṣ* and *-*t* had become *-∅. That Tocharian B should then have generalized the unmarked zero-ending at the expense of *-*ṣ*, before replacing it with -*meṃ* seems to me extremely unlikely.

Comitative

The Tocharian A comitative ending *-aśśäl* has a clear connection with the preposition and compositional element TB *śale~śle*, TA *śla* '(along) with; likewise'. The entire group is etymologically rather obscure, however, and connections with other Indo-European words are either semantically dubious or formally unresolved. The Celtic words OG *céile*, W *cilydd* 'companion, other' are semantically attractive for a comitative, but formally represent either **keiliio* or **kiliio* respectively, which would have yielded TB ***śille* or ***śalle* /śə̆lle/. A pre-form **kilo* would perhaps regularly yield TB *śale* /śə̆le/, but such a formation would be unparalleled (Adams 2013: 680; cf. Matasović 2009: 199–200).

Kim has proposed to derive PT **kʸəle* from a combination of **kʸə* from PIE **kʷe* 'and' and **yəle* 'to go', a hypothetical old gerundive from PIE **h₁i-lo-* (Kim 2013: 134–136). The Proto-Indo-European clitic **kʷe* is not otherwise preserved in Tocharian, and the regular form of the gerundive of 'to go' is TB *yalle* ~ TA *yäl* from PT **yəlle*. Thus, while a sequence like N_1 N_2-**kʷe h₁ilo-* ±'N_1 and N_2 following' > N_1 N_2-*śə-yəle* might regularly become TA *-aśśäl* with assimilation of pre-TA syncopated *-śy-* to explain the geminate *-śś-*, the individual elements needed for this etymology lack proper support.

The development of the preposition from this original suffix or clitic element also remains difficult. Kim points, as a parallel, to Ossetic *æd* 'with' and *ænæ* 'without', which are the only prepositions in a language otherwise dominated by propositions, similar to TB *śale* 'with' and *snai* 'without' (Kim 2013: 136). This does not, however, amount to an explanation as to how or why *śale* would have become a preposition if it originated as a suffix (cf. the criticism of Koller 2018: 172). Additional evidence would be needed to support the notion that there is a general pressure for elements meaning 'with' or 'without' to precede the noun phrase they modify, regardless of their origins. As such, Kim's etymology for the Tocharian A comitative *-aśśäl* and the preposition TB *śale*, *śle* ~ TA *śla-* cannot easily be accepted.

Koller has proposed to explain the geminate *-śś-* in *-aśśäl* as the result of a combination of *-śäl*, from the adposition, with the ablative suffix *-ac*: **-ac-śäl* → *-aśśäl* (Koller 2018: 172–173). This would account for the parallel existence of a simpler comitative suffix *-śäl*, which is especially found in combination with obliques in *-n* (Koller 2018: 168–169). The preposition PT **kʸəle* would have developed into a postposition in Tocharian A, and optionally selected the allative case of the noun in governed (Koller 2018: 173–182). While this might provide a pathway for the development of the comitative suffix within Tocharian A, it does not bring us closer to its ultimate origins.

The Tocharian B comitative *-mpa* is quite as mysterious as the TB ablative *-meṃ*. Van Windekens once proposed a Uralic origin, from the suffix PU **-mpA* with original contrastive semantics (see Ylikoski 2018), but he later abandoned this etymology (Van Windekens 1979: 253), and with good reason, as the semantic gap is quite great. Kim (2014:

133–134) has suggested a derivation from the word for 'both' (TB *antapi*, TA *āmpi*) from PT **ant(ə)pi*. The problem is that the final **-a* of a hypothetical pre-form **ant(ə)pa* is not found in either Tocharian language. Kim's solution is to reconstruct **ant(ə)pay* with a reduction of **-ay* to **-a* in unstressed syllables; e.g., TB *oksaine* /oksáyne/ 'two oxen', *pokaine* /pokáyne/ 'two arms' vs. *ckāckane* /ckáckane/ 'to shanks' (ibid.). Neither the existence of a form **ant(ə)pay* nor the development from **-ay* to **-a* as described by Kim is certain, however. Especially in final position, the obliques TB *oksai* 'ox', *pokai* 'arm' and *ckāckai* 'shank' rather suggest that there was at least no regular simplification of an unaccented **-ay* in that position.

Adams suggests a formation based on PIE **me* 'in the middle, around, with' as in Gr. μετά 'among, with', Goth. *miþ* 'with' and some other particle (Adams 2013: 514). Akao dismisses the possibility of a nasal element altogether, with an interpretation of TB ⟨mp⟩ as [β] rather than [mp] (cf. Pinault 2009: 236–240) and the lack of a full vowel in the independent particle TB *mpa* ±'like, as if' rather than ***mapa* disqualifying any interpretation of this word containing a separate nasal element (Akao 2020). However, a similar situation is found in *spe* 'near' from PIE **supo-* 'under', which is not found as expected *sape** (Adams 2013: 788), so that the existence of independent *mpa* does not disprove the possibility of an earlier form **mVpa*. In any event, a convincing etymology has still not been found.

It is thus not at all clear-cut whether we should reconstruct a Proto-Tocharian comitative on the basis of TA *-aśśäl* or TB *-mpa*, seeing as no compelling etymology is available for either. It could be that both are independent innovations, and that Proto-Tocharian did not have a comitative. At the same time, we may consider that PT ±**-śəle* based on TA *-aśśäl* would have becomeTB ***-śle*, which is more salient than the expected Tocharian A reflex of a PT **-mpa* based on TB *-mpa*: this would have become TA ***-mp* or perhaps just ***-m* (see Peyrot 2022b: 164–165 on the correspondence of TB final *-mp* to TA *-m*). Just a final ***-m* latter is not particularly salient, and may have been more vulnerable to a secondary replacement with an innovative suffix like TA *-aśśäl* (cf. Peyrot 2019a: 93). For this reason, **-mpa* as found in Tocharian B could be regarded as the older suffix, although this is by no means assured.

6.2.2.3 A Proto-Tocharian dative-locative?

Peyrot (2012a) has suggested that there existed also an old dative-locative in Proto-Tocharian. This is based on a correspondence between Tocharian B *ā*-stem oblique singular forms in *-ai* and Tocharian A *ā*-stem genitive singular forms in *-e*. The reconstruction of TB *-ai* and TA *-e* is PT **-ay*, which could go back to **-eh₂-i* or **-eh₂-ei*. The semantics of this suffix could not have been either genitive or oblique already, since Tocharian A and B disagree on this point. The Tocharian B oblique function could not be derived from a genitive, which normally remains clearly differentiated, but since the

genitive functions as a dative, the Tocharian A genitive function could be derived from an old dative without any issues.

An element *-*ay* is also used to form adverbs such as TA *spānte* 'confidently', TB *spantai* 'trustingly'. In Tocharian B, such adverbs with a locative meaning generally have a locative prefix like *en-* (e.g., *enestai* 'in secret'), so that the locative meaning in Tocharian B need not be derived from the ending. The same cannot be said for Tocharian A, however, which thus implies that an original locative function should be attributed to the ending after all. With this argumentation, Peyrot concludes that there may well have been an additional case in Proto-Tocharian, combining dative and locative functions, at least for *ā*-stems (Peyrot 2012a: 204–207).

6.2.2.4 The status of the secondary cases in Proto-Tocharian

Up to this point, the identity of the secondary cases as proper case forms has been taken for granted. However, the relationship between the secondary case endings and the oblique used as the base are different in Tocharian A and B in some interesting ways, which could have implications for their status in Proto-Tocharian.

In Tocharian A, it is clear from the regular apocope of final vowels in, e.g., loc. TA *-ṃ* vs. TB *-ne*, that the secondary cases and the noun they are attached to form a single accentual unit. Otherwise, these monosyllabic elements should have kept their vowel, had they been independent (Carling 1999: 99). Furthermore, an epenthetic *-y-* was added between those secondary cases starting with a vowel and an oblique stem ending in *-i*, *-e* or *-o*; this is not a normal sandhi development between two words, and thus points to the status of the secondary cases forms of nouns as single units (Kölver 1965: 4–5). The fact that the secondary case endings could receive an analogical initial vowel that originally belonged to the end of the noun also supports this.

In Tocharian B, on the other hand, a lack of unity is indicated by several facts. The accent is not attracted by the addition of secondary case suffixes except the ablative, contrary to the usual pattern: TB *lakle* /lə́kle/ has a gen.sg. *läklentse* /ləkléntse/, as expected, but a per.sg. *laklesa* /lə́klesa/, com.sg. *laklempa* /lə́klempa/, loc.sg. *laklene* /lə́klene/ (see also 5.4.4 and the references therein). In a few cases, a secondary case ending also occurs separated from the oblique stem it belongs to, as in *ṣkas meñantse ne* 'on the sixth of the month' and *ṣkas meñantse meṃ* 'from the sixth of the month', where the locative *-ne* and the ablative *-meṃ* are separate from *ṣkas* 'sixth' by the intervening genitive *meñantse* 'of the month' (Carling 1999: 99–100). This may reflect a continuation of the original independence of the case ending (cf. also Carling 2012: 60). On the other hand, the development of **ns* to **nts* in the perlative plural is a word-internal development, indicating that there was no word boundary between the oblique and the secondary case suffix; e.g., per.pl. *ñäkteṃtsa* /ńəkténtsa/ 'among gods' from the obl.pl. *ñäkteṃ* /ńəktén/ + per. *sa*, (Carling 1999: 100).

Tocharian B thus presents us with a most contradictory picture. However, some aspects of the unusual behaviour of the secondary case endings can also be understood as later innovations. The apparent lack of accentual unity may be the result of a secondary development: the local case forms are clearly based on the oblique case, which usually does not show any accent movement, as in nom.sg. *lakle*, obl.sg. *lakle*, both /lə́kle/. If the secondary case endings were simply (re-)added to the synchronic oblique, no accent movement would be expected; and after all, the accent rules of Tocharian B were not synchronically automatic anymore (cf. 5.4.4). Those oblique singulars that do have a different accent from the nominative retain this in the secondary case forms; e.g., *saswe* /sə́swe/ 'lord' with the obl.sg. *säsweṃ* /səswén/, com.sg. *säsweṃmpa* /səswénmpa/, and abl.sg. *säsweṃmeṃ* /səswénmen/. The peculiar examples like *ṣkas meñantse ne* 'on the sixth of the month' might be understood if *ṣkas meñantse* 'the sixth of the month' and other, similar expressions of dates were conceived of as more of a single unit. In such a regular type of expression, this could have been a later development. I think that the general behaviour of the Tocharian secondary endings suggests that they were normally phonologically merged with the base noun and fully integrated with the nominal paradigm in Proto-Tocharian already.

6.2.2.5 Overview

In Table 6.3 below, the secondary case endings of Tocharian A and B are presented with their Proto-Tocharian counterparts. In the case of the ablative, the suffix of Tocharian A (*-äṣ*) is given precedence and is reconstructed for Proto-Tocharian, on account of its plausible Proto-Indo-European origins. The comitative cannot be reconstructed with any semblance of certainty. Where an etymology is available, the Proto-Indo-European adposition or adverbial element is given as well. These elements were not really part of the Proto-Indo-European case paradigm, and only became case markings in the prehistory of Tocharian, after much of the original case system had been lost (cf. Carling 1999: 98).

Table 6.3: The reconstructed Proto-Tocharian secondary case endings together with their most likely Proto-Indo-European origins and the Tocharian A and B forms.

	TA	TB	PT	PIE
allative	*-ac*	*-śc*	**-cə*	**=d^he*
locative	*-aṃ*	*-ne*	**-ne*	**$h_2$nom*
ablative	*-äṣ*	*-meṃ*	**-ṣə*	**-ti* (or *$h_1$eti*?)
perlative	*-ā*	*-sa*	**-a*	**$h_2$ed*
comitative	*-aśśäl*	*-mpa*	?**-mpa*	??

6.3 The Samoyed case system

We have seen the Tocharian secondary case system in the previous section, but to make a comparison it needs to be established what the corresponding system in Samoyed looked like. Some Uralic languages are famous for their extensive local case system, such as Hungarian with eighteen cases or Finnish with fifteen. Many of these cases denote a location 'at' and movement 'to' or 'from', as well as a distinction between 'in', 'on' or 'near'. However, such extensive inventories are not inherited from Proto-Uralic. Instead, various Uralic languages increased their local case systems from an original set of three: a primary directional or "lative" *-*ŋ*, a locative *-*nA* and an ablative *-*tA* (see, e.g., Ylikoski 2011: 235).

Most languages from the Samoyed branch of Uralic do not have case systems that are as elaborate as those of Hungarian and Finnish. In addition to the grammatical cases nominative *-*∅*, accusative *-*m* and genitive *-*n* inherited from Proto-Uralic, the lative, locative and ablative also each have their Samoyed counterpart. The original suffixes are only preserved on their own in the inflection of relational nouns used as postpositions and in adverbs. The case suffixes of regular nouns, by contrast, are extended with coaffixes PS *-*ntə* and *-*kə* (Janhunen 1998: 469). The Samoyed languages also have a prolative *-*mənA*, which cannot be reconstructed for Proto-Uralic. Further information on the functions of these various cases is provided in the subsections of 6.3.1.

For a comparison with the Tocharian secondary case system, it is necessary to gain a clear picture of the Samoyed situation, and to determine the age of the cases and their various uses. The present section will provide an overview of the different cases in the Samoyed languages and their functions. It appears that the Uralic languages in general, including Samoyed, do not have Gruppenflexion as found in Tocharian; only adjective agreement in Nganasan shows some vague parallels, since it only applies to the core cases, but adjective agreement of this sort is understood to be a late innovation in Samoyed (e.g., Rießler 2016: 218). The formal reconstruction of the Proto-Samoyed and pre-Proto-Samoyed case systems will be discussed in 6.3.2.

6.3.1 The Samoyed cases and their functions

In this section, the functions of the local cases will be considered, as well as various comitative expressions in Samoyed and some more restricted cases or case-like elements found in only some Samoyed languages.

The Samoyed local case suffixes are usually accompanied by an additional element, a coaffix *-*kə*- or *-*ntə*-. These coaffixes are not used on their own, only in combination with the case suffixes, hence their name; they will be further addressed below, in 6.3.2. Only the prolative does not have a coaffix.

6.3.1.1 Lative

The lative in Samoyed typically marks a direction of movement or a goal (example 15). This is also the case that is generally used to indicate the recipient or the beneficiary (indirect object) of a ditransitive verb (example 16). Accordingly, it is often called "lative/dative" or "dative" in grammatical descriptions; I will only use the term "lative" to avoid confusion.

15. Tundra Nenets (Nikolaeva 2014: 62; glosses adapted)
    lam°pa-n°h *xərasyin°-m* *xəmta-q*
    lamp-LAT kerosene-ACC pour-SBC.IMP.2SG
    'Pour some kerosene into the lamp.'

16. Forest Enets (Khanina & Shluinsky 2023: 836; glosses adapted)
    ʧukuʧi *buniki-xiz* *miʔ-e-ɲitʃ*
    all dog-LAT.PL give-OBC.PL-1DU.PST
    'We gave them all to dogs.'

It appears that all Samoyed languages agree on the function of the lative as a directional case with both illative and allative functions, translatable as '(in)to'. Since the use of this case to mark the indirect object is also widely attested, this was probably a function of this case in Proto-Samoyed as well.

More information about the lative in the Samoyed languages and additional examples can be found in, e.g.: Wagner-Nagy (2019: 196-197) for Nganasan; Khanina & Shluinsky (2023: 801 and *passim*) for both Tundra and Forest Enets; Siegl (2013: 159-160) for Forest Enets; Nikolaeva (2014: 62) for Tundra Nenets; Sammallahti (1974: 36) for Forest Nenets; Kuznecova, Helimski & Gruškina (1980: 179–180) for Taz (Northern) Selkup; Künnap (1971: 72–77, 1999: 16) for Kamas.

6.3.1.2 Locative

The locative case is primarily used to mark a location inside or on something. It also marks an instrument in the northern Samoyed languages, as these do not have a dedicated instrumental case. For human referents, the locative can be used to express a comitative in at least Nenets and Enets (Nikolaeva 2014: 64; Siegl 2013: 161).

17. Kamas (Künnap 1999: 17; glosses adapted)
    orō-γân *ćüpi* *būzüj* *iʔbə*
    hole-LOC wet calf lie:PRS.3SG
    'A wet calf is lying in the hole.'

18. Tundra Nenets (Nikolaeva 2014: 64; glosses adapted)
    Wera-xəna *to-°-∅*
    PN-LOC come-AOR-SBC.3SG
    'He came with Wera.'

The Proto-Samoyed locative probably had the same function as the attested locatives, expressing location. It is also possible that an instrumental meaning was already available, as a secondary development from the more primary locational semantics. It is easy to imagine a re-analysis of instances like 'catch in a net' → 'catch with a net', 'travel in a boat' → 'travel with a boat' and 'hold in hands' → 'hold with hands' as a way in which instrumental use of the locative might have spread. A separate instrumental cannot be reconstructed for Proto-Samoyed.

More information about the locative in the Samoyed languages and additional examples can be found in, e.g.: Wagner-Nagy (2019: 197–199) for Nganasan; Khanina & Shluinsky (2023: 801 and *passim*) for both Tundra and Forest Enets; Siegl (2013: 161) for Forest Enets; Nikolaeva (2014: 63–64) for Tundra Nenets; Sammallahti (1974: 38) for Forest Nenets; Kuznecova, Helimski & Gruškina (1980: 180–181) for Taz (Northern) Selkup; Künnap (1999: 16–17) for Kamas.

6.3.1.3 Ablative

The ablative case is used to denote movement away from a place, marking the source of the movement. The standard of comparison is also marked in the ablative in all Samoyed languages for which comparative constructions are known; the formation and syntax of comparatives in Mator is unknown (Helimski 1997: 145).

19. Nganasan (Wagner-Nagy 2019: 199; glosses adapted)
    ďesʲ-mə *büü-ʔnar-u* ***gərədə-gətə***
    father-POSS.NOM.SG.1SG go-FREQ-AOR.3SG town-ABL
    'My father often leaves (goes **out of**) **town**.'

20. Selkup (Kazakevič 2022: 792; glosses adapted)

buran	***ɔːtæː-qinɨ***	*tʃatki-sɨmɨɕ*	*ɛːŋa*
PN	reindeer-ELA[73]	rapid-ADJ	be:3SG

'A Buran (snowmobile) is faster **than a reindeer**.'

The Proto-Samoyed ablative must have had the same canonical ablative functions as attested in all Samoyed languages, including a use as marking the standard of comparison.

More information about the ablative in the Samoyed languages and additional examples can be found in, e.g.: Wagner-Nagy (2019: 199–200) for Nganasan; Khanina & Shluinsky (2023: 801 and *passim*) for both Tundra and Forest Enets; Siegl (2013: 162–163) for Forest Enets; Nikolaeva (2014: 64–65) for Tundra Nenets; Sammallahti (1974: 38–39) for Forest Nenets; Kuznecova et al. (1980: 181–182) for Taz (Northern) Selkup; Künnap (1999: 16–18) for Kamas.

6.3.1.4 Prolative

The prolative marks movement across or along an object. This function of the prolative can be found in Nganasan, Enets, Nenets and Selkup, and can thus be straightforwardly assumed for Proto-Samoyed as well. In Kamas the prolative is only found in a few adverbs (Mikola 1988: 238; Klumpp 2022: 824). The prolative stands apart from the other local cases in that is has no coaffix.

21. Tundra Nenets (Nikolaeva 2014: 65; glosses adapted)

yəxa-w°na	*buksir*	*myiŋa-∅*
river-PRO	tugboat	go:AOR-SBC.3SG

'A tugboat is moving along the **river**.'

More information about the locative in the Samoyed languages and additional examples can be found in, e.g.: Wagner-Nagy (2019: 200–201) for Nganasan; Khanina & Shluinsky (2023: 801 and *passim*) for both Tundra and Forest Enets; Siegl (2013: 165) for Forest Enets; Nikolaeva (2014: 65–66) for Tundra Nenets; Sammallahti (1974: 40) for Forest Nenets; Kuznecova, Helimski & Gruškina (1980: 183) for Taz (Northern) Selkup; Künnap (1999: 16–17) for Kamas.

[73] The Proto-Samoyed ablative became the Selkup elative, more specifically used for internal movement, and restricted to inanimates.

6.3.1.5 Comitative constructions

There are various strategies to express a comitative in Samoyed. In Nganasan, the postposition *na* 'to, near' can be used as a comitative: *ńuə-nə-na* 'with my child' (Wagner-Nagy 2019: 188–189), or a sociative derivational suffix *-səbtə* may be employed (Wagner-Nagy 2019: 329). Nenets and Enets use the locative for a comitative meaning (Sammallahti 1974: 37–38; Nikolaeva 2014: 64; Burkova 2022: 684; Khanina & Shluinsky 2023: 801). A comitative or proprietive adjective can be derived in Enets with EnT *-sae*, EnF *-saj*, e.g., EnT *niɔsae* 'with a child, with children' (Khanina & Shluinsky 2023: 801). The Nenets counterpart to this is *-sawey*°, e.g., *yísawey*° 'intelligent' from *yí* 'mind', *nyesawey*° 'married' from *nye* 'woman' (Nikolaeva 2014: 32–33); the suffix can be straightforwardly reconstructed as **-sAmAjə̂*. Kamas and Selkup can use the instrumental as a comitative (Künnap 1971: 132; Kuznecova, Helimski & Gruškina 1980: 175; 2002: 88; Kazakevič 2022: 791; Klumpp & Budzisch 2023: 908–909).

22. Taz Selkup (Kuznecova et al. 1980: 175; glosses added)

man	***ima-ny-sä***	*ila-k*
1SG	wife-GEN.POSS.1SG-INS	live-SBC.1SG

'I live with my **wife**.'

No dedicated comitative case can be reconstructed for Proto-Samoyed.

6.3.1.6 Additional cases

There are a few other suffixes with a more limited distribution in Samoyed that can be considered cases. There is the predestinative, which is found in the northern Samoyed languages and marks something for the benefit of someone. It is usually combined with the possessive suffixes, and it has been variously interpreted as nominal tense marking (e.g., Nikolaeva 2015) or as a separate declension type (e.g., Siegl 2013). Despite its limited distribution in only the northern Samoyed languages, the predestinative suffix can be reconstructed for Proto-Samoyed as **-tə-* and connected with the Proto-Uralic translative **-ksi*, which expresses changes of state: the phonological correspondence is entirely regular, and there is an overlap in the use of both suffixes (see Janhunen 1989; Salminen 2014; Ylikoski 2017, Aikio 2022a: 15). It is unclear what the status of the predestinative was in Proto-Samoyed and early stages of pre-Proto-Samoyed. It may have remained as a translative for a long period of time.

23. Tundra Nenets (Nikolaeva 2014: 76; glosses adapted)

tyuku°	*wenyako*	*mənyaq*	***wenyako-d°-naq***	*xəya-∅*
this	dog	1PL	dog-DST-POSS.GEN.SG.1PL	go:AOR-SBC.3SG

'This dog became **our dog**.'

The southern Samoyed languages Selkup and Kamas have an instrumental case in Sk. *-sä/-se* and Km. *-ʒʲəʔ/-ʒʲiʔ* respectively (Klumpp & Budzisch 2023: 905; Klumpp 2022: 827). Selkup furthermore has a number of additional cases such as a caritive in *-qalɨk*, an essive-translative *-ŋgo* and a translative in *-wle* (e.g., Klumpp & Budzisch 2023: 905). An additional set of specifically animate local cases in Selkup is based on the Proto-Samoyed postposition **na-* 'at, near' (SW 99 under **nä-*); this same postposition is used in the northern Samoyed languages to periphrastically express the local cases of the dual (e.g., Wagner-Nagy 2019: 191 on Nganasan; Nikolaeva 2014: 57 on Tundra Nenets).

6.3.2 The Proto-Samoyed and Proto-Uralic case systems

In this subsection, I will give an overview of the origins of the Samoyed cases, summarising the literature on the topic. I put forward a slightly updated reconstruction of the plural local cases relative to Janhunen (1998) and Däbritz (2017), which allows for a more uniform interpretation of their formation in Nganasan, Enets and Nenets, and subsequently, a more coherent reconstruction of the Proto-Samoyed plural local cases as a morphological system. In this way, the relationship between the formation of the plural local cases and the plural genitive is highlighted, although it does not affect the details of the eventual comparison with Tocharian.

The lative, locative, ablative and prolative, found in all Samoyed languages, are reconstructed for Proto-Samoyed (Janhunen 1998: 469). The coaffixes **-ntə-* and **-kə-* are present in the lative, locative and ablative, while the prolative does not have a coaffix. Crucially, the Samoyed languages do not agree on which co-affix is used in the locative: Nganasan uses **-ntə-* there (Ng. loc. *-NTənU*), while the rest of the Samoyed languages use **-kə-* (e.g., NeT loc. *-xəna*, Mt. loc. *-kənA*). Janhunen interprets this as a sign that the local case system was not yet fully formed in Proto-Samoyed, before Nganasan split off from the others (Janhunen 1998: 469). In the plural, only the northern Samoyed languages have special case suffixes. Selkup and Kamas both add the singular case endings to the nominative plural in a fully agglutinating manner (cf. Klumpp 2022: 825; Klumpp & Budzisch 2023: 905). The Proto-Samoyed plural case endings can be reconstructed based on the northern Samoyed languages as in Table 6.4.

Table 6.4: Proto-Samoyed local cases, singular and plural, based on Janhunen (1998: 470), though with a slightly different reconstruction of the Nenets (and Enets) plural case suffixes, without *-*j*-.

PS	singular	plural
nom.	*-∅	*-*t*
acc.	*-*m*	*-*j*
gen.	*-*n*	*-*j-t*
lat.	*-*ntə-ŋ*	*-*ntə-j-t* (Ng) / *-*kə-j-t* (En-Ne)
loc.	*-*ntə-nA* (Ng) / *-*kə-nA* (rest)	*-*ntə-j-t-nA* (Ng) / *-*kə-j-t-nA* (En-Ne)
abl.	*-*kə-tə*	*-*kə-j-t-tə*
pro.	*-*mənA*	*-*j-t-mənA*

The basis of the plural local cases in Proto-Samoyed was reconstructed as two sets by Janhunen (1998: 470), based on the plural nominative to account for Nenets, and the plural genitive to account for Nganasan. In my view, the plurals of the local cases as found in the northern Samoyed languages are all formed with the addition of the plural genitive PS *-*j-t*, most clearly in the case of the prolative. This is inserted after the coaffix in the case of the lative, locative and ablative, while it comes before the prolative suffix in its entirety. No *-*j*- is visible in Nenets, probably due to a sound change from *-*əjtC*- to pre-PNe. *-*itC*- to PNe. *-*əqC*- (cf. Salminen 2012: 344 on development from *-*i* to PNe. *-*ə* in non-initial syllables; both Enets and Nganasan must have obtained their vowel -*i*- from this *-*j*-). Meanwhile, no *-*t*- is visible in the locative plural of Nganasan and Enets[74], but this would probably have regularly disappeared in a sequence like *-*tn*-, meaning that it can be reconstructed. Cf. the cognate set for the verb 'lie down (of animals)' in the northern Samoyed languages (not in SW), where only Nenets shows a cluster -*qn*- (= -*ʔn*-):

> PS **wåtʲ³nâ*- 'lie down (of animals) : sich legen (von Tieren) : лечь, улежать (о животном)' || Ng. *bənəďa* (NgSl.) | EnT *bano*- (EnSl.) | EnF *banu*- (EnWl.) | NeT *waqnə*(*syº*) (T65) | NeF *waqnăsyº* (NeSl.) || see Kaheinen (2023: 270)

Apparently, the lative plural did not contain the lative suffix *-(*ə*)*ŋ*, seeing as it is absent in both Nganasan and Nenets. Only Enets seems to have added it, as it has a lat.pl. EnT -*kizo*, EnF -*kiz* from PEn. *-*kitə*, where the *-*t* that became a word-final glottal stop in Ng. -*NTəʔ* and NeT -*xəq*, NeF -*xăq* is intervocalic instead (Däbritz 2017: 74). The singular lative suffix PS *-*ntəŋ* does not have an *-*ŋ* in EnT -*do*, EnF -*d*, so final -*ŋ* was apparently lost in Enets.

[74] Cf. Mikola (2004: 103) and Däbritz (2017: 74), who reconstruct only *-*j*-, i.e., *-*ntə-j-nA* for Nganasan (so, too, Janhunen 1998: 469) and *-*kə-j-nA* for Enets.

Table 6.5: Case endings in Nganasan, Enets and Nenets. In the notation of Nenets forms, the glottal stop is written as *q*. Tundra and Forest Enets from Khanina & Shluinsky (2023: 799–802), Nganasan from Wagner-Nagy (2019: 193), Tundra Nenets from Nikolaeva (2014: 59) and Forest Nenets adapted from Sammallahti (1974: 41).

	Nganasan	Enets	Nenets
nom.	*-ʔ*	**-ʔ* > T *-ʔ*, F *-ʔ*	**-ʔ* > T *-q*, F *-q*
acc.	*-j*	**-ʔ* > T *-ʔ*, F *-ʔ*	**-j* > T *-∅*[(a)], F *-∅*[(a)]
gen.	*-ʔ*[(a)]	**-ʔ* > T *-ʔ*, F *-ʔ*	**-jʔ* > T *-q*[(a)], F *-q*[(a)]
lat.	*-NTiʔ*	**-kitəŋ* > T *-xizo*, F *-xiz*	**-kəʔ* > T *-xəq*, F *-xăq*
loc.	*-NTi^{c}nU*	**-ki(ʔ)na* > T *-xine*, F *-xin*	**-kəʔna* > T *-xəqna*, F *-xăqna*
abl.	*-Ki^{c}tə*	**-kiʔto* > T *-xito*, F *-xit*	**-kəʔtə* > T *-xət°*, F *-xăqt°*
pro.	*-ʔmənU*[(a)]	**-i(ʔ)mna* >> T *-ine*[(b)], F *-in*[(b)]	**-jʔməna* > T *-qməna*[(a)], F *-qmăna*[(a)]

(a) The earlier presence of the plural suffix **-j* in these cases can be seen in the stem-final vowel alternations; e.g., Ng. *kümaa* 'knife' with acc.pl. *kümaa-j*, gen.pl. *kümau-ʔ*, pro.pl. *kümau-ʔmənu* (Wagner-Nagy 2019: 193).

(b) Olesya Khanina has pointed out to me that the Enets forms in *-ine* and *-in* are secondary, with older sources attesting to regular *-ʔone* and the intermediate *-ʔine*.

For the coaffix **-ntə-*, Mikola (2004: 99–100) reconstructs a sequence of two lative endings **-n* and **-tə*. Leaving the origins of **-n* aside, Mikola supposed that the second lative, **-tə*, might be connected to similar elements with an **s* in the western Uralic *s*-cases found in Saami, Finnic, Mordvin and Mari; after all, PU **s* is regularly reflected as PS **t*.

Like Mikola, Ylikoski suggests that there may be a connection between the *s*-cases and the Proto-Samoyed coaffix **-ntə-*. However, he derives the **s* in the *s*-cases not from a lative suffix, but rather from an old set of theoretical postpositions derived from a locational noun that became a coaffixal element. This provides a more explicit functional derivation of the different elements that make up these case suffixes. The lative PS **-ntəŋ* would then be direct cognate of SaaS *-se*, Fi. *-hVn*, MdE *-s* and MariE *-š*, from PU **-[n]sVŋ*, while the locative PS **-ntənA* reflected in Nganasan would be shared with SaaS *-sne*, Fi. *-ssA*, MdE *-se*/*-so* and MariE *-što* from PU **-[n]sVnA* (Ylikoski 2016: 53–59).

Gusev has instead argued that the coaffixes PS **-ntə-* and **-kə-* go back to derivational suffixes that formed (locational) denominal nouns: Ng. *ŋuəntəə* 'tsar' derived from *ŋuə* 'cloud, air, deity, spirit' with **-ntə-jə*, EnT *ŋaaxi* 'tsar' from *ŋaa* 'god, weather' with **-kə-jə*, NeT *numki°* 'star' from *num* 'weather, sky, heaven, god' with **-kə-jə* (Valentin Gusev: teaching material Helsinki Samoyed Summer School 2023). The position of the plural markers after the coaffix (i.e., **-kə-jt-* rather than **-jt-kə-*) lends credence to this theory, since derivational suffixes would more naturally precede the plural endings than would

an agglutinated relational noun. This is also seen in the fact that the plural morphology in the prolative precedes the entire suffix (cf. below on the origin of the prolative).

The discrepancy between Nganasan and the other Samoyed languages is still interesting. It is difficult to imagine a motivation for either the coaffix *-*kə*- or the coaffix *-*ntə*- to spread from its original locus in either part of the Samoyed area, since either direction of spread assumes that a co-affix that was originally present in only one case (the lative for *-*ntə*- and the ablative for *-*kə*-) could oust its (apparently) semantically equivalent but necessarily more well-represented counterpart. It could be that the Samoyed case system as we see it, with its fully grammaticalized coaffixes, was not yet formed in Proto-Samoyed, but that the use of (perhaps) denominal nouns in combination with the local case suffixes, the probable basis for the later coaffixes, was already commonplace. The choice of which type of coaffix to grammaticalize could then have been a later phenomenon. The agreement of the other Samoyed languages vis-à-vis Nganasan provides one of the more salient arguments for an early phylogenetic split of Nganasan from the rest of Samoyed (Janhunen 1998: 459–469).

In any event, the functional cases lative, locative and ablative can definitely be reconstructed for Proto-Samoyed and pre-Proto-Samoyed without problem, as all three derive from Proto-Uralic, from the lative *-*ŋ*, the locative *-*nA*, and the ablative *-*tA* (e.g., Janhunen 1998: 469; Aikio 2022a: 14). The plurals were formed based on the genitive plural suffix PS *-*j-t*, which was added before the local case suffix.

It is more difficult to determine the status of the prolative. Janhunen suggested that it is in origin a combination of the accusative *-*m* and the locative *-*nA* (Janhunen 1998: 469), but Jalava has recently proposed that it can be derived from the locative or the Proto-Uralic noun **muka* 'back', or perhaps **müŋä* 'back'. Only the former has an independent reflex in Samoyed, as PS **mə̑kå* 'back', which became, e.g., Ng. *məku*, NeT *məxa*, Mt. *baga*, etc. The original shape of the postposition **muka-na* lit. 'on the back' would have become truncated in the process of becoming a case ending to PS *-*mənA* (Jalava 2022). At what point in pre-Proto-Samoyed the suffixation of PU **mukana* (or **müŋänä*) as a prolative case suffix took place cannot be determined. An unrelated prolative in *-*ko* can be reconstructed for the shared ancestor of Saami, Finnic and Mordvin (Aikio & Ylikoski 2016: 61), but it does not seem to be reconstructible for Proto-Uralic with the current state of our knowledge; the Permic prolative continues the Proto-Uralic ablative *-*tA* (Riese 1998: 268–269).

Table 6.6: Proto-Samoyed case endings and their Proto-Uralic origins.

	PS	PU
nominative	*-∅	*-∅
accusative	*-*m*	*-*m*
genitive	*-*n*	*-*n*
lative	*-*ntə-ŋ* / *-*ŋ* (postp.)	*-*ŋ*
locative	*-*ntə-nA* (Ng) / *-*kə-nA* (rest) / *-*nA* (postp.)	*-*nA*
ablative	*-*kə-tə* / *-*tə* (postp.)	*-*tA*
prolative	*-*mənA*	?**mukana* / **müŋänä*

As an additional, non-local case, the Proto-Uralic translative *-*ksi*, can be reconstructed for pre-Proto-Samoyed as well. This became the predestinative PS *-*tə*- (Janhunen 1989; cf. 6.3.1.6).

6.4 Comparison of the Tocharian and Samoyed case systems

In this subsection, the case systems of Tocharian and Samoyed will be compared in terms of their non-core case inventories, the functions of the individual cases, and the ways in which new cases were added to the system.

6.4.1 Case inventory

Considering the pre-Proto-Tocharian and (pre-)Proto-Samoyed case systems side by side, there are certainly points of agreement, but also some discrepancies. Among the local cases, the main difficulty is the age of the Samoyed prolative, which cannot be confidently determined. There furthermore seems to be no dedicated comitative at any time in the history of Samoyed, which means that the Tocharian comitative cannot receive an explanation from contact with this language group. The limited continuation of a dative-locative in Proto-Tocharian is not matched with Samoyed either, nor is the Tocharian Gruppenflexion.

Table 6.7: The Proto-Tocharian and Proto-Samoyed secondary case systems compared.

PIE	PT	PS	PU
(allative)	*new* allative	lative	lative
dative	?? *old* dative-locative	—	—
locative	*new* locative	locative	locative
ablative	*new* ablative	ablative	ablative
—	*new* perlative	prolative	—
—	?? *new* comitative	—	—

6.4.2 Functional comparison

If we turn to the functions of the individual cases as they can be reconstructed for Proto-Tocharian and Proto-Samoyed, and assume, for the sake of the argument, that the same functions can be attributed to their earlier stages, the correspondence is still imperfect. Due to the lack of a Samoyed comitative, only the local cases can be compared.

The allative in Tocharian is not used to indicate movement into an object, whereas this is one of the functions of the Samoyed lative. Tocharian furthermore does not use the allative to mark a recipient, unlike Samoyed, as in Tocharian this function is normally fulfilled by the genitive instead.

The Tocharian locative can express not only location, but also movement. This means that it functionally overlaps with both the Samoyed locative and lative. Expressions of static location and movement into and from are generally kept separate in Samoyed.

The Tocharian perlative also has more functions than can be reconstructed for the Samoyed prolative: unlike the Tocharian perlative, the Samoyed prolative is not used to mark a static location. Furthermore, no instrumental function is known for the Samoyed prolative, while this is one of the functions of this case in Tocharian B; in (northern) Samoyed, the locative is used as an instrumental instead. The additional functions of the Tocharian perlative can be considered as secondary derivation from the core perlative function (Krause & Thomas 1960: 84), which is shared with Samoyed.

Only the ablative case appears to have the same meaning in both Proto-Tocharian and Proto-Samoyed. If the Tocharian A use of the ablative for the standard of comparison is taken to be original, the match is quite exact.

These differences could be due to secondary innovations from a shared original meaning, in particular in the Tocharian locative and perlative. Specialized meanings, such as the Tocharian B instrumental perlative use and the (northern) Samoyed instrumental locative are clearly different, independent developments from the original core local meanings of these cases. Perhaps a certain semantic range was also dictated by the Proto-Indo-European origins of these secondary cases: for example, the adposition *$*h_2ed$*, which can be connected with the Tocharian perlative, is attested with both directional meaning (Lat. *ad* 'to, up to, into') and locational meaning (as in English *at*). It may therefore be expected that a case ending created on the basis of this adposition would also incorporate both meanings. Furthermore, from a canonical prolative meaning 'across', a more static sense of 'on' could be derived in the sense that when, for instance, a blanket is spread out over the grass, it is then also on the grass, and one has to be on the tundra to move across or over it.

Table 6.8: A comparison of the Proto-Tocharian and Proto-Samoyed case functions; the first function listed it he most original (local) function, with other (grammatical) functions listed second.

Case / functions in:	Proto-Tocharian	Proto-Samoyed
(al)lative	direction of movement.	direction of movement; movement into; recipient.
locative	internal location; movement into.	location; instrument.
ablative	source; starting point; standard of comparison?	source; starting point; standard of comparison.
perlative	path or direction of movement; external location; cause; instrument?	path of movement.
(comitative)	(accompaniment.)	—

6.4.3 Comparison of development

The precise details of how the case systems of Tocharian and Samoyed developed are not entirely clear or agreed on at the present state of research. However, it is clear that both recruited earlier postpositional elements to form new cases, a strategy that continued in Selkup with the creation of additional local cases for animate nouns based on the postposition PS **na-* 'near, to'. The same type of expansion of the case system is likely found in western Uralic languages (Aikio & Ylikoski 2016). A discrepancy is found between Tocharian and Samoyed in the noun case to which the postpositions were added: Tocharian secondary cases are based on the oblique/accusative, whereas in Samoyed, and Uralic more generally, the genitive is used before postpositions deriving from spatial nouns. The plural of the local cases also has the same plural marker as the genitive plural, namely PS **-jt*. This is inserted after the coaffixes in the lative, locative and ablative, but it immediately precedes the prolative suffix. The singular local cases are not based on the genitive singular, but rather on the stem.

The mismatch in the cases that are used as the basis for the formation of agglutinative local cases can receive a possible explanation: primary adpositions in Indo-European languages generally select the accusative, dative or locative, so that the use of one of these cases in Tocharian is as expected. The accusative is the only of these cases that has a clear, direct descendent, in the form of the Tocharian oblique. The strategies used to expand the local case systems in Tocharian and Samoyed are thus broadly the same, including the use of a non-nominative plural as the basis for the plural local cases.

It is also important to bear in mind that a prerequisite for the formation of new cases from postpositions is the presence of postpositions in the first place. Proto-Indo-

European is not generally reconstructed with postpositions so that the development of postpositions in pre-Proto-Tocharian constitutes an innovation that itself may have been due to substrate influence from a language like pre-Proto-Samoyed. A similar reverse development is seen in Saami and Finnish, Uralic languages that developed and are developing more prepositions due to contact with Indo-European languages with prepositions.

6.5 Conclusions on the agglutinative case systems

The core of the local cases is shared between Proto-Tocharian and Proto-Samoyed, with an allative/lative, a locative, an ablative and a perlative/prolative. The Tocharian locative and to some extent the perlative are semantically broader than the corresponding Samoyed cases, with additional illative use of the Tocharian locative, and a locational use of the perlative. If these are later, secondary innovations, the original local systems may have been more similar, but this cannot be determined with certainty. It could also be that the broader semantics of the Tocharian secondary cases result from the broader semantic range of the adpositions from which they were formed, in which case the system was from the outset an inexact match for Samoyed.

The Tocharian comitative case has no counterpart in Samoyed. Tocharian A and B do not agree on the suffix of this case either, so that it could be a late innovation. However, it could also be that either Tocharian A or B inherited the Proto-Tocharian comitative with an innovation in only one of the two (this is suggested by Peyrot 2019a: 93). A (pre-)Proto-Tocharian comitative case cannot be explained based on Samoyed influence.

The Tocharian Gruppenflexion, whereby only the final noun in a sequence of nouns needs to be inflected with a secondary case suffix, has no Samoyed correspondence either. Meanwhile, this feature is found in Turkic languages, including Old Uyghur, so that Turkic influence on Tocharian is more likely in this regard (cf. Akao 2020: 9–10). On the other hand, no perlative is found in Turkic, so that Turkic influence cannot explain the development of that particular characteristic local case (Peyrot 2019a: 92).

The main problems with the hypothesis that the Tocharian agglutinative case system is the result of contact with pre-Proto-Samoyed can be summarized in two points, namely that (1) the functional ranges of especially the locatives and the perlative/prolative do not fully overlap, and that (2) Samoyed does not have Gruppenflexion. If a comitative case should be reconstructed for Proto-Tocharian after all, that is another point of disagreement, but the comitative could also be a later addition to the Tocharian case system.

Not all aspects of the prehistory of the Tocharian and Samoyed case systems are yet fully understood. The etymology of the Tocharian comitatives TA *-aśśäl* and especially TB *-mpa*, as well as that of the Tocharian B ablative *-meṃ*, are still unclear. The age of the

Tocharian secondary cases is also difficult to determine, which means that they could theoretically be too young to be caused by Samoyed substrate influence. On the Samoyed side, the precise age and origins of the co-affixes *-*ntə*- and *-*kə*- remain uncertain, as various interpretations are available. It is furthermore unknown when the Samoyed prolative was first formed, how exactly it was formed, and whether it would have come into existence early enough to possibly inspire the formation of the perlative in pre-Proto-Tocharian.

The elements that gave rise to the Tocharian agglutinative case system stem from Proto-Indo-European, meaning that they would already have been present in pre-Proto-Tocharian before contact with any other language. It could be that various (or all?) prepositions in pre-Proto-Tocharian were changed into postpositions, possibly due to language contact, and that a select few that semantically corresponded reasonably well to the four pre-Proto-Samoyed local cases became fixed expressions that would give rise to the eventual Tocharian local cases.

Later developments, such as a semantic extension of the perlative and the creation of a comitative in both Tocharian A and B, may have further obscured the similarities between the pre-Proto-Samoyed and Tocharian local case systems. Some aspects of the case system, such as the use of Gruppenflexion, find much better parallels in Turkic, and could perhaps be an instance of Turkic influence on Tocharian at some perhaps late stage.

The case system thus provides us with a general parallel in type, connected also with the broader region of Siberia, and a slightly better match with pre-Proto-Samoyed than with Proto-Uralic. While, on its own, it does not constitute clear evidence for any specific prehistoric contact event, it may be considered to strengthen the evidence from the other parallels discussed in this dissertation.